Mahajana Education Society (R)
Education to Excel
SBRR Mahajana First Grade College (Autonomous)
Jayalakshmipuram, Mysuru – 570 012 Karnataka, INDIA
Affiliated to University of Mysore
Re-Accredited by NAAC with 'A' Grade, College with Potential for Excellence

Course Plan – ODD Semester 2023-24

Department: Biochemistry
Subject: Biochemistry **(I SEM)** [Course code: **212169**]
Title of the Paper- DSC1- Chemical Foundation of Biochemistry- 1
Total contact hours **- 56** No of teaching hours/week**: 04Term Period: 11/09/2023** to **16/12/23**

1. Name of the Faculty: Ramya.V

Hrs/week: 01 **Total Hrs: 14**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 2 : Atomic structure and Chemical bonds **Duration :14Hrs** **Atomic structure** : Atom, Dalton's postulates, Structure of an atom, electrons, Quantum numbers and their significance. Orbit, orbitals and their differences. Shapes of s, p, d, and f atomic orbitals. Illustrate the rules for filling up of electrons in various orbitals - Pauli`s exclusion principle, Aufbau principle, and Hund`s rule. Electronic configuration of elements (upto Z = 30), Octet rule & its limitations. **Chemical bonds**	• DSC I - Chemical Foundationof Biochemistry-1	01	11/09/23	Discussion of POs and COs of all units.
	• Introduction to Chemical foundation of Biochemistry I and Atomic structure - Structure of an atom, electrons	01	25/09/23	Lecture method
	• Quantum numbers and their significance. Orbit, Orbitals, their differences.	01	09/10/23	Lecture/ICT method
	• Shapes of s, p, d, and f atomic orbitals	01	16/10/23	Lecture & ICT method
	• Illustrate the rules for filling up of electrons in various orbitals - Pauli`s exclusion principle, Aufbau principle, and Hund`s rule	01	30/10/23	Lecture & ICT method
	• Electronic configuration of elements (up to Z = 30) and octet rule & its limitations.	01	06/11/23	Lecture & ICT method
	• Introduction to Chemical bonds and different types of bonds.		07/11/23	Special Class to compensate

Different types of bonds, formation and properties – Coordinate bond, covalent bonds - Sigma & pi bonds.	• Formation and properties of Co-ordinate bonds and covalent bonds.	02	& 10/11/23	the class missed Lecture method
	• Non covalent bonds, sigma and pi bonds.	01	13//11/23	Lecture method
UNIT 1 AND UNIT 2	**Atomic structure and Chemical bonds, Scope of Biochemistryand Units of measurement**	**01**	**15/11/2023 To 18/11/23**	**Internal Assessment C1Written Test**
			22/11/23	**Display of C1Internal test marks on the notice board**
Electrostatic interactions - ionic bonds. Non-covalent bonds - Vander Waals interactions n-dipole, dipole-dipole interactions, London forces, hydrogen bonds, hydrophobic interactions and their significance. Concept of back bonding. Outline of theories of bonding (VBT & MOT).	• Electrostatic interactions- ionic bonds, Hydrogen bonds.	01	20//11/23	Lecture method
	• Van der Waals interactions- ion dipole, dipole-dipole interactions	01	27/11/23	Lecture & ICT method
	• London forces.	01	04/12/23	Lecture & ICT method
	• Hydrophobic interactions and their significance.	01	11/12/23	Lecture & ICT method
	• Concept of back bonding. Outline of theories of bonding. (VBT)	02	12/12/23 and	Special Class to complete the course
	• Postulates of theories of bonding.- MOT		15/12/23	Lecture method

2.Name of the Faculty: Radhika.P

Hrs/week: 02 **Total Hrs: 28**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit 1: Scope of Biochemistry and Units of measurement **Duration :14Hrs** **Scope of Biochemistry-** Definition, aim and scope of Biochemistry. Origin of life	• Definition, Scope & Significance of biochemistry. Origin of life.	01	14/9/2023	Lecture & discussion method
	• Types of organisms - prokaryotes, eukaryotes,	01	15/9/2023	Lecture & discussion method
	• Types of organisms – Unicellular and multicellular.	01	21/9/2023	Lecture & discussion

				method
Five theoriesthries), types of organisms - prokaryotes, eukaryotes, unicellular and multicellular organisms (characteristics & differences). Compartmentalization of cellular functions (lower and higher organisms), subcellular organelles. General physiological events of organisms (plants and animals). Chemical composition of living organisms. **Units of measurement** – SI units - mass, volume, temperature, amount, length and time. An overview on the metric system - atomic weight, molecular weight, equivalent weight. Basicity of acids & acidity of bases. Avogadro`s number, concentration units - molarity, normality, molality, mole concept, mole to molar conversion. Oxidation number and its significance. Density and specific gravity and their significances.	• Compartmentalization of cellular functions in lower and higher organisms.	01	22/9/2023	Lecture, discussion & ICT
	• General physiological events of organisms.	01	29/9/2023	Lecture & discussion
	• Chemical composition of living organisms.	01	05/10/2023	Lecture, discussion & ICT method
	• Sub-cellular organelles.	01	06/10/2023	Lecture & ICT method
	• SI units, mass, volume, temperature, amount, length and time.	01	12/10/2023	Lecture, discussion & ICT method
	• An overview on the metric system	01	13/10/2023	Lecture, discussion & ICT method
	• Atomic weight, molecular weight, equivalent weight.	01	19/10/2023	Lecture, discussion method
	• Basicity of acids & acidity of bases.	01	20/10/2023	Lecture & discussion method
	• Avogadro`s number, molarity, normality, molality.	01	26/10/2023	Lecture and discussion method
	• Mole concept, Concentration, mole to molar conversion.	01	27/10/2023	Lecture & discussion method
	• Oxidation number and its significance. Density and specific gravity, their significances.	01	02/11/2023	Lecture & discussion method
UNIT 1 AND UNIT 2	**Atomic structure and Chemicalbonds and Scope of Biochemistry and Units of measurement**	**01**	**15/11/2023 To 18/11/23**	**Internal Assessment C1Written Test**
			22/11/24	**Display of C1Internal test marks on the notice board**
Unit 3: Buffers and Colligative properties **Duration :14Hrs** **Buffers** – Acids, bases, Arrhenius, Lewis and Bronsted- Lowry concept of	• Acids, bases, Arrhenius, Lewis Theory, Bronsted-Lowry concept	01	03/11/2023	Lecture, discussion & ICT method
	• Buffers, composition, pH, types with examples.	01	09/11/2023	Lecture, discussion & ICT method
	• pH scale, pKa value, isoelectric pH and its significance.	01	10/11/2023	Lecture, discussion & ICT method

acid-base (with examples). Structure of water, phase diagram of pure water, ionic product of water, special properties of water. Buffers-composition, types with examples, buffer capacity. Buffers in animal system. pH scale, pKa value, isoelectric pH and its significance. Henderson-Hasselbalch equation. Titration curve of $H_3PO_4$and CH_3COOH (comparative study). Ionization of HCl, HNO_3 and H_2SO_4. **Colligative properties** Colligative properties of solutions. Types of solutes-ionizable & non-ionizable solutes. Types of solution (hyper, hypo & isotonic). Osmosis, osmotic pressure and its determination by Berkely and Hartley's method. Vant Hoff law, Roult`s law, Reverse osmosis, Vapor pressure and its application in distillation. Elevation in boiling point, depression in freezing point, de-icing. Anomalous colligative properties of solutions.	**Internal Assessment C1**			**15/11/2023 To 18/11/23**
	• Henderson-Hasselbalch equation. Titration curve of H_3PO_4. Ionization of HCl,HNO_3, H_2SO_4.	01	23/11/2023	Lecture & discussion method
	• Colligative properties of solutions. Anomalous colligative properties of solutions.	01	24/11/2023	Lecture & discussion method
	• Structure of water, phase diagram of pure water.	01	01/12/2023	Lecture method
	• Ionic product of water, Special properties of water	01	07/12/2023	Lecture method
	• Buffers in animal system.	01	08/12/2023	Lecture method
	• Types of solutes– ionizable & non-ionizable solutes. Types of solution (Hyper, hypo and isotonic).	01	14/12/2023	Lecture method
	• Osmosis and osmotic pressure determination by Berkley and Hartley's method	01	15/12/2023	Lecture & discussion method
	• Reverse osmosis, vapour pressure and its application in distillation.	04	12/12/2023 To 16/12/2023	Need special class to complete the syllabus Lecture and discussion method
	□ Vant Hoff law, Roult`s law. □ Elevation in Boiling point. □ depression in freezing point, de-icing			
UNIT 3	**Assessment C1- Assignment**		**24/11/23**	**Submission of Assessment C1 Assignment**
			01/12/2023	**Display of C1 Assignment marks on notice board**

3.Name of the Faculty: Madhuri R
Hrs/week: 01 Total Hrs: 14

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit 4: Electrochemistry and Redox reactions	• Scope of electrochemistry, Electrochemical cells.	01	12/09/23	Lecture method

Duration :14Hrs **Electrochemistry** Scope of electrochemistry, Electrochemical cells-Daniel cell/galvanic cell. Electrode potential and its measurement Electrolysis and its applications. Types of electrolytes with examples, primary and secondary batteries (lead & Ni-Cd batteries). Electrodes, half-cell reaction, standard electrodes-SHE, Glass & Calomel. **Thermodynamics** -Laws of thermodynamics, entropy, enthalpy and their relation. Gibb's energy and free energy change. Standard free energy change in biological system. **Redox reactions -**Redox reactions, redox potential and its application, energy linked to redox reactions. Reduction of oxygen (respiration), oxidation and reduction of iron in hemoglobin. Biological active forms of zinc, calcium, nickel, molybdenum, selenium, and cobalt (with examples).	Daniel cell/galvanic cell			
	• Electrode potential and its measurement. Electrolysis and its applications.	01	19/09/23	Lecture method
	• Types of electrolytes with examples. primary and secondary batteries (lead & Ni-Cd batteries).	01	26/09/23	Lecture method
	• Electrodes, half-cell reaction, standard electrodes-SHE. Glass & Calomel Electrode.	01	03/10/23	Lecture & ICT method
	• **Thermodynamics** -Laws of thermodynamics. Entropy, Enthalpy and their relation.	01	10/10/23	Lecture & ICT method
	• Gibb's energy and free energy change. Standard free energy change in biological system.	01	17/10/23	Lecture & ICT method
	• Redox reactions. Redox potential and its application.	01	31/10/23	Lecture method
	• Energy linked to redox reactions. Reduction of oxygen (respiration). Oxidation and reduction of iron in hemoglobin.	01	07/11/23	Lecture method
	• Biological active forms of zinc, calcium (with examples).	02	09/11/23 And 15/11/23	Special Class to compensate the class missed Lecture method
	• Biological active forms of nickel, molybdenum (with examples).			
	• Biological active forms of selenium, and cobalt (with examples).	01	21/11/23	Lecture method
	• Redox reactions of - NAD^+/NADH, $NADP^+$/NADPH.	01	28/11/23	Lecture method
UNIT 4	**Assessment C2 - Quiz**	**01**	**01/12/23**	**Written quiz**
			2/12/23	**Display of Assessment 2 Quiz marks on the notice board**

Redox reactions of NAD^+/NADH,$NADP^+$/NADPH,FAD/$FADH_2$,FMN/$FMNH_2$. Molecularity and orderof a reaction.	• Redox reactions of - FAD/$FADH_2$, FMN/$FMNH_2$.	01	05/12/23	Lecture method
	• Molecularity and order of a reaction.	01	12/12/23	Lecture method

Department: Biochemistry

Subject: Biochemistry **(I SEM)** [Course code:

212169]**Title of the Paper - DSC1 Lab -**

Volumetric Analysis

Total contact hours **– 56** No of teaching hours/week**: 04**

Term Period: 11/09/2023 to **16/12/23**

1. Name of the Faculty: Ramya.V

Hrs/week: 04 **Total Hrs: 56**

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
1. Concept of molarity, molality and normality- Calculation and preparation of molar solutions, normal solutions and percent solutions and dilute solutions. (Problems based on Normality & molarity to be given in exams). 2. Calibration of volumetric glassware's (Burette, pipette). 3. Preparation of standard Oxalic acid. Standardization of $KMnO_4$ and estimation of H_2O_2 in the given solution. 4. Preparation of standard Oxalic acid solution. Standardization of NaOH solution and estimation of acidity in vinegar. 5. Preparation of standard potassium bi-phthalate solution, standardization of sodium hydroxide solution and estimation of alkalinity of antacids. 6. Determination of density and viscosity of the given liquid using specific gravity bottle and Ostwald's viscometer. 7. Determination of density and surface tension of the given liquid using specific gravity bottle and stalagnometer.	EXPT 1 to EXPT 7	04/week	11/09/23 To 25/11/23	Analytical – (Solving Problems) and Experimental Method

Experiments 1 to 7		**01**	**08/11/23**	**Practical Internal Assessment C1 - Test**
			10/11/23	**Display of practical C1 test marks onthe notice board**
8. Preparation of standard Oxalic acid solution. Standardization of $KMnO_4$ solution and estimation of calcium in milk. 9. Preparation of standard Sodium carbonate solution, standardization of HCl (Methyl orange) and estimation of NaOH in the given solution. (Methyl orange or phenolphthalein). 10. Preparation of standard potassium bipthalate. Standardization of NaOH and estimation of HCl in the given solution. (Phenolphthalein). 11. Preparation of standard Oxalic acid. Standardization of NaOH and estimation of H_2SO_4 in the given solution (phenolphthalein) 12. Preparation of $ZnSO_4$. Standardization of EDTA and estimation of total hardness of water using Eriochrome-Black-T indicator. 13. Estimation of sulphuric acid and oxalic acid in a mixture using standard NaOH solution and standard $KMnO_4$ solution	EXPT 8 to EXPT 7	04/week	02/11/23 To 13/12/23	Experimental Method
Experiments 8 to 13		**02**	**29/11/23**	**Practical Internal Assessmen t C2 - Test**
			01/12/23	**Display of practical C2 test marks on the notice board**

Department: Biochemistry
Subject: Biochemistry **(I SEM)** [Course code: **21OEBIC101**] **Title of the Paper- OE 1-** Biochemistry in Health and Diseases
Total contact hours **– 42** No of teaching hours/week**: 03**
Term Period: 11/09/2023 to **16/12/23**

1. **Name of the Faculty: Madhuri R**

Hrs/week: 02 **Total Hrs: 28**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1: Introduction: **Duration : 14Hrs** WHO definition of health, Health and hygiene, General health care. Factors affecting health, Indicators of health and evaluation of health. Classification of diseases - Endemic, Epidemic, Pandemic; Professional health hazards. **Disease conditions:** Acute disease, chronic disease, Incurable disease, Terminal disease, Illness, disorders, Syndrome, Pre-disease. **Treatmen**t: Psychotherapy, Medications, Surgery, Medical devices, and Self-care. **Dimensions of Health**: Physical, Mental, Spiritual, Emotional, Environmental, and Philosophical.	• OE 1- Biochemistry inHealth and Diseases	01	11/09/23	Discussion ofPOs and COsof all units.
	• WHO definition of health, Health and hygiene, General health care.	01	13/09/23	Lecture method
	• Factors affecting health, Indicators of health and evaluation of health	01	20/09/23	Lecture method
	• Classification of diseases -Endemic, Epidemic, Pandemic.	01	25/09/23	Lecture method
	• Professional health hazards.	01	27/09/23	Lecture method
	• Disease conditions: Acutedisease, chronic disease,	01	11/10/23	Lecture method
	• Incurable disease,Terminal disease.	01	16/10/23	Lecture method
	• Illness, disorders, Syndrome, Pre-disease.	01	18/10/23	Lecture method
	• Treatment: Psychotherapy, Medications.	01	25/10/23	Lecture method
	• Surgery and Medical devices.	01	26/10/23	Special Class to compensate the class missed Lecture method
	• Self- care and Dimensions ofHealth: Physical dimension.	01	27/10/23	
	• Dimensions of Health: Mental dimension.	01	30/10/23	Lecture method

	• Dimensions of Health Emotional and Environmental.	01	06/11/23	Lecture method
	• Dimensions of Health: Spiritual dimension.	01	08/11/23	Lecture method
	• Dimensions of Health: Philosophical dimension.	01	13/11/23	Lecture method
Unit 1	**Introduction:, Disesase conditions, treatment Dimensions of Health**	**01**	**15/11/23 to 18/11/23**	**Internal Assessment C1 Written Test**
			22/11/23	**Display of C1Internal test marks on the notice board**
Unit 3: Health Promotions: **Duration :14Hrs** Preventing drug abuse, Oral health promotion by tobacco control. Mental hygiene and mental health: Concepts of mental hygiene and mental health, Characteristics of mentally healthy person, Warning signs of poor mental health, promotive mental health strategies and services, Ego defense mechanisms and implications, Personal and social adjustments, Guidance and Counseling. Infection control: Nature of infection, Chain of infection transmission, Defenses against infection transmission	• Introduction to Health Promotions: Preventing drugabuse.	01	20/11/23	Discussion & ICT
	• Oral health promotion by tobacco control.	01	2/11/23	Special Class to compensate the class missed Lecture method
	• Mental health: Concepts of mental health	01	22/11/23	Lecture method
	• Mental health: Concepts of mental hygiene	01	23/11/23	Special Class to compensate the class missed Lecture method
	• Characteristics of mentally healthy person.	01	27/11/23	Lecture and discussion
	• Warning signs of poor mental health.	02	28/11/23	Special Class to compensate the class missed Lecture method
	• Promotive mental health strategies			
	• Promotive mental health services.	01	29/11/23	Lecture method
	• Ego defense mechanisms and implications.	01	02/12/23	Special Class to compensate the class
	• Personal and social adjustments.	01	04/12/23	Lecture method
	• Guidance and Counseling	01	05/12/23	Special Class to compensate the class missed Lecture method

	• Nature of infection.	01	06/12/23	Lecture method
	• Chain of infection transmission	01	11/12/23	Lecture method
	• Defenses against infection transmission	01	13/12/23	ICT and lecture method
UNIT 3	**Assessment C2- Assignment questions**		**25/11/23**	**Submission of Assessment C2 Assignment**
			28/11/23	**Display of C2 Assignment marks on notice board**

2. **Name of the Faculty: Ramya V**

Hrs/week: 01 **Total Hrs: 14**

Curriculum as prescribed by the University	**Topics**	**No of Hours required to cover**	**Date**	**Method of Deployment and Remarks**
UNIT- 2 **DISEASES and Disorders** **Duration:14 Hrs** **Bacterial diseases:** Tuberculosis, Cholera ,Typhoid, conjunctivitis. **Sexually transmitted diseases(STD):** Syphilis and AIDS - Information, treatmentguidelines and Prevention. **Non-communicable diseases:** Malnutrition - Under nutrition, Over nutrition, Nutritionaldeficiencies - Anemia, Stroke, heart diseases, Cancer, mental illness, Iodine deficiency, Epilepsy, Asthma.	• Tuberculosis, Cholera (Causative agents/Causes, symptoms, diagnosis, treatment, prognosis, prevention)	01	16/09/23	Lecture method
	• Typhoid, Conjunctivitis	01	23/09/23	Lecture method
	• Syphilis, AIDS- Information, treatment guidelines and Prevention.	01	30/09/23	Lecture & Discussion method
	• Non communicable diseases. Malnutrition- Under nutrition	01	07/10/23	Lecture & Discussion method
	• Over nutrition, Nutritional deficiencies- Anemia	01	14/10/23	Lecture & Discussion method
	• Stroke	01	21/10/23	Lecture method
	• Heart disease	01	28/10/23	Lecture & ICT method

(Causative agents/Causes, symptoms, diagnosis, treatment, prognosis, prevention)	• Cancer	01	04/11/23	Lecture & ICT method
	• Iodine deficiency, Mental illness	01	11/11/23	Lecture method
	Internal Assessment Test – C1		**15/11/23 to 18/11/23**	

Genetic disorders: Down's syndrome & Sicklecell anemia. **Lifestyle disorders:** Obesity,Liver cirrhosis, Diabetesmellitus, Hypertension (Causes, effects, prevention and treatment)	• Epilepsy, Asthma	01	25/11/23	Lecture method
	• Down's syndrome	01	02/12/23	Lecture & ICT method
	• Sickle cell anemia.	01	09/12/23	Lecture & ICT method
	• Obesity and Diabetes mellitus	01	16/12/23	Lecture and Discussion method
	• Liver cirrhosis and Hypertension	01	16/12/23	Special Class to complete the unit Lecture method
UNIT - 2	**Assessment C1- Assignment Topics**		**11/12/23**	**Submission of Assessment C1 -Assignment**
			13/12/23	**Display of C1 Assignment marks on notice board**

Subject: Biochemistry (III SEM) [Course code: **222369**]

Title of the Paper- DSC 3- Bioorganic Chemistry

Total contact hours **– 56** No of teaching hours/week**: 04**

Term Period: 11/09/2023 to **16/12/23**

1. Name of the Faculty: Radhika P

Hrs/week: 01 **Total Hrs: 14**

Curriculum as prescribed by the Institution	Topics	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit4: Bio-organic compounds **Duration: 14Hrs**	• DSC 3- Bioorganic Chemistry	01	12/09/2023	Discussion of Course outcomes of all units.

Alcohols: Classification, Monohydric alcohols: examples, general and distinguishing reactions. Dihydric alcohols: glycols, Tri hydric alcohols: glycerol – synthesis from propene, properties and	• Classification, Monohydric alcohols: examples, general and distinguishing reactions.	01	19/09/2023	Lecture & discussion method
	• Dihydric alcohols: glycols, Tri hydric alcohols: glycerol – synthesis from propene, properties and uses.	01	26/09/2023	Lecture & discussion method
ssification,electronic interpretation of acidityof phenols, mechanism of Kolbe, Reimer– Tiemann and bromination reactions	• Classification, electronic interpretation of acidity of phenols, mechanism of Kolbe, Reimer–Tiemann and bromination reactions.	01	03/10/2023	Lecture & discussion method
Hydroxy acids: Structure and properties: Lactic acid, Citric acid and Isocitric acid. Dicarboxylic acids: Maleic and Fumaric acid. Ketoacids: Pyruvic, α-Ketoglutaric, Oxaloacetic acid. Carbonyl compounds: General properties, Keto-enol tautomerism. Mechanisms: addition of HCN to acetaldehyde, Claisen and aldol condensations. Quinones: o &p-benzoquinones-structure and properties.	• Structure and properties: Lactic acid, Citric acid and Isocitric acid. Dicarboxylic acids: Maleic and Fumaric acid.	01	10/10/2023	Lecture & discussion method
	• Ketoacids: Pyruvic, α-Ketoglutaric, Oxaloacetic acid. Carbonyl compounds: General properties, Keto-enol tautomerism.	01	17/10/2023	Lecture & discussion method
Amines: Classification, properties, functional group – Basicity of amines, acylation. Reaction with HNO2 & Schiff's base formation. Distinguishing reactions of primary, secondary and tertiary amines.	• Mechanisms: addition of HCN to acetaldehyde, Claisen and aldol condensations. Quinones: o & p-benzoquinones- structure and properties.	01	31/10/2023	Lecture & discussion method
	• Classification, properties, functional group – Basicity of amines, acylation. Reaction with HNO2 & Schiff's base formation. Distinguishing reactions of primary, secondary and tertiary amines.	01	07/11/2023	Lecture & discussion method
Heterocyclic compounds: Definition, classification with examples, structure and biological importance of furan, pyrrole, thiophene, pyridine, pyran, thiazole, pyrimidine, purine, indole, imidazole, quinoline and isoquinoline. Basicity of pyrrole and pyridine.	**Internal Assessment C1**			**15/11/23 to 18/11/24**
Terpenes: Definition, Isoprene rule, classification, isolation, structure and biological importance of menthol, camphor, farnesol, phytol, lanosterol, lycopene, and dolichols.	• Definition, classification with examples, structure and biological importance of furan, pyrrole, thiophene, pyridine, pyran, thiazole, pyrimidine.	01	21/11/2023	Lecture & discussion method

Steroids: Basic ring structure in steroids. Structure and biological importance of cholesterol, phytosterols, ergosterol, cortisol, β-estradiol, testosterone, and aldosterone. Bile acids (Mono, Di & Tri cholic acids).	• Definition, classification with examples, structure and biological importance of purine, indole, imidazole, quinoline and isoquinoline. Basicity of pyrrole and pyridine.	01	28/11/2023	Lecture, discussion & ICT method
	• Definition, Isoprene rule, classification, isolation, structure and biological importance of menthol, camphor, farnesol, phytol, lanosterol, lycopene, and dolichols.	01	05/12/2023	Lecture, discussion & ICT method
Alkaloids: Definition, classification based on their structure and biological functions, Isolation of alkaloids, structure and physiological action of morphine, nicotine and atropine.	• Basic ring structure in steroids. Structure and biological importance of cholesterol, phytosterols, ergosterol, cortisol, β-estradiol, testosterone, and aldosterone. Bile acids (Mono, Di & Tri cholic acids).	01	12/12/2023	Lecture, discussion & ICT method
	• Definition, classification based on their structure and biological functions • Isolation of alkaloids, • Structureand physiological action of morphine, nicotine and atropine.	03	13/12/2024 To 16/12/2024	Need special class to complete syllabus Lecture & ICT method
UNIT 4	**Assessment C1- Assignment Topics**		**24/11/2023**	**Submission of Assessment C1 Assignment**
			26/11/2023	**Display of C1Assignmentmarks on the notice board**

2. Name of the Faculty: Madhuri R

Hrs/week: 01 **Total Hrs: 14**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Reaction mechanisms and aliphatic hydrocarbons **Duration : 14Hrs** **Introduction**: Meaning of the terms - kinetic and non-kinetic. Fundamental aspects: Homo and heterolytic cleavage. Classification of organic reactions - substitution, addition, elimination and	• Introduction: Meaning of the terms - kinetic and non-kinetic. Fundamental aspects: Homo and heterolytic cleavage.	01	14/09/23	Lecture method
	• Classification of organic reactions - substitution, addition with two examples for each.	01	21/09/23	Lecture method
	• Classification of organic reactions - elimination and re-arrangement with two examples for each.	01	22/09/23	Lecture method
	• Concepts of reactive intermediates – Carbocations, carbanions.	01	05/10/23	ICT method
re-arrangement with two examples for each. Concepts of reactive intermediates – Carbocations, carbanions, free radicals, carbenes, nucleophiles and electrophiles (Formation and Stability). Concept of inductive effect and mesomeric effect. Resonance and hyperconjugation Aliphatic Hydrocarbons - **Mechanism of addition of HCl to propene, Markovnikov's rule, Alkenes – Ozonolysis, oxidation**	• Concepts of reactive intermediates – free radicals, carbenes.	01	12/10/23	ICT method
	• Nucleophiles and electrophiles (Formation and Stability).	01	19/10/23	ICT method
	• Concept of inductive effect and mesomeric effect.	01	26/10/23	Lecture method
	• Resonance and hyperconjugation	01	27/10/23	Lecture method
	• Aliphatic Hydrocarbons - Mechanism of addition of HCl to propene, Markovnikov's rule.	01	02/11/23	Lecture method
	• Alkenes – Ozonolysis, oxidation.	01	09/11/24	Lecture method
Unit 1 and Unit 2	**Reaction mechanisms and aliphatic hydrocarbons and Mechanism of substitution, elimination, and addition reactions**	**01**	**15/11/23 to 18/11/23**	**Internal Assessment C1 Written Test**
			22/11/23	**Display of C1Internal test marks on the notice board**
Alkynes – formation of	• Alkynes – formation of acetylides and their importance.	01	20/11/23	Lecture method

acetylides and their importance. Dienes– types with examples. Conjugate dienes-1, 3-butadiene - stability, mechanism of addition of HBr. Conformational analysis of ethane and n–butane	• Dienes– types with examples. Conjugate dienes-1, 3-butadiene – stability.	01	23/11/23	Lecture method
	• Dienes- Mechanism of addition of HBr.	01	07/12/23	Lecture method
	• Conformational analysis of ethane and n–butane.	01	14/12/23	Lecture method

3. Name of the Faculty: Ramya.V

Hrs/week: 02 **Total Hrs: 28**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 2 : Mechanism of substitution, elimination, and addition reactions **Duration : 14Hrs** **Substitution reaction-**	• General introduction to Mechanism of reactions and types	01	13/09/23	Lecture method
	• Substitution reaction- SN_1 and SN_2 reactions on	01	16/09/23	Lecture method
N_1 and SN_2 reactions on tetrahedral carbon, energy profile diagrams, Stereochemistry of SN_2 and SN_1 reactions. Factors affecting SN_2 and SN_1 reactions. Substitution reactions in synthesis of ether (Williamson ether synthesis) and amines. **Elimination reactions** - E_2 reaction, Zaitsev rule, E_1 reaction. Stereochemistry of E_1 & E_2 reactions, E_2 & E_1 elimination from cyclic compounds. Elimination reactions in synthesis of alkynes. **Addition reactions** – Nucleophilic addition reactions of Aldehydes and	tetrahedral carbon, energy profile diagrams,			
	• Stereochemistry of SN_2 and SN_1 reactions Factors affecting SN_2 and SN_1 reactions	01	20/09/23	Lecture & ICT method
	• Substitution reactions in synthesis of ether (Williamson ether synthesis) and amines.	01	23/09/23	Lecture & ICT method
	• Elimination reactions - E_2 reaction, Zaitsev rule, E_1 reaction.	01	27/09/23	Lecture & ICT method
	• Stereochemistry of E_1 & E_2 reactions,	01	30/09/23	Lecture method
	• E_2 & E_1 elimination from cyclic compounds.	01	04/10/23	Lecture method
	• Elimination reactions in synthesis of alkynes.	01	07/10/23	Lecture method
	• **Addition reactions** – Nucleophilic addition reactions of Aldehydes and Ketones with HCN	01	11/10/23	Lecture method
	• Formation of acetals& ketals.	01	14/10/23	Lecture & ICT method

Ketones with HCN, Formation of acetals& ketals. Addition reactions of Ammonia, primary amines and other ammonia derivatives. Nucleophilic addition in alpha and beta unsaturated aldehydes and ketones: 1, 2 and 1, 4 additions.	• Addition reactions of Ammonia, primary amines	01	18/10/23	Lecture method
	• Addition reactions of other ammonia derivatives.- amine, hydrazine,phenyl hydrazine	01	21/10/23	Lecture & ICT method
	• Addition reactions of other ammonia derivatives- semicarbazide	01	25/10/23	Lecture method
	• Nucleophilic addition in alpha and beta unsaturated aldehydes and ketones: 1, 2 and 1, 4 additions.	01	28/10/23	Lecture method
Unit 1 and Unit 2	**Reaction mechanisms and aliphatic hydrocarbons and Mechanism of substitution, elimination, and addition reactions**	**01**	**15/11/23 to 18/11/23**	**Internal Assessment C1 Written Test**
			22/11/23	**Display of C1 Internal test mark on the notice board**
Unit 3: Mechanism of electrophilic aromatic substitution reactions **Duration : 14Hrs** **Aromatic compounds –** Aromaticity, Huckel's rule, criteria for aromaticity, anti-aromatic, and non-aromatic compounds with examples. Mechanism of electrophilic substitution reactions - Halogenation, nitration and Sulfonation.Mechanism of Friedel crafts alkylation and Friedel crafts acylation. Effect of substituents on reactivity and orientation of mono substituted benzenes and polycyclic benzenoid hydrocarbons (E.g.: Naphthalene)	• Aromatic compounds – Aromaticity	01	04/11/23	Lecture method
	• Huckel's rule, criteria for aromaticity	01	08/11/23	Lecture method
	• Anti-aromatic, and non-aromatic compounds with examples.	01	11/11/23	Lecture & ICT method
	Internal Assessment – C1			**15/11/23 to 18/11/23**
	• Non-aromatic compounds with examples.	01	20/11/23	Special Class to compensate the class missed
	• Mechanism of electrophilic substitution reactions – Halogenation and nitration	01	21/11/23	Lecture method
	• Mechanism of electrophilic substitution reactions - Sulfonation.	01	22/11/23	Lecture & ICT method
	• Mechanism of Friedel crafts alkylation and Friedel crafts acylation	01	25/11/23	Lecture method
	• Effect of substituents on reactivity and orientation of mono substituted benzenes	01	29/11/23	Lecture method

Structure and Role of coenzymes Thiaminepyrophosphate-structure and its role in decarboxylation of alpha-keto acids.	• Effect of substituents on reactivity and orientation of polycyclic benzenoid hydrocarbons	01	02/12/23	Lecture & ICT method
	• Introduction to coenzymes, TPP- structure and its role in decarboxylation of alpha-keto acids.	01	06/12/23	Lecture method
UNIT 4	**Assessment 2 - Quiz**	**01**	**06/12/23** **08/12/23**	**Written quiz** **Display of Assessment 2 Quiz marks on the notice board**
Biotin- structure and its role in carboxylation of some important biochemical reactions of in carbohydrate and lipid metabolism. Vit B12 its role rearrangement reactions.	• Biotin- structure and its role in carboxylation of some important biochemical reactions of carbohydrate.	01	08/12/23	Special Class to complete the course Lecture & ICT method
	• Biotin- structure and its role in carboxylation of in	01	09/12/23	Lecture & ICT method
	•			
Vitamin B2 coenzymes and its role in redox reactions with suitable examples.	biochemical reactions of lipid metabolism.			
	• Vitamin B12 its role in rearrangement reactions.	01	13/12/23	Lecture & ICT method
	• Vitamin B2 coenzymes and its role in redox reactions with suitable examples.	01	16/12/23	Lecture method

Subject: Biochemistry (III SEM) [Course code: **222369**]

Title of the Paper- DSC 3- Bioorganic Chemistry

Total contact hours **- 56** No of teaching hours/week**: 04Term Period: 11/09/2023** to **16/12/23**

1. Name of the Faculty: Ramya.V and Radhika P

Hrs/week: 04
Total Hrs: 56

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
I. Extractions 1. Extraction of starch from potatoes 2. Extraction of casein from milk. 3. Extraction of caffeine from tea leaves **II. Preparation of the following organic compounds.** 1. Acetylation: Preparation of acetyl salicylic acid from salicylic acid. 2. Oxidation: Preparation of benzoic acid from benzaldehyde. 3. Nitration: Preparation of m-dinitrobenzene from nitrobenzene. 4. Hydrolysis: Preparation of benzoic acid from ethyl benzoate.	EXPT I AND EXPT II	04/week	11/09/23 To 27/11/23	Experimental Method
Experiment I and II		**02**	**03/11/23**	**Practical Internal Assessment C1-Test**
			06/11/23	**Display of practical C1 test marks on notice board**
III Systematic qualitative analysis of organic compounds. (6 practical) • Urea, Aniline, • Salicylic acid, Benzoic acid • Benzaldehyde, Acetophenone • Nitrobenzene • Chlorobenzene	EXPT III	04/week	03/11/23 To 08/12/23	Experimental Method
Experiment III		**02**	**01/12/23**	**Practical Internal Assessment C2 –Test**
			04/12/23	**Display of practical C2 test marks on notice board**

Subject: Biochemistry (V SEM) [Course code: **232569]**
Title of the Paper - DSC 5 – Biochemistry of Macromolecules and Nutrition Total contact hours **- 60** No of teaching hours/week**: 04 Term Period: 11/09/23** to **16/12/23**

1. **Name of the Faculty: Madhuri.R**

Hrs/week: 01 **Total Hrs: 30**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT 3: **Lipids and Nucleic acids** **Duration : 15Hrs** **Lipids:** Classification and biological role, Fatty acids - Structure and nomenclature of saturated and unsaturated fatty acids.	• DSC 5 - Biochemistry of Macromolecules and Nutrition	01	11/09/23	Discussion of Course outcomes of all units.
	• Lipids: Classification and biological role, Fatty acids - Structure and nomenclature of saturated and unsaturated fatty acids.	01	13/09/23	Lecture & ITC method
Acylglycerols: Mono, di and triacylglycerols. Saponification, saponification value, iodine value, acid value, Peroxide value and significance, Rancidity-types (oxidative and hydrolytic rancidity) and prevention of rancidity, **Phosphoglycerides:** Structure and biological importance of lecithin (phosphatidyl choline), cephalins, phosphatidylinositol, plasmalogens and cardiolipin, Sphingolipids: Structure and importance of sphingomyelin. Glycerosphingolipids: Composition and biological importance of gangliosides and cerebrosides	• Acylglycerols: Mono, di and triacylglycerols. Saponification, saponification value. Iodine value, acid value, Peroxide value and significance	01	20/09/23	Lecture & ITC
	• Rancidity-types (oxidative and hydrolytic rancidity) and prevention of rancidity.	01	25/09/23	Lecture method
	• Structure and biological importance of lecithin (phosphatidyl choline), cephalins, phosphatidylinositol, plasmalogens and cardiolipin, Sphingolipids: Structure and importance of sphingomyelin.	01	27/09/23	Lecture method
	• Glycerosphingolipids: Composition and biological importance of gangliosides and cerebrosides	01	29/09/23	Special Class to complete the course Lecture method
Eicosanoids:	• Definition, Prostaglandins-types, structure of PGE2 and PGF2.	01	04/10/23	Lecture & ICT

Definition, Prostaglandins-types, structure of PGE2 and PGF2 1. Biological importance of thromboxanes (TX2), leukotrienes and lipoxins. Plasma lipoproteins: Types and functions. **Nutritional aspects of Fats:** Dietary sources of fats, visible and invisible fat, trans fats, non essential fatty acids, essential fatty acids - types with examples and functions. Role of omega 3 fatty acids - DHA and EPA. • **Nucleic acids**: Composition of DNA and	• Biological importance of thromboxanes (TX2), leukotrienes and lipoxins. Plasma lipoproteins: Types and functions.	01	05/10/23	Special Class to complete the course Lecture & ICT method
	• Plasma lipoproteins: Types and functions. Nutritional aspects of Fats: Dietary sources of fats.	01	09/10/23	Lecture & ICT
	• Visible and invisible fat, trans fats, non essential fatty acids, essential fatty acids - types with examples and functions. Role of omega 3 fatty acids - DHA and EPA.	01	11/10/23	Lecture & ICT
	• Nucleic acids: Composition of DNA and RNA. Nucleosides and Nucleotides, Chargaff's rule, Watson and Crick model of DNA.	01	16/10/23	Lecture & ICT
	• Physico-chemical properties of Nucleic acids : Effect of heat on DNA (denaturation and	01	18/10/23	Lecture & ICT
RNA. Nucleosides and Nucleotides, Chargaff's rule, Watson and Crick model of DNA, Physico-chemical properties of Nucleic acids : Effect of heat on DNA (denaturation and renaturation), Melting of DNA (Tm) factors affecting (Tm), UV absorption and Hyperchromic	renaturation), Melting of DNA (Tm) factors affecting (Tm).			
	• UV absorption and Hyperchromic effect. Effect of alkali and acid on DNA.	01	19/10/23	Special Class to complete the course Lecture & ICT method
	• Variants of DNA (A, B and Z form).	01	25/10/23	Lecture & ICT method
	• Structure and functions of types of RNA - mRNA, tRNA and rRNA.	01	26/10/23	Special Class to complete the course Lecture & ICT method
	• Secondary structures of tRNA - Clover leaf model.	01	30/10/23	Lecture & ICT
Unit 3	**Assessment 1 – Assignment**		**22/11/23**	**Submission of Assessment 1- Assignment**
			24/11/23	**Display of C1 Assignment marks on thenotice board**

Unit 4: Nutrition Introduction: Concept of Nutrition, calorific value of foods and its determination (Bomb calorimeter), Respiratory quotient, Basal Metabolic Rate, factors affecting BMR. Specific dynamic action (SDA) of foods. Vitamins: Biochemical functions and deficiency symptoms of Thiamine, Riboflavin, Niacin, Pantothenic acid, Pyridoxine, Biotin, Folic acid, Vit-B12 and Vit - C. Fat soluble vitamins - A, D, E and Vit-K. Mineral Metabolism: Physiological functions and deficiency disorders of Ca, P,	• Introduction: Concept of Nutrition, calorific value of foods and its determination (Bomb calorimeter).	01	06/11/23	Lecture & ICT
	• Respiratory quotient, Basal Metabolic Rate, factors affecting BMR.	01	08/11/23	Lecture & ICT
	• Specific dynamic action (SDA) of foods.	01	10/11/23	Special Class to complete the course Lecture method
	• Vitamins: Biochemical functions and deficiency symptoms of Thiamine, Riboflavin, Niacin.	01	13/11/23	Lecture & ICT
	Internal Assessment C1		**15/11/23 to 18/11/23**	
	• Vitamins: Biochemical functions and deficiency symptoms of Pantothenic acid, Pyridoxine, Biotin.	01	20/11/23	Lecture & ICT
	• Vitamins: Biochemical functions and deficiency symptoms of Folic acid, Vit-B12 and Vit - C.	01	21/11/23	Special Class to complete the course Lecture method
	• Fat soluble vitamins – Vit A , Vitamin D.	01	22/11/23	Lecture & ICT

	• Fat soluble vitamins E and Vit-K.	01	27/11/23	Lecture & ICT
	• Physiological functions and deficiency disorders of Ca and P.	01	28/11/23	Special Class to complete the course Lecture method
Unit 4	**Assessment 2 – Quiz**	**30 min**	**29/11/23**	**Written Quiz** **Display of Assessment2 Quiz marks on the notice board**
Physiological functions and deficiency disorders of Ca, P, Na, K, Cl, Mg, Fe and I Protein energy malnutrition (PEM):	• Physiological functions and deficiency disorders of K and Na.	01	29/11/23	Lecture & ICT
	• Physiological functions and deficiency disorders of Cl and Mg.	01	04/12/23	Lecture & ICT

Kwashiorkar and Marasmus Antinutritional factors: Sources and harmful effects of antivitamins (Eg. Avidin, Dicoumarol), Natural toxicants (Eg. Lathyrus sativa) and adulterants (Eg. butter yellow, lead chromate) Nutraceuticals: Introduction, functional foods and pre and pro-biotics in health and disease prevention.	• Physiological functions and deficiency disorders of Fe and I.	01	05/12/23	Special Class to complete the course ICT method
	• Antinutritional factors: Sources and harmful effects of antivitamins (Eg. Avidin, Dicoumarol).	01	06/12/23	Lecture & ICT
	• Natural toxicants (Eg. Lathyrus sativa) and adulterants (Eg. butter yellow, lead chromate)	01	11/12/23	Lecture & ICT
	• Nutraceuticals: Introduction, functional foods and pre and pro-biotics in health and disease prevention	01	13/12/23	Lecture & ICT

2. Name of the Faculty: Ramya V
Hrs/week: 01 **Total Hrs: 15**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT- I CARBOHYDRATES **Duration: 14Hrs** Definition, empirical formulae, classification and biological importance. **Monosaccharides:** Configuration relationship of D-aldoses and D-ketoses. General properties of aldoses and ketoses. Oxidation, reduction, reducing property, addition – HCN, acylation, formation of glycosides, methylation and condensation	• Definition, empirical formulae, classification and biological importance.	01	12/9//2023	Lecture method
	• Monosaccharides: Configuration relationship of D-aldoses and D-ketoses. General properties of aldoses and ketoses. Oxidation, reduction, reducing property	01	19/9//2023	Lecture method
	• Addition – HCN, acylation, formation of glycosides, methylation and condensation with phenyl hydrazine.	01	26/9//2023	Lecture method

with phenyl hydrazine. Interconversion of aldoses and ketoses by chemical method. Ascending and descending series by chemical methods. Stereochemistry of monosaccharides : (+) and (-), D and L, epimers, anomers and diastreoisomers. **Glucose:** Elucidation of open chain structure and ring structure of glucose. Conformation of glucose (only structures), mutarotation. Structure of ribose, galactose and mannose (open chain and Hawarth ring structure) **Derivatives of monosaccharides:** Structure and biological importance of sugar acids, deoxy sugars, amino sugars, derivatives of amino sugars - neuraminic and muramic acid. **Disaccharides:** Establishment of structures of Sucrose and Lactose, Biological Importance and structure of Isomaltose, Trehalose and Maltose. **Polysaccharides:** Partial structure, occurrence and	• Interconversion of aldoses and ketoses by chemical method. Ascending and descending series by chemical methods.	01	03/10/23	Lecture Method
	• Stereochemistry of monosaccharides : (+) and (-), D and L, epimers, anomers and diastreoisomers.	01	10/10/23	Lecture & ICT method
	• Elucidation of open chain structure and ring structure of glucose. Conformation of glucose (only structures), mutarotation. Structure of ribose, galactose and mannose (open chain and Hawarth ring structure)	01	17/10/23	Lecture method
	• Structure and biological importance of sugar acids, deoxy sugars, amino sugars, derivatives of amino sugars - neuraminic and muramic acid.	01	25/10/23 And 26/10/23	Special Class to compensate the class missed Lecture method
	• Establishment of structures of Sucrose and Lactose, Biological Importance and structure of Isomaltose, Trehalose and Maltose.	01		
biological importance of Starch, Glycogen, Inulin, Cellulose, Chitin, and Pectin.	• Partial structure, occurrence and biological importance of Starch, Glycogen, Inulin	01	31/10/23	Lecture method
	• Partial structure, occurrence and biological importance of Cellulose, Chitin, and Pectin.	01	07/11/23	Lecture method
Unit 1 and Unit 2	**Carbohydrates, amino acids and proteins**	**01**	**15/11/23 To 18/11/23**	**Internal Assessment C1Written Test**
			22/11/23	**Display of C1Internal test marks on the notice board**

Glycosaminoglycans: Occurrence, structure of the repeating units and importance of heparin, hyaluronic acid, teichoic acid and chondroitin sulphate. Bacterial cell wall polysaccharide -peptidoglycans. **Nutrition of Carbohydrates:** Dietary sources, dietary fibers - types, beneficial and adverse effects, protein sparing action, Glycemic Index- importance with examples, Lactose intolerance.	• Glycosaminoglycans: Occurrence, structure of the repeating units and importance of heparin, hyaluronic acid	01	21/11/23	Lecture method
	• Occurrence, structure of the repeating units and importance of teichoic acid and chondroitin sulphate.	01	28/11/23	Lecture method
	• Bacterial cell wall polysaccharide - peptidoglycans.	01	05/12/23	Lecture method
	• Dietary sources, dietary fibers - types, beneficial and adverse effects,	01	12/12/23	Lecture method
	• Protein sparing action, Glycemic Index- importance with examples, Lactose intolerance.	01	13/12/23	Special Class to complete the unit Lecture method

2. Name of the Faculty: Radhika.P

Hrs/week: 01 **Total Hrs: 15**

Curriculum as prescribed by institution	Topic	No. of Hours required to complete	Date	Method of Deployment
UNIT-I: **Duration – 15hrs**	• Amino acids: Structure and classification of	01	13/09/2023	Lecture, discussion
Amino acids and proteins • **Amino acids:** Structure and classification of amino acids based on charge, functional group and solubility. Stereoisomerism ofamino acids (D & L notation). Reactions of the amino groups with HNO_2, $LiAlH_4$, Ninhydrin, Phenyl isothiocyante, Dansyl Chloride and Flurodinitro benzene. Reaction of carboxyl group with	Amino acids based on charge, functionalgroup and solubility.			& ICT method
	• Stereoisomerism of aminoacids (D & L notation).Reactions of theamino groups with HNO_2, $LiAlH_4$, Ninhydrin.	01	20/09/2023	Lecture & discussion method
	• Reactions of the amino groupswith Phenyl isothiocyante, Dansyl Chloride andFlurodinitro benzene.	01	27/09/2023	Lecture & discussion method

Hydrazine. Chemical properties of amino acids - Zwitterionic property, amphoteric property, pKaand pKb values • **Peptides:** Definition, Peptide bond, structure and biological importance of Glutathione, Valinomycin and Vasopressin. Synthetic peptides - polyglutamic acid and polylysine • **Proteins:** Classification of proteins based on solubility, structure and functions with examples. Forces that stabilise the structure of proteins. Primary structure of proteins,	• Reaction of carboxyl groupwith Hydrazine.Chemical properties of amino acids - Zwitterionic property.	01	04/10/2023	Lecture & discussion method
	• Amphoteric property, pKa andpKb values. • **Peptides:** Definition, Peptidebond.	01	11/10/2023	Lecture & discussion method
	• Structure and biological importance of Glutathione, Valinomycin & Vasopressin.	01	18/10/2023	Lecture & discussion method
	• Synthetic peptides - polyglutamic acid andpolylysine	01	25/10/2023	Lecture & discussion method
	• **Proteins:** Classification of proteins based on solubility,structure and functions with examples.	01	01/11/2023	Lecture & discussion method
	• Forces that stabilise the structure of proteins. Primary structure of proteins.	01	08/11/2023	Lecture, discussion & ICT Method
Unit 1 and Unit 2	**Carbohydrates, amino acids and proteins**	**01**	**15/11/23 To 18/11/23**	**Internal Assessment C1Written Test**
			22/11/23	**Display of C1 Internal test marks on the notice board**
• Determination of amino acid composition, Methods of sequencing aminoacids - Determination of N-terminal amino acids by Sangers method and Edman degradation method,	• Determination of amino acid composition, Methods of sequencing aminoacids - Determination of N-terminal amino acids by	01	22/11/2023	Lecture, discussion & ICT method

C-terminal amino acids by hydrazinolysis method and enzymatic method (carboxypeptidase). • Secondary Structure – α helix, β-sheet and β-bend. • Tertiary and quaternary structures, 3D structure of haemoglobin, Denaturation and renaturation of proteins. Anfinsen's experiment. • **Nutritional aspects of Proteins:** Dietary sources, essential aminoacids, Nutritional classification, Nutritional value of proteins – PER, NPU and Biological value of proteins (BV), Nitrogen balance, mutual supplementation of proteins.	Sanger's method and Edman degradation method.			
	• Determination of C-terminal amino acids by hydrazinolysismethod and enzymatic method (carboxypeptidase).	01	29/11/2023	Lecture, discussion & ICT method
	• Secondary Structure – α helix, β-sheet and β-bend.	01	06/12/2023	Lecture, discussion & ICT method
	• Tertiary and quaternary structures, 3D structure of haemoglobin.	03	07/12/2023 To 12/12/2023	Need special class to complete Lecture, discussion & ICT method
	• Denaturation and renaturationof proteins. Anfinsen's experiment. • **Nutritional aspects of Proteins:** Dietary sources,essential aminoacids, Nutritional classification.			
	• Nutritional value of proteins –PER, NPU and Biological value of proteins (BV).Nitrogen balance, mutual supplementation of proteins.			

Department: Biochemistry

Subject: Biochemistry **(V SEM)**[Course code: **232569**]

Title of the Paper: **DSC 5 Lab –Qualitative analysis of Biomolecules and their nutritionalaspects**

Total contact hours **- 60**No of teaching hours/week**:**

04Term Period: 11/09/2023 to **16/12/2023**

1. **Name of the Faculty: Ramya.V and Radhika P**

Hrs/week: 04 **Total Hrs: 60**

Curriculum as prescribed by the Institution	Experiments	No. of Hours requiredto complete	Date	Method of Deployment andRemarks
Experiments on Nutrition: 1. Detection of food adulterants in various food stuffs. 2. Determination of moisture content of food.	Experiment 1 To	04 Hours/	11/09/23 to 07/11/23	Discussion and Experimental and Method

3. Extraction and estimation of Vitamin C in biological sample 4. Extraction and estimation of Calcium in ragi powder. 5. Estimation of Phosphorous from food sample. 6. Estimation of amino acid by formal titration method. 7. Extraction and estimation of iron in mustard seeds. 8. Determination of Saponification value of oil/fat. Determination of iodine value ofoil/fat.	Experiment 9	week		
Experiment 1 to 9		**02**	**08/11/23** **09/11/231** **3/11/23**	**Practical IA C1 – Test displayed on notice board**
Qualitative analysis of Biomolecules: **Carbohydrates:** Monosaccharides (Glucoseand Fructose), Disaccharides (lactose, maltose, sucrose), polysaccharides (starch/glycogen). **Proteins**: Precipitation reactions of proteins, Colour reactions of proteins, Colour reactions of amino acids like tryptophan, tyrosine, cysteine, methionine, arginine, proline and histidine. **Lipids**: solubility test, acrolein test, Salkowski test and Lieberman-Burchard test. **Nucleic acids** : DPA test (ribose), Orcinol test(deoxy ribose)	Experiment 1 To Experiment 9	04 Hours/ week	13/11/23 and 05/12/23	Discussion and Experimental andMethod
Experiment 2 and 3		**02**	**27/11/23** **28/11/23**	**Practical Internal Assessment C2 - Test**
			01/12/23	**Display of practicalC2 test marks on the notice board**

Subject: Biochemistry (V SEM) [Course code: **232570]**

Title of the Paper- DSC 6- Human Physiology and Enzymology.

Total contact hours **- 60** No of teaching hours/week**: 04Term Period: 11/09/2023** to **16/09/23**

1. Name of the Faculty: Ramya V

Hrs/week: 01 Total Hrs: 15

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit 2 – **Duration-15Hrs** **Bone and Cartilage:** Composition of bone, types of bones, Components of long bone, Growth and remodeling of long bone. Factors affecting its growth. Cartilage and its types. **Digestive System:** Anatomy of GIT and accessory organs, digestive secretions, Digestion, absorption & transport of carbohydrates, lipids and proteins. Role of various enzymes involved in digestive process. **Hepatic System:** Liver, Structure of a liver lobule. Role of liver in	• DSC 6: Human Physiology andEnzymology	01	12//09/23	Discussion of Course outcomes of all units
	• Bone and Cartilage: Composition of bone, types ofbones, Components of long bone,	01	15//09/23	Lecture and ICT method
	• Growth and remodeling of long bone. Factors affecting its growth	01	22 /09/23	Lecture and ICT method
	• Cartilage and its types	01	29//09/23	Lecture and ICT method
	• Anatomy of GIT and accessory organs, digestive secretions	01	06/10/23	Lecture and ICT method
	• Digestion, absorption & transport of carbohydrates,	01	13/10/23	Lecture and ICT method
	• Digestion, absorption & transport of lipids	01	20/10/23	Lecture and ICT method
	• Digestion, absorption & transport of proteins.	01	27/10/23	Lecture and ICT method
	• Role of various enzymes involved in digestive process.	01	03/11/23	Lecture and ICT method
	• Liver, Structure of a liver lobule.	01	10/11/23	Lecture and ICT method
	Internal Assessment C1		**15/11/23 to 18/11/23**	

metabolic, storage and Detoxification. **Excretory system:** Brief outline of various excretory organs and their excretory products, Structure of nephron,	• Role of liver in metabolic, storage and Detoxification.	01	22/11/23	Special class to compensate the class missed
	• Brief outline of various excretory organs and their excretory products,	01	23/11/23	
	• Structure of nephron, formation of urine – Glomerular filtration	01	24/11/23	Lecture and ICT method
UNIT 2	**Assessment C1 - Assignment**		**24/11/23**	**Submission of Assessment C1 Assignment**
			28/11/23	**Display of C1 Assignment marks on the notice board**
Formation of urine – Glomerular filtration, tubular reabsorption and secretions. Role of kidneys in acid-base balance. Regulation of kidney functions.	• Formation of urine – tubular reabsorption and secretions.	01	01/12/23	Lecture and ICT method
	• Role of kidneys in acid-base balance. Regulation of kidney functions.	01	08/12/23	Lecture and ICT method
	• Regulation of kidney functions.	01	15/12/23	Lecture and ICT method

2. Name of the Faculty: Madhuri.R

Hrs/week: 01 **Total Hrs: 15**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT 3: **Duration : 15 Hrs** Introduction to enzymes: Definition, Nature of enzymes - protein and non-protein (ribozyme), Characteristics of enzymes. Holoenzyme - apoenzyme and prosthetic group, Cofactors & Coenzymes - definition with examples.	• Introduction to enzymes: Definition, Nature of enzymes - protein and non-protein (ribozyme)	01	15/09/23	Lecture method
	• Characteristics of enzymes. Holoenzyme - apoenzyme and prosthetic group	01	22/09/23	Lecture method
	• Cofactors & Coenzymes - definition with examples.	01	26/09/23	Lecture and ITC
	• IUBMB classification of enzymes with examples.	01	29/09/23	Lecture method

	• Enzyme activity & Units of enzyme activity	01	06/10/23	Lecture method
	•			
IUBMB classification of enzymes with examples. Enzyme activity & Units of enzyme activity, specific activity of enzymes. Monomeric and oligomeric enzymes, multifunctional enzymes (Fattyacid synthase), multienzyme complexes (PDH) and isoenzymes (lactate dehydrogenase). Immmoblized enzymes - methods and applications.	• Specific activity of enzymes.	01	13/10/23	Lecture &ICT
	• Monomeric and oligomeric enzymes.	01	20/10/23	Lecture &ICT
	• Multifunctional enzymes (Fattyacid synthase)	01	27/10/23	Lecture & ICT
	• Multienzyme complexes (PDH) and isoenzymes (lactate dehydrogenase)	01	03/11/23	Lecture & ICT
	• Isoenzymes (lactate dehydrogenase)	01	09/11/23	Lecture & ICT
	• Immmoblized enzymes- methods and applications.	01	10/11/23	Lecture & ICT
Unit 1 and Unit 3	**Introduction, Circulatory system, Blood, respiratory system,Enzymology- introduction an dcharacteristics**	**01**	**15/11/23 to 18/11/23**	**Internal Assessment C1Written Test**
			22/11/23	**Display of C1 Internal testmarks on the notice board**
Features of enzyme catalysis: Catalysis, reaction rates and thermodynamics of reaction. Activation energy and transition state theory. Catalytic power, specificity of enzymes, concept of active site, Theories of enzyme catalysis- Fischer's lock and key hypothesis, Koshland's induced fit hypothesis.	• Features of enzyme catalysis: Catalysis, reaction rates and thermodynamics of reaction.	01	24/11/23	Lecture & ICT
	• Activation energy and transition state theory	01	01/12/23	Lecture, discussion &ICT
	• Catalytic power, specificity of enzymes, concept of active site.	01	08/12/23	Lecture method
	• Theories of enzyme catalysis- Fischer's lock and key hypothesis, Koshland's induced fit hypothesis.	01	15/12/23	Lecture method

3. Name of the Faculty: Radhika P

Hrs/week: 02 **Total Hrs: 30**

Curriculum as prescribed by institution	Topic	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT-I: **Duration 15hrs** • **Introduction**: Basic body plan in humans & Location of organs.	• **Introduction**: Basic body plan in humans & Location of organs.	01	14/09/2023	Lecture, discussion & ICT method
	• **Nervous System**: Brief outline of nervous			Lecture, discussion &
	•			
• **Nervous System**: Brief outline of nervous system, Types of Neurons, generalized structure of multipolar neuron, Action potential & resting potential. Synapse, types of synapses, mechanism of nerve impulse transmission along the axon, synaptic transmission. Neurotransmitters, types - Excitatory & Inhibitory with examples. • **Respiratory system**: Respiration, Structure and functions of lungs, Mechanism of respiration (inspiration and expiration), Exchange of gases, Biochemical events in the transport of gases and the factors affecting the exchange of gases, Role of lungs in acid-base balance. Hypoxia, emphesema. • **Circulatory system:** Components of circulatory system (heart, blood vessels and blood), Structure and functions of heart. Blood vessels – types and functions. Phases of Cardiac cycle, heart	system, Types of Neurons, generalized structure of multipolar neuron.	01	16/09/2023	ICT method
	• Action potential & resting potential. Synapse, types of synapses. Mechanism of nerve impulse transmission along the axon	01	21/09/2023	Lecture, discussion & ICT method
	• synaptic transmission. Neurotransmitters, types - Excitatory & Inhibitory with examples.	01	23/09/2023	Lecture, discussion & ICT method
	• Respiratory system: Respiration, Structure and functions of lungs.	01	30/09/2023	Lecture, discussion & ICT method
	• Mechanism of respiration (inspiration and expiration).	01	05/10/2023	Lecture, discussion & ICT method
	• Exchange of gases, Biochemical events in the transport of gases and the factors affecting the exchange of gases.	01	07/10/2023	Lecture, discussion & ICT method
	• Role of lungs in acid-	01	12/10/2023	Lecture, discussion & ICT method

rate, cardiac output. Blood pressure - types, measurement and its regulation. • **Blood:** Composition, volume, structure and functions of RBC, WBC and platelets. Mechanism of blood coagulation. Cerebrospinal fluid, lymph and their functions. Blood brain Barrier. • **Muscular system:** Types of muscles and their structure. Ultrastructure of skeletal	• **Circulatory system:** Components of circulatory system (heart, blood vessels and blood), Structure and functions of heart.	01	14/10/2023	Lecture, discussion & ICT method
	• Blood vessels – types and functions. Phases of Cardiac cycle, heart rate, cardiac output.	01	19/10/2023	Lecture, discussion & ICT method
	• Blood pressure - types, measurement and its regulation. Blood: : Composition, volume,	01	21/10/2023	Lecture, discussion & ICT method
	•			
muscle. Contractile and regulatory proteins of muscle. Sliding filament model of skeletal muscle contraction.	structure and functions of RBC, WBC and platelets			
	• Mechanism of blood coagulation. CSF, lymph and their functions. Blood-brain Barrier.	01	26/10/2023	Lecture, discussion & ICT method
	• **Muscular system:** Types of muscles and their structure. Ultrastructure of skeletal muscle.	02	27/10/23 and 28/11/23	Need special class to cover
	• Contractile and regulatory proteins of muscle. Sliding filament model of skeletal muscle contraction.			
Unit 1 and Unit 3	**Introduction, Circulatory system ,respiratory system ,Enzymology- introduction and characteristics**	**01**	**15/11/23 to 18/11/23**	**Internal Assessment C1Written Test**
			22/11/23	**Display of C1Internal test marks on thenotice board**
UNIT 4: Enzyme kinetics **Duration 15hrs** **Enzyme kinetics of single**	• Enzyme kinetics of single substrate reactions: Michaelis-Menten equation.	01	02/11/2023	Lecture, discussion & ICT method

substrate reactions: Michaelis-Menten equation, equilibriumconstant – monosubstrate reactions, relationship betweeninitial velocity and substrate concentration**.** Factors affecting the rate of enzyme catalysed reactions - - enzyme concentration, substrat econcentration, pH, temperatureand metal ions. Lineweaver-Burkplot. Determination ofVmax & Km from L-B plot and their significance. K_{cat} and turnover number. **Enzyme Inhibition:** Definition, types of inhibition- reversible and irreversible inhibition. Reversible inhibition- competitive, uncompetitive, non-	• Equilibrium constant – monosubstrate reactions. • base balance. Hypoxia, emphesema.	01	04/11/2023	Lecture, discussion & ICT method
	• Relationship between initial velocity and substrate concentration**.**	01	09/11/2023	Lecture, discussion & ICT method
	• Factors affecting the rate of enzyme catalysed reactions – enzyme concentration, substrate concentration.	01	11/11/2023	Lecture, discussion & ICT method
	• Factors affecting the	01	23/11/2023	Lecture,
	•			
competitive with graphical representations using L-B plots. Evaluation of Km and Vmax in presence of inhibitor (mixed and substrate). Irreversible inhibition–Suicide inhibition. Antibiotics as inhibitors- penicillin. **Clinical Enzymes:** Alkaline phosphatase, serum transaminases (SGPT &	rate of enzyme catalysed reactions – pH, temperature and metal ions.			discussion & ICT method
	• Lineweaver-Burkplot. Determination of Vmax & Km from L-B plot and their significance.	01	25/11/2023	Lecture, discussion & ICT method
	• K_{cat} and turnover number.	01	02/12/2023	Lecture, discussion & ICT method
	• **Enzyme Inhibition:** Definition, types of inhibition- reversible and irreversible inhibition.	01	07/12/2023	Lecture, discussion & ICT method

SGOT), Cardiac injury profile- CPK and LDH.	• Reversible inhibition- competitive & uncompetitive with graphical representations using L-B plots.	01	09/12/2023	Lecture, discussion & ICT method
	• Reversible inhibition- non-competitive with graphical representations using L-B plots.	01	14/12/2023	Lecture, discussion & ICT method
	• Evaluation of Km and Vmax in presence of inhibitor (mixed and substrate).	04	01/12/2023 To 12/12/2023	Need special class to complete Lecture, discussion & ICT method
	• Irreversible inhibition – Suicide inhibition. Antibiotics as inhibitors -penicillin.			
	• **Clinical Enzymes:** Alkaline phosphatase, serum transaminases (SGPT & SGOT).			
	• Cardiac injury profile- CPK and LDH.			
Unit 4	**Assessment 2 - Quiz**	**01**	**13/12/2023**	**Written Quiz**
			15/12/2023	**Display of Assessment2 Quiz marks on the notice board**

Subject: Biochemistry **(VI SEM)**[Course code: **232570**]
Title of the Paper – **DSC6 Lab –Human Physiology and Enzymology**
Total contact hours **– 60** No of teaching hours/week**: 04**
Term Period: 11/09/2023 to **16/12/2023**

1. Name of the Faculty: Ramya.V and Radhika P

Hrs/week: 04 **Total Hrs: 60**

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
Enzyme Assays **1.** Salivary amylase/β- amylase **a.** Determination of activity and specific activity of salivary amylase by DNS method. (Construction of Maltose/glucose calibration curve by DNS method) **b.** Determination of optimum temperature of salivary amylase. **c.** Determination of pH optimum of salivary amylase. **d.** Determination of time kinetics of salivary amylase **e.** Determination of Km and Vmax of salivary amylase. **f.** Effect of Sodium chloride on amylase **2.** Isolation of acid phosphatase and demonstration of its activity by PNP method. **3.** Isolation of Urease and demonstration of its activity. **4.** Isolation of invertase and demonstration of its activity.	Experiment 1 To Experiment 4	04 Hours/ week	13/09/23 to 03/11/23	Discussion and Experimental and Method
Enzymology Experiments 1 to 4		**03**	**06/11/23** **07/11/23**	**Practical Internal Assessment C1 - Test**
			10/11/23	**Display of practical C1 test marks on the notice board**

Human Physiology 1. Determination of Blood clotting time 2. Enumeration of RBC and WBC count using Haemocytometer 3. Separation of Serum and Plasma from Blood 4. Estimation of percentage of haemoglobin content in blood 5. Determination of Blood pressure by Sphygmomanometer.	Experiment 1 To Experiment 5	04 Hours/ week	06/11/23 to 14/12/23	Discussion and Experimental and Method
Human Physiology Experiments 1 to 3		**01**	**04/12/23** **05/12/23**	**Practical Internal Assessment C2 - Test**
			08/12/23	**Display of practical C2 test marks on the notice board**

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Karnataka, INDIA
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Course Plan – EVEN Semester 2023-24

Department: Biochemistry
Subject: Biochemistry **(II SEM)**[Course code: **212269**]
Title of the Paper –**DSC2: Chemical Foundation of Biochemistry- 2**Total contact hours **-56** No of teaching hours/week**: 04 Term Period: 12/02/2024** to **25/05/24**

1. Name of the Faculty: Ramya.V

Hrs/week: 01
Total Hrs: 14

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1: Chemical Catalysis & Colloids **Duration : 14 Hours** **Chemical Catalysis**: Definition, characteristics, catalytic promoters and types of catalysts. Multifunctional catalysis. Theories of catalysis (intermediate compound formation & adsorption theory). Properties, characteristics of enzyme catalysis, autocatalysis and acid-base catalysis. Industrial catalysis and its applications. **Colloids:** Colloids, suspension and true solutions. Classification of colloids (based on physical state, particle size and interaction between	• DSC2-Chemical Foundationof Biochemistry- 2	01	12/02/24	Discussion of Course Outcomes of all units
	• Chemical Catalysis- Definition, characteristics, types	01	19/02/24	Lecture method
	• Intermolecular& multifunctional catalysis.	01	26/02/24	Lecture method
	• Theories of catalysis (intermediate compound formation & adsorption theory	01	04/03/24	Lecture method
	• Properties, characteristics of enzyme catalysis, autocatalysis	01	11/03/24	Lecture, discussion & ICT method
	• Industrial catalysis and their role in biological system.	01	18/03/24	Lecture, discussion & ICT method
	• **Colloids:** Colloids, true solutions, classification	01	25/03/24	Lecture, discussion & ICT method
	• Properties of colloids- kinetic property - Brownian movements	01	01/04/24	Lecture, discussion & ICT method
dispersed phase & medium). Differences between lyophobic & lyophilic sols. Properties of colloids- kinetic property (Brownian movements), electric properties (electrophoresis & electro-osmosis). Stability of colloids - coagulation; Effect of boiling and addition of electrolytes.	• Properties of colloids- electric properties	01	08/04/24	Lecture, discussion & ICT
	• Effect of boiling and addition of electrolytes – coagulation	01	15/04/24	Lecture, discussion & ICT method
Unit 1 and Unit 2	**Chemical Catalysis & Colloids and Nomenclatureof Organic Compounds & Stereochemistry**	01	**16/04/24 to 20/04/24**	**Internal Assessment C1Written Test**
			25/04/24	**Display of C1 Internal test marks on the notice board**

Peptization with examples. Mutual precipitation of colloids, Purification of colloids – dialysis, electro-dialysis, ultrafiltration and ultracentrifugation. Colloids in daily life and applications. Emulsion- types, micelles, applications of emulsions	• Peptization with examples. Mutual precipitation of colloids	01	22/04/24	Lecture& ICT method
	• Differences between lyophobic & lyophilic sols	01	29/04/24	Lecture, discussion & ICT
	• Purification of colloids – ultrafiltration, dialysis – electro & persistent dialysis.	01	06/05/24	Lecture, discussion & ICT
	• Colloids in daily life and applications	01	13/05/24	Lecture and Discussion method
	• Emulsion- types, micelles with biomolecules and its biological applications.	01	20/05/24	Lecture, discussion & ICT

2. **Name of the Faculty: Radhika P**

Hrs/week: 01 **Total Hrs: 28**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit 2: Nomenclature of Organic Compounds &	• Introduction &Classification of organic compounds.	01	15/02/24	Lecture & discussion
Stereochemistry **Duration :15Hrs** Classification, naming- IUPAC nomenclature, compounds containing one, two functional groups with chains, homologous series. **Stereochemistry**- Definition and types, Structural Isomerism- types with examples. Stereoisomerism - Optical isomerism (Lactic acid, tartaric acid), symmetry of elements, plane polarized light and optical purity. Molecular chirality. Geometrical isomerism (maleic & fumaric acid).	• Naming- IUPAC nomenclature. Compounds containing one functional group.	01	16/02/24	Lecture, discussion & ICT
	• Naming- IUPAC nomenclature. Compounds containing functional groups with chains, homologous series.	01	22/02/24	Lecture, discussion & ICT
	• Stereochemistry-Introduction, Definition and types of Isomerism.	01	23/02/24	Lecture, discussion & ICT
	• Structural Isomerism- types with examples.	01	29/02/24	Special class- ICT
	• Stereoisomerism - Optical isomerism (Lactic acid, tartaric acid).	01	01/03/24	Lecture, discussion & ICT
	• Symmetry of elements, plane polarized light and Optical purity.	01	07/03/24	Lecture, discussion & ICT

Nomenclature properties of enantiomers and diastereomers, epimers&anomers with examples. Racemic mixture &resolution (chemical & biological methods). Fischer and Newman projection formulae (molecule with one and two chiral and achiral centers). Priority rules (CIP rules) - E and Z, R and S, D and L notations, absolute and relative configuration. Role of stereochemistry in biological systems.	• Molecular chirality. Geometrical isomerism (maleic &fumaric acid).	01	14/03/24	Lecture, discussion & ICT
	• Nomenclature properties of enantiomers and diastereomers.	01	15/03/24	Lecture, discussion & ICT
	• Epimers & anomers with examples.	01	21/03/24	Lecture, discussion & ICT
	• Racemic mixture & Resolution (chemical & biological methods)	01	22/03/24	Lecture, discussion & ICT
	• Resolution (biological methods).Priority rules (CIP rules) - E and Z.	01	28/03/24	Lecture, discussion & ICT
	• R and S, D and L notations. Absolute and relative configuration.	02	21/03/24 to 03/04/24	Need special class to complete unit
	• Role of stereochemistry in biological systems.			Lecture, discussion & ICT
Unit 1 and Unit 2	**Chemical Catalysis & Colloidsand Nomenclature of Organic Compounds & Stereochemistry**	01	**16/04/24 to 20/04/24**	**Internal Assessment C1Written Test**
			25/04/24	**Display of C1Internal test marks on the notice board**
UNIT 3: Organometallic Compounds and Metalloporphyrin **Duration :15Hrs** **Organometallic Compounds:** Definition, Classification with examples. Preparation of Grignard reagents, reactions, applications & limitations. Organolithium compounds, Organozinc compounds - preparation and synthetic applications. Metallocenes: ferrocenes-structure, properties & its importance.	• Definition, Classification with examples.	01	04/04/24	Lecture, discussion & ICT
	• Preparation of Grignard reagents, reactions, applications &limitations	01	05/04/24	Lecture, discussion & ICT
	• Organolithium compounds-preparation and synthetic applications.	01	12/04/24	Lecture, discussion & ICT
	Internal Assessment C1		**16/04/24 to 20/04/24**	
	• Organozinc compounds - preparation and synthetic applications.	02	22/04/24 23/04/24	Special Class Lecture, discussion & ICT
	• Metallocenes: Ferrocenes – structure, properties and importance.			

Metallurgy Introduction to mineral and ores, classification. Extraction of crude metal from their ores (General steps), Extraction of Nickel from sulphide ore followed by Mond's process of purification, Gold from native ore by cyanide process and refining by quartation process. Uses of metals, Importance of minerals. **Metalloporphyrin:** Definition, basic porphyrin nucleus structure, types (brief). Role of metal ions in biological systems- Fe, Co**,** Zn, Mg (occurrence, structure and functions) and iron-sulphur clusters with suitable example (Nitrogenase) and their role in biological systems.	• Introduction to mineral and ores, classification. Extraction of crude metal from their ores.	01	25/04/24	Lecture, discussion & ICT
	• Nickel extraction from sulphide ore followed by Mond's process of purification.	01	26/04/24	Lecture, discussion & ICT
	• Gold from native ore by cyanide process and refining by quartation process.	01	02/05/24	Lecture, discussion & ICT
	• Uses of minerals and metals and its importance.	01	03/04/24	Lecture, discussion & ICT
	• Metalloporphyrins, role of metal ions in biological systems- Fe and Cu(occurrence, structure and functions).	01	06/05/24 and 13/02/24	Special Class to cover unit Lecture, discussion & ICT
	• Metalloporphyrins, role of metal ions in biological systems- Zn (occurrence, structure and functions)	01		
	• Role of metal ions in biological systems- Mg (occurrence, structure and functions).		14/05/24 To	Need special class to complete syllabus
	• Iron-sulphur clusters with Nitrogenase as suitable example.	03	16/05/24	Lecture, discussion & ICT
	• Nitrogenase role in biological systems.			
Unit 3	**Assessment 2 - Quiz**	**30 min**	**16/05/24**	**Written Quiz**
			18/05/24	**Display of Assessment 2 Quiz marks on the notice board**

3. Name of the Faculty: Madhuri R

Hrs/week: 01 **Total Hrs: 14**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit 4: **Inorganic Chemistry & Heavy metal poisons** **Inorganic Chemistry** Nomenclature of inorganic molecules- IUPAC nomenclature (ionic, molecular and inorganic acids). Coordination compounds – formula, IUPAC nomenclature, central metal ion, ligand & its types, coordination number & its significance, coordination sphere, complex ion. Oxidation number of central atom, stock notations. Homoleptic and heteroleptic complexes. Isomerism in complexes – structural (ionization, hydrate, linkage and coordination isomerism). Stereoisomerism-	• **Inorganic Chemistry** Nomenclature of inorganic molecules- IUPAC nomenclature. Coordination compounds – formula, IUPAC nomenclature.	01	13/02/24	Lecture method
	• Coordination number & its significance. Coordination sphere.	01	20/02/24	Lecture method
	• Central metal ion, ligand & its types.Complex ion.	01	27/02/24	Lecture method
	• Oxidation number of central atom, stock notations.Homoleptic and heteroleptic complexes.	01	05/03/24	Lecture method
	• Isomerism in complexes – structural (ionization, hydrate, linkage and coordination isomerism).	01	12/03/24	ICT method
	• Stereoisomerism- geometrical (coordination number 4).	01	14/03/24	ITC method
	• Optical isomerism with simple inorganic complexes.	01	19/03/24	ICT method
geometrical (coordination number 4), optical isomerism with simple inorganic complexes. Applications of qualitative, quantitative analysis, photographic, metallurgy, medicine, catalysis and bio-systems. **Heavy Metal Poisons:** Introduction, sources, poisoning/entry, signs and symptoms- lead, mercury, aluminium, arsenic, cyanide, phosphorus, CO, SO_2, NO_2, halides (F & Br)	• Applications of qualitative, quantitative analysis, photographic, metallurgy, medicine, catalysis and bio-systems	01	26/03/24	ICT mthod
	• Introduction, sources, poisoning/entry, signs and symptoms- lead, mercury.	01	02/04/24	ICT method
	INTERNAL TEST – C1		**16/04/24 to 20/04/24**	
	• Sources, poisoning/entry, signs and symptoms- cyanide, phosphorus, aluminium, arsenic.	01	23/04/24	ICT method
	• CO, SO_2, NO_2, halides (F &Br) and corrosives.	01	30/04/24	ITC method

and corrosives. **Free radicals**: Introduction, sources (exogenous & endogenous), types of free radicals, generation (enzymatic & non-enzymatic) and scavenger systems. Redox reactions. Endergonic and exergonic reactions with examples. The Importance of free radicals in biological systems.	• **Free radicals**: Introduction, sources (exogenous & endogenous), types of free radicals.	01	07/05/24	Lecture method
	• Generation (enzymatic & non-enzymatic) and scavenger systems.	01	14/05/24	Lecture method
	• Redox reactions. Endergonic and exergonic reactions with examples. The Importance of free radicals in biological systems.	01	21/05/24	Lecture method
Unit 4	**Assessment 1 – Assignment**		**10/05/24**	**Submission of Assessment C1 Assignment**
			14/05/24	**Display of C1 Assignment marks on notice board**

Department: Biochemistry
Subject: Biochemistry **(II SEM)**[Course code: **212269**]
Title of the Paper: **DSC2 Lab -Qualitative and quantitative analysis – 2**
Total contact hours **-56**
No of teaching hours/week**: 04**
Term Period: 12/02/2024 to **25/05/2024**

1. Name of the Faculty: Ramya.V

Hrs/week: 04 **Total Hrs: 56**

Curriculum as prescribed by the Institution	**Experiments**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
1. Determination of molecular weight of non-volatile solute by Walker-Lumsden method. 2. Determination of rate constant of decomposition of H2O2 using KMnO4 by volumetric analysis method using ferric chloride as catalyst. 3. Determination of distribution coefficient of benzoic acid between water and benzene or iodine between water and carbon tetrachloride.	Experiment 1-7	04 Hours/ week	14/02/24 to 13/03/24	Discussion and Experimental and Method

4. Determination of distribution coefficient of benzoic acid between water and toluene. 5. Determination of role of emulsifying agents in stabilising the emulsions of different oils.(Demonstration) 6. Verification of Beer's Law. Estimation of unknown concentration of glucose by using colorimeter 7. Calibration of pH meter and determination of pH of aerated soft drinks				
Experiment 1 to 7		**01**	**20/03/24**	**Practical Internal Assessment C1 - Test**
			22/03/24	**Display of practical C1 test marks on the notice board**
8. Systematic Semi micro–Qualitative Analysis of Inorganic Salt Mixtures Systematic semi micro qualitative analysis of two acid and two basic radicals in the given inorganic salt mixture. The constituent ions in the mixture to be restricted to the following. (Any **five** binary mixtures shall be given) **Anions:** HCO_3^-, CO_3^{2-}, Cl^-, Br^-, NO_3^-,	Experiment 8	04 Hours/ week	27//03/24 to 15/05/24	Discussion and Experimental and Method
BO_3^{3-}, SO_4^{2-} and PO_3^{2-}. **Cations**: Pb^{4+}, Al^{3+}, Fe^{2+}, Fe^{3+}, Mn^{2+}, Zn^{2+}, Ca^{2+}, Sr^{2+}, Ba^{2+}, Mg^{2+}, K^+, Na^+&NH_4^+.				
Experiment 8 - Systematic Semi micro–Qualitative Analysis of Inorganic Salt Mixtures		**02**	**08/05/24**	**Practical Internal Assessment C1 - Test**
			10/05/24	**Display of practical C1 test marks on the notice board**

Department: Biochemistry
Subject: Biochemistry **(II SEM**)
[Course code: **21OEBIC201**]
Title of the Paper: **OE 2 - Nutrition and Dietetics**
Total contact hours **- 42**
No of teaching hours/week**: 03**
Term Period: 12/02/2024 to **25/05/2024**

1. Name of the Faculty: Madhuri R

Hrs/week: 02 **Total Hrs: 28**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 2: **Macronutrients and Micronutrients:** **Duration – 14Hrs** Carbohydrates- Digestible and non-digestible, Dietary fibers, Essential fatty acids, lipoproteins and cholesterol. Essential amino acids, Fortification of foods, Protein requirement for different categories.	• OE 2 - Nutrition and Dietetics	01	12/02/24	Discussion of Course outcomes of all units
	• Carbohydrates- Digestible and non-digestible. Dietary fibers.	01	14/02/24	ICT method
	• Essential fatty acids.	01	19/02/24	Lecture method
	• Lipoproteins and cholesterol.	01	21/02/24	ICT method
	• Essential amino acids. Fortification of foods.	01	26/02/24	Lecture method
	• Protein requirement for different categories.	01	28/02/24	Lecture method
Vitamins-Sources, requirements, functions and deficiency symptoms of Vitamin-C, Thiamine, Riboflavin, Pyridoxine, Folic acid, Vitamin B12. Absorption of fat-soluble vitamins- A, D, E and K. Micronutrients: Source, Daily requirement, functions and deficiency disease symptoms of Macro-minerals (Ca, P, and Cl) and micro minerals/trace elements (I, Fe, Zn and Se).	• Vitamins-Sources, requirements, functions and deficiency symptoms of Vitamin-C.	01	04/03/24	Lecture method
	• Vitamins-Sources, requirements, functions and deficiency symptoms of Thiamine and Riboflavin.	01	06/03/24	Lecture method
	• Vitamins-Sources, requirements, functions and deficiency symptoms of Pyridoxine and Folic acid.	01	11/03/24	ICT method
	• Vitamins-Sources, requirements, functions and deficiency symptoms of Vitamin B12.	01	13/03/24	ICT method
	• Absorption of fat-soluble vitamins- A and D.	01	18/0324	Lecture method

	• Absorption of fat-soluble vitamins- E and K.	01	20/03/24	ICT method
	• Micronutrients: Source, Daily requirement, functions and deficiency disease symptoms of Macro-minerals Ca and P	01	25/03/24	Lecture method
	• Micronutrients: Source, Daily requirement, functions and deficiency disease symptoms of Macro-minerals Cl. Micro minerals/trace elements I.	01	27/03/24	Lecture method
	• Micro minerals/trace elements Fe, Zn and Se.	01	01/04/24	Lecture method
Unit 2	**Assessment -1 – Assignment topics**		**28/03/24**	**Submission of Assessment C1 Assignment**
			30/03/24	**Display of C1 Assignment marks on notice board**
Unit 3: **Dietetics and Diet Therapy:** **Duration – 14Hrs** Introduction, Food pyram01id, Diet planning and introduction to diet therapy. Nutrition al	• Introduction, Food pyramid, Diet planning.	01	03/04/24	Lecture method
	• Introduction to diet therapy.	01	06/05/24	Special Class to complete the course Lecture method
	• Nutritional requirements for different age groups, anemic child.	01	08/04/24	Lecture method
	• Nutritional requirements for different age groups,	01	10/04/24	ICT method
requirements for different age groups, anemic child, expectant women, and lactating women. Diet planning for prevention and cure of nutritional deficiency disorders. Diet therapy: Functional foods, Anthropometric measurements, dietary considerations during fever, malaria, and tuberculosis.Prevention	expectant women, and lactating women.			
	• Diet planning for prevention and cure of nutritional deficiency disorders.	01	15/04/24	Lecture method
	INTERNAL ASSESSMENT –C1		**16/04/24 to 20/04/24**	
	• Diet therapy: Functional foods, Anthropometric measurements.	01	22/04/24	Lecture method
	• Dietary considerations during fever.	01	24/04/24	Lecture method
	• Dietary considerations during malaria.	01	29/04/24	Lecture method

and correction ofobesity, underweight, and metabolic diseases by diet therapy. Dietary interventions to correct and or manage the gastrointestinal diseases (indigestion, peptic ulcer, constipation, diarrhea, steatorrhea, irritable bowelsyndrome. Functional foods-based diet therapy for diabetes, cardiovascular disease and cancer.	• Dietary considerations during tuberculosis.	01	06/05/24	Lecture method
	• Prevention and correction of obesity underweight, and metabolic diseases by diet therapy.	01	08/05/24	Lecture method
	• Dietary interventions to correct and or manage the gastrointestinal diseases.	01	13/05/24	Lecture method
	• Indigestion, peptic ulcer, constipation, diarrhea.	01	15/05/24	Lecture method
	• Steatorrhea, irritable bowel syndrome.	01	20/05/24	Lecture method
	• Functional foods-based diet therapy for diabetes, cardiovascular disease and cancer.	01	22/05/24	Lecture method
Unit 3	**Assessment 2 – Assignment Questions**		**15/05/24**	**Submission of Assessment C2 Assignment**
			17/05/24	**Display of C2 Assignment marks on notice board**

2. Name of the Faculty: Ramya V

Hrs/week: 01 **Total Hrs: 14**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit 1: **Basic Concepts of Nutrition:**	• Introduction to Nutrition	01	17/02/24	Lecture method and Discussion
	• Balanced diet	01	24/02/24	Lecture method and Discussion
	•			
Duration : 14 Hrs Introduction, Basic principles of a balanced diet to provide energy and nutrients. Composition of foods and proximate analysis of foods. Calorific	• Basic principles of a balanced diet to provide energy and nutrients.	01	02/03/24	Lecture method
	• Composition of foods	01	09/03/24	Lecture method
	• Proximate analysis of foods	01	16/03/24	Lecture method
	• Calorific value of foods	01	23/03/24	Lecture method and Discussion

value of foods and Basal metabolism. Basal Metabolic Rate (BMR), Factors affecting BMR, Energy requirements for different physical activities, Specific dynamic action of food,	• Basal metabolism. Basal Metabolic Rate (BMR)	01	30/03/24	Lecture method
	• Factors affecting BMR	01	06/04/24	Lecture method
	• Energy requirements for different physical activities	01	13/04/24	Lecture method and Discussion
Unit 1	**Introduction to Nutrition**	**01**	**16/04/24 to 20/04/24**	**Internal Assessment C1 Written Test**
			25/04/24	**Display of C1 Internal test marks on the notice board**
Nutritive value of proteins. Energy requirements and recommended dietary allowance (RDA) for infants, children and pregnant women. Protein calorie malnutrition.	• Specific dynamic action of food	01	27/04/24	Lecture method
	• Nutritive value of proteins	01	04/05/24	Lecture method
	• Energy requirements and (RDA) for infants, children	01	11/05/24	Lecture method and Discussion
	• Energy requirements and (RDA) for pregnant women.	01	11/05/24	Lecture method and Discussion
	• Protein calorie malnutrition	01	25/05/24	Lecture method

Department: Biochemistry
Subject: Biochemistry (IV SEM)
[Course code: **222469**]
Title of the Paper-: DSC 4- Analytical Biochemistry
Total contact hours **-56**
No of teaching hours/week**: 04**
Term Period: 12/02/2024 to **25/05/2024**

1. **Name of the Faculty: Radhika P**

Hrs/week: 01 **Total Hrs: 14**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit 3: Electrophoretic and radio isotopic methods **Electrophoresis:**	• DSC4 Analytical Biochemistry	01	12/02/24	Discussion of Course Outcomes of all the units

General principle of electrophoresis, velocity of a charged molecule in the applied electric field in relevance of ohm's law on electrophoretic separation. Factors affecting electrophoresis, supporting media for electrophoresis- work of Tiselius, paper, agarose and polyacrylamide. Principle, methodology and applications of - Agarose gel, Pulse field electrophoresis, native PAGE and SDS- PAGE, 2-D electrophoresis, diagonal electrophoresis. Identification of proteins; post electrophoresis- dyes and biological activities. Brief principle and applications of applications of capillary electrophoresis, isoelectric focusing, cellulose acetate	• General principle of electrophoresis, velocity of a charged molecule in the applied electric field in relevance of ohm's law on electrophoretic separation.	01	19/02/24	Lecture, discussion & ICT
	• Factors affecting electrophoresis, supporting media for electrophoresis-	01	26/02/24	Lecture, discussion & ICT
	• Work of Tiselius, paper, agarose and polyacrylamide.	01	04/03/24	Lecture, discussion & ICT
	• Principle, methodology and applications of - Agarose gel,	01	11/03/24	Lecture, discussion & ICT
	• Pulse field electrophoresis, native PAGE and SDS- PAGE	01	18/03/24	Lecture, discussion & ICT
	• 2-D electrophoresis, diagonal electrophoresis.	01	25/03/24	Lecture, discussion & ICT
	• Identification of proteins; post electrophoresis- dyes and biological activities.	01	01/04/24	Lecture, discussion & ICT
	• Brief principle and applications of capillary electrophoresis, isoelectric focusing,	01	08/04/24	Lecture, discussion & ICT
	• Brief principle and applications of cellulose acetate electrophoresis and immuno-electrophoresis.	01	15/04/24	Lecture, discussion & ICT
electrophoresis and immuno- electrophoresis. **Radioisotopic methods:** Radioactivity, radioactive decay, types of radioactive decay, Properties of α, β, γ radiations. Group displacement law, decay law, decay constant, Half-life period and average life of a radioactive element. Detection of radioactivity – GM counter and scintillation counters (Construction,	• Radioactivity, radioactive decay, types of radioactive decay, Properties of α, β, γ radiations.	01	22/04/24	Lecture, discussion & ICT
	• Group displacement law, decay law, decay constant, Half-life period and average life of a radioactive element.	01	29/04/24	Lecture, discussion & ICT
	• Detection of radioactivity – GM counter and scintillation counters (Construction, principle and working)	01	06/05/24	Lecture, discussion & ICT
	• Applications of radioisotopes – ^{3}H, ^{14}C, ^{60}Co and ^{32}P.	01	13/05/24	Lecture, discussion & ICT

principle and working) Applications of radioisotopes – ^{3}H, ^{14}C, ^{131}I, ^{60}Co and ^{32}P. Biological effects of radiations, radio labeling, Safety measure in handling radioisotopes.	• Biological effects of radiations, radio labeling, Safety measure in handling radioisotopes.	01	20/05/24	Lecture, discussion & ICT
Unit 3	**Assessment -1 – Assignment topics**		**30/04/24**	**Submission of Assessment C1 Assignment**
			03/05/24	**Display of C1 Assignment marks on the notice board**

2. Name of the Faculty: Madhuri R

Hrs/week: 01 **Total Hrs: 14**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Unit 1: Biological sample preparation and fractionation and centrifugation **Duration – 14Hrs** **Introduction to bio-analysis,** objectives of bio-analysis, Extraction of molecules from tissue and cells, types of biological sample - living and post-mortem, sample	Introduction to bio-analysis, objectives of bio-analysis, Extraction of molecules from tissue and cells.	01	17/02/24	Lecture method
	Types of biological sample - living and post-mortem.	01	24/02/24	Lecture method
	Sample preparation and preservation of biological sample.	01	02/03/24	Lecture method
	Extraction of macromolecules from cells and tissues: liquid-liquid	01	09/03/24	ICT method
preparation and preservation of biological sample. Extraction of macromolecules from cells and tissues: liquid-liquid, liquid-solid and precipitation methods. **Centrifugation**: Introduction, principle of centrifugation, sedimentation, sedimentation coefficient, angular velocity, centrifugal field and relative	Extraction of macromolecules from cells and tissues: liquid-solid and precipitation methods.	01	16/03/24	ICT method
	Centrifugation: Introduction, principle of centrifugation, sedimentation.	01	23/03/24	ITC method
	Sedimentation coefficient. Angular velocity.	01	30/03/24	ICT method
	Centrifugal field and relative centrifugal field.	01	06/04/24	ICT method

centrifugal field. Basic instrumentation, types of rotors and their design.	Basic instrumentation, types of rotors and their design..	01	13/04/24	ICT method
Unit 1 and Unit 2	**Biological sample preparation, fractionation, centrifugation and Chromatography**	**01**	**16/04/24 to 20/04/24**	**Internal Assessment C1 Written Test**
			25/04/24	**Display of C1 Internal test marks on the notice board**
Types of Ultra centrifuge – Types of centrifuge: desk top, high speed and ultra-centrifuge. Construction and applications of Ultra-centrifuge. Preparative: Differential and density gradient ultra-centrifuge (Principle and applications) and Analytical ultra-centrifuge. Operational instruction and applications of Laboratory centrifuge in sub-cellular fractionation. Care and maintenance of instrument	Types of centrifuge: desk top, high speed and ultra-centrifuge. Construction and applications of Ultra-centrifuge.	01	27/04/24	Lecture method
	Types of Ultra centrifuge – Preparative: Differential and density gradient ultra-centrifuge(Principle and applications)	01	04/05/24	Lecture method
	Analytical ultra-centrifuge (Principle and applications)	01	11/05/24	ICT method
	Operational instruction and applications of Laboratory centrifuge in sub-cellular fractionation	01	18/5/24	ICT method
	Care and maintenance of instrument and revision.	01	25/05/24	Lecture method

3.Name of the Faculty: Ramya.V

Hrs/week: 02 **Total Hrs: 28**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to Complete**	**Date**	**Method of Deployment and Remarks**
Unit 2: Chromatography **Duration 14Hrs** General principles of chromatography, history of chromatography, Classification based on -	• Introduction to Chromato-graphy, General principles of chromatography, history of chromatography	01	14/02/24	Lecture & ICT method
	• Classification based on - nature of stationary and mobile phase, principle or mode of operation based on geometry	01	15/02/24	Lecture & ICT method

nature of stationary and mobile phase: Gas chromatography and liquid chromatography, principle or mode of operation: adsorption and partition, based on geometry: Planar and column chromatography. Principle, methodology and applications of Paper chromatography - ascending, descending and circular, 2D chromatography, Rf values, Thin layer Chromatography (TLC), Adsorption chromatography, gel-filtration, Ion-exchange and affinity- chromatography. Advanced chromatography- HPLC and FPLC, UPLC and GLC	• Principle, methodology and applications of Paper chromatography - ascending, descending	01	21/02/24	Lecture & ICT method
	• Principle, methodology and applications of circular Paper chromatography	01	22/02/24	Lecture & ICT method
	• Principle, methodology andapplications of 2D chromatography, Rf values	01	28/02/24	Lecture & ICT method
	• Thin layer Chromatography(TLC	01	29/02/24	Lecture & ICT method
	• Adsorption chromatography	01	06/03/24	Lecture & ICT method
	• Gel-filtration Chromatograpy	01	07/03/24	Lecture & ICT method
	• Ion-exchange chromatography.	01	13/03/24	Lecture & ICT method
	• Affinity- chromatography.	01	14/03/24	Lecture & ICT method
	• Advanced chromatography- HPLC	01	20/03/24	Lecture & ICT method
	• Advanced chromatography- FPLC	01	21/03/24	Lecture & ICT method
	• Advanced chromatography- UPLC	01	27/03/24	Lecture & ICT method
	• Advanced chromatography- GLC	01	28/03/24	Lecture & ICT method
Unit 1 and Unit 2	**Biological sample preparation, fractionation, centrifugation and Chromatography**	**01**	**16/04/24 to 20/04/24** **25/04/24**	**Internal Assessment C1 Written Test** **Display of C1 Internal test marks on the notice board**
Unit 4: Spectroscopic methods of bio-analysis **Duration 14 Hours** **Introduction-**	• Introduction, Wave particle duality of light.	01	03/04/24	Lecture & ICT method
	• Electromagnetic spectrum	01	04/04/24	Lecture & ICT method
	• Beer-Lambert's and its limitations.	01	10/04/24	Lecture & ICT method
	•			
Wave particle duality of light, electromagnetic spectrum, transition in	**INTERNAL ASSESSMENT C1**		**16/04/24 to 20/04/24**	
	• Determination of molar absorption coefficient of molecules.	01	24/04/24	Lecture & ICT method

spectroscopy. Beer-Lambert's and its limitations. Determination of molar absorption coefficient of molecules. **Spectroscopic methods:** Working principle and applications of a colorimeter, flame photometer and fluorimeter. Principle, design and applications of UV-Visible spectrophotometer. Principle and applications of IR, and Raman spectroscopy, ESR and NMR spectroscopy.	• Working principle and applications of a colorimeter	01	25/04/24	Lecture & ICT method
	• Principle, design and applications of UV-Visible spectrophotometer.	01	02/05/24	Lecture & ICT method
	• Working principle and applications flame photometer	01	08/05/24	Lecture & ICT method
	• Working principle and applications of a fluorimeter	01	10/05/24	Lecture & ICT method
	• Principle and applications of IR spectroscopy	01	15/05/24	Lecture & ICT method
	• Principle and applications of Raman spectroscopy	01	16/05/24	Lecture & ICT method
	• Principle and applications of ESR spectroscopy	01	22/05/24	Lecture & ICT method
	• Principle and applications of NMR spectroscopy	01	23/05/24	Lecture & ICT method
Unit 4	**Assessment 2 -Quiz**	**30 min**	**10/05/24**	**Written Quiz**
			12/05/24	**Display of Assessment 2 Quiz marks on the notice board**

Department: Biochemistry
Subject: Biochemistry **(IV SEM**)
[Course code: **212469**] **T**
itle of the Paper – **DSC4 Lab – Analytical Biochemistry**
Total contact hours **-56**
No of teaching hours/week**: 04**
Term Period: 12/02/2024 to **25/05/2024**

1. Name of the Faculty: Ramya.V and Radhika P

Hrs/week: 04 **Total Hrs: 56**

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
1. Preparation of human lymphocytes using clinical centrifuge 2. Determination of packed cell volume/ hematocrit				

3. Resolution of basic, acidic & aromatic amino acids by ascending /descending Paper chromatography. 4. Identification and resolution of amino acids using circular paper chromatography. 5. Identification and resolution of plant pigments by thin layer chromatography. 6. Separation of plant pigments by Gel permeation chromatography	Experiment 1 To Experiment 6	04 Hours/ week	16/02/24 to 22/03/24	Discussion and Experimental and Method
Experiments 1 to 7		**01**	**12/04/24**	**Practical Internal Assessment C1 - Test**
			15/11/24	**Display of practical C1 test marks on the notice board**
7. Determination of Void volume of Gel filtration chromatography 8. Recording the absorption spectrum of Riboflavin. 9. Colorimetric estimation of glucose by DNS method/ protein by biuret method 10. Estimation of DNA by diphenylamine method. 11. Electrophoretic Separation of plasma proteins by SDS PAGE	Experiment 7 To Experiment 11	04 Hours/ week	12/04/24 to 09/05/24	Discussion and Experimental and Method
Experiments 7 to 11		**02**	**03/05/24**	**Practical Internal Assessment C2 - Test**
			06/05/24	**Display of practical C2 test marks onthe notice board**

Subject: Biochemistry **(VI SEM)**
[Course code: **232669**]
Title of the Paper – **DSC 7 – Metabolism with Clinical Correlations**
Total contact hours **– 60**
No of teaching hours/week**: 04**
Term Period: 12/02/2024 to **25/05/2024**

1. Name of the Faculty: Madhuri R

Hrs/week: 01 **Total Hrs: 15**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT 3 : **Metabolism of Lipids and Nucleic acids** **Duration – 15Hrs** **Metabolism of Lipids :** Introduction, hydrolysis of triacylglycerols, transport of fatty acids into mitochondria, Oxidation of fatty acid – α, β and ω types, β- oxidation of saturated and unsaturated fattyacids, Energetics of β-oxidation. Schematic representation of biosynthesis of even number saturated fatty acids. Elongation of Fatty acid(Mitochondrial elongation). Biosynthesis of TAG, Phospholipids (Lecithin andCephalin). Cholesterol Metabolism (synthesis and degradation).	• DSC 7 Metabolism withClinical Correlations	01	12/02/24	Discussion of Course Outcomes of all units
	• Introduction, hydrolysis of triacylglycerols.	01	19/02/24	Lecture and ICT method
	• Transport of fatty acids into mitochondria.	01	26/02/24	Lecture and ICT method
	• Oxidation of fatty acid – β-Oxidation	01	04/03/24	ICT method
	• Oxidation of fatty acid – α, and ω	01	11/03/24	ICT method
	• β- oxidation of saturated and unsaturated fatty acids.	01	18/03/24	Lecture and ICT method
	• Energetics of β-oxidation. representation of biosynthesis of even number saturated fatty acids.	01	25/03/24	Special Class to cover the Unit
	• Elongation of Fatty acid (Mitochondrial elongation).	01	01/04/24	Lecture and ICT Lecture method
	• Biosynthesis of TAG, Phospholipids (Lecithin and Cephalin).	01	08/04/24	ICT method
	• Cholesterol Metabolism (synthesis and degradation).	01	15/04/24	ICT method
	INTERNAL ASSESSMENT C1		**16/04/24 to 20/04/24**	

Inborn errors of Lipid Metabolism: Niemann-Pick disease and Gaucher disease	• Inborn errors of Lipid Metabolism: Niemann-Pick disease and Gaucher disease	01	22/04/24	Lecture method
Metabolism of Nucleic acids: Degradation of nucleic acids, action of nucleases: DNase I and II, RNase and phosphodiesterases. Catabolism of purines and pyrimidines. Salvage and Denovo biosynthetic pathwaysof purine and pyrimidine nucleotides. Conversion of ribonucleotides to deoxy ribonucleotides.	• Metabolism of Nucleic acids: Degradation of nucleic acids, action of nucleases: DNase I and II.	01	29/04/24	Lecture method
	• Action of RNase and phosphodiesterases.	01	30/04/24	Special Class to complete the Unit. Lecture method
	• Catabolism of purines and pyrimidines. Salvage and Denovo biosynthetic pathways of purine and pyrimidine	01	06/05/24	ICT method
	• Conversion of ribonucleotides to deoxy ribonucleotides.	01	13/05/24	ICT method
Inborn errors of Nucleic acid Metabolism: Gout, Lesch-Nyhan syndrome	• Inborn errors of Nucleic acid Metabolism: Gout, Lesch-Nyhan syndrome.	01	20/05/24	ICT method
Unit 3	**Assessment 1- Assignment**		**10/05/24**	**Submission of Assessment C1 Assignment**
			13/05/24	**Display of C1 Assignment marks on notice board**

2. Name of the Faculty: Radhika P

Hrs/week: 02 **Total Hrs: 30**

Curriculum as prescribed by institution	**Topic**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit 1: Bioenergetics **Duration – 15hrs**	• Definition and significance of bioenergetics.	01	14/02/2024	Lecture, discussion & ICT method

Definition, significance of bioenergetics, Laws of Thermodynamics: first and second law. Concept of	• Laws of Thermodynamics: first and second law.	01	15/02/2024	Lecture, discussion & ICT method
	• Concept of enthalpy,	01	21/02/2024	Lecture,
enthalphy, entropy and free energy change, equlibrium constant. Coupled reactions. High energy compounds: ATP - structural features, ATP cycle, its free energy change during hydrolysis. Ultra structure of mitochondrion, Electron transport chain and their complexes Complex I, II, III and IV. Uncouplers and inhibitors of respiration (Rotenone, Antimycin, Cyanide and 2,4 DNP) Oxidative phosphorylation: Proton gradient generation, redox loop, Q cycle, Proton pumping. P/O ratio. Outline of - Peter Mitchell's Chemiosmotic hypothesis. Substrate level phosphorylation with examples.	entropy and free energy change.			discussion & ICT method
	• Equilibrium constant. Coupled reactions.	01	22/02/2024	Lecture, discussion & ICT method
	• High energy compounds: ATP - structural features	01	28/02/2024	Lecture, discussion & ICT method
	• ATP cycle, its free energy change during hydrolysis.	01	29/02/2024	Lecture, discussion & ICT method
	• Ultra-structure of mitochondrion	01	06/03/2024	Lecture, discussion & ICT method
	• Electron transport chain and their complexes Complex I, II, III and IV.	01	07/03/2024	Lecture, discussion & ICT method
	• Electron transport chain and their complexes Complex I, II, III and IV.	01	13/03/2024	Lecture, discussion & ICT method
	• Uncouplers and inhibitors of respiration (Rotenone, Antimycin, Cyanide and 2,4 DNP)	01	14/03/2024	Lecture, discussion & ICT method
	• Oxidative phosphorylation: Proton gradient generation	01	20/03/2024	Lecture, discussion & ICT method
	• Redox loop, Q cycle, Proton pumping. P/O ratio.	01	21/03/2024	Lecture, discussion & ICT method
	• Outline of - Peter Mitchell's Chemiosmotic hypothesis.	01	27/03/2024	Lecture, discussion & ICT method
	• Substrate level phosphorylation with examples.	01	28/03/2024	Lecture, discussion & ICT method
Unit 1	**Assessment 2 - Quiz**	**30min**	**29/04/2024**	**Written Quiz**
			02/05/2024	**Display of Assessment 2 Quiz marks on the notice board**

Unit 4: Metabolism ofamino acids	• General reactions of amino acid degradation.	01	03/04/2024	Lecture, discussion &
Duration –15hrs **Metabolism of Aminoacids:**General reactions of aminoacid degradation –Transamination, deamination (oxidative and non oxidative),decarboxylation, desulphataion and theirsignificances. Ketogenic andglucogenic amino acids.				ICT method
	• Transamination.	01	04/04/2024	Lecture, discussion & ICT method
	• Deamination (oxidative and non-oxidative).	01	10/04/2024	Lecture, discussion & ICT method
	• Decarboxylation and their significances. • Desulphation and their significances. • Ketogenic and glucogenic amino acids.	03	12/04/2024 To 15/04/2024	Need special class to compensate classes Lecture, discussion & ICT method
Unit 2 and Unit 4	**Metabolism of Carbohydrates and Aminoacids**	**01**	**16/04/24 To 20/04/24**	**Internal Assessment C1Written Test**
			25/04/24	**Display of C1Internal test marks on the notice board**
Urea cycle – energetics and itssignificance. Regulations ofurea cycle (coarse, fine/allosteric, compartmentalization). Inherited disorders of urea cycle - Hyperammonemia Type I and Type II, Hyperargeninemia an dCitrullinemia. Synthesis andcatabolism of alanine, serine and cysteine.	• Urea cycle – energetics and its significance.	01	24/04/2024	Lecture, discussion & ICT method
	• Regulations of urea cycle (coarse, fine/allosteric, compartmentalization).	01	25/04/2024	Lecture, discussion & ICT method
	• Inherited disorders of urea cycle - Hyperammonemia Type I and Type II.	01	02/05/2024	Lecture, discussion & ICT method
	• Hyperargeninemia and Citrullinemia.	01	08/05/2024	Lecture, discussion & ICT method
	• Synthesis and catabolism of alanine.	01	09/05/2024	Lecture, discussion & ICT method
	• Synthesis and catabolism of cysteine.	01	15/05/2024	Lecture, discussion & ICT method
	• Synthesis and catabolism of serine.	01	16/05/2024	Lecture, discussion & ICT method

Inborn errors of amino acid Metabolism: Phenylketonuria, alkpatonuria and albinism.	• Inborn errors of amino acid Metabolism: Phenylketonuria.	01	22/05/24	Lecture, discussion & ICT method
	• Inborn errors of amino acid Metabolism: • alkaptonuria and albinism.	01	23/05/24	Lecture, discussion & ICT method

2. Name of the Faculty: Ramya.V

Hrs/week: 01 **Total Hrs: 15**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT 2 :Metabolism of Carbohydrates **Duration : 15 Hours** **Introduction:** Metabolism,phases of metabolism: anabolism and catabolism, compartmentalization of metabolic pathways **Carbohydrate Metabolism:** Glycolysis, energetics and regulatory steps of glycolysis. Entry of other carbohydrates (Fructose, galactose, mannose and Lactose) into glycolytic pathway. Fates of pyruvate – conversion of pyruvate to lactate, alcohol and acetyl Co-A. Citric acid cycle, it's energetics and regulatory steps, Amphibolic	• Introduction to metabolism	01	13/02/24	Lecture and ICT method
	• Phases of metabolism: anabolism and catabolism	01	20/02/24	Lecture and ICT method
	• Compartmentalization of metabolic pathways	01	27/02/24	Lecture and ICT method
	• Glycolysis, energetics and regulatory steps of glycolysis.	01	05/03/24	Lecture and ICT method
	• Entry of other carbohydrates (Fructose, galactose, mannose and Lactose) into glycolytic pathway.	01	12/03/24	Lecture and ICT method
	• Fates of pyruvate – conversion of pyruvate to lactate, alcohol and acetyl Co-A.	01	19/03/24	Lecture and ICT method
	• Citric acid cycle, it's energetics and regulatory steps,	01	26/03/24	Lecture and ICT method
	• Amphibolic integrating roles of TCA cycle.	01	27/03/24	Special Class to cover the

integrating roles of TCA cycle. Anaplerotic reactions. Cori cycle.	• Anaplerotic reactions and Cori cycle.	01	28/03/24	Unit Lecture and ICT method
Unit 2 and Unit 4	**Metabolism of Carbohydrates and Aminoacids**	**01**	**16/04/24 To 20/04/24**	**Internal Assessment C1Written Test**
			25/04/24	**Display of C1 Internal test marks on the notice board**

Gluconeogenesis, Pentose phosphate pathway and its significance. Glycogen metabolism – glycogenolysis, glycogen synthesis. **Inborn errors of Carbohydrate Metabolism:**Von-Gierke's and cori's disease	• Gluconeogenesis pathway	01	23/04/24	Lecture and ICT method
	• Pentose phosphate pathway and its significance.	01	30/04/24	Lecture and ICT method
	• Glycogenolysis,	01	07/05/24	Lecture method
	• Glycogen synthesis.	01	14/05/24	Lecture Method
	• Inborn errors of CarbohydrateMetabolism: Von-Gierke's disease	01	23/05/24	Special Class to complete the Unit Lecture and ICT method
	• Inborn errors of CarbohydrateMetabolism : cori's disease	01	25/05/24	Lecture and ICT method

Department: Biochemistry
Subject: Biochemistry **(VI SEM**)
[Course code: **232669**]
Title of the Paper – **DSC 7 Lab – Metabolism with Clinical Correlations**
Total contact hours **– 60**
No of teaching hours/week**: 04**
Term Period: 12/02/2024to **25/05/2024**

1. Name of the Faculty: Ramya.V and Radhika P

Hrs/week: 04
Total Hrs: 60

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
Part A: Colorimetric Estimations 1. Glucose by Anthrone method. 2. Ketoacid (Pyruvate) by DNPH method 3. Amino acid by Ninhydrin method. 4. Protein by Biuret method. 5. Protein by Lowry's method. 6. Uric acid by PMA method. 7. Urea by DAMO method. 8. Creatinine by Jaffe's method. 9. Phosphorous by Fiske and Subbarao's method. 10. Iron by Wong's method.	Experiment 1 To Experiment10	04 Hours/ week	12/02/24 to 15/04/24	Discussion and Experimental and Method
Experiment 1 to 10		**02**	**01/04/24** **02/04/24**	**Practical Internal Assessment C1 - Test**
			05/04/24	**Display of practical C1 test marks on thenotice board**
Part B **1. Qualitative analysis of normal constituents of urine:** • Organic: constituents: urea, uric acid, creatinine and amino acid. • Inorganic constituents: chlorides, sulfates, phosphates and ammonia **2. Qualitative analysis of Abnormal constituents of urine:** Abnormal constituents -glucose, albumin, bile pigments, bile salts and ketone bodies	Experiment 1 and Experiment 2	04 Hours/ week	06/05/24 and 14/05/24	Discussion and Experimental and Method
Experiment 2		**02**	**06/05/24** **07/05/24**	**Practical IA C2 - Test**
			09/05/24	**Display of practical C2 test marks on notice board**

Department: Biochemistry
Subject: Biochemistry **(VI SEM)**[Course code: **232670**]
Title of the Paper – **DSC 8 – Molecular Biology and Immunology**Total contact hours **– 60** No of teaching hours/week**: 04 Term Period: 12/02/2024** to **25/05/2024**

1. Name of the Faculty: Ramya.V

Hrs/week: 01 **Total Hrs: 15**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT 2 : **Transcription, Genetic code, Translation and Regulation of Gene expression**	• DSC 8 – Molecular Biology and immunology	01	13/02/24	Discussion of Coursse Outcomes of all units
	• Introduction to Transcription and Structure	01	16/02/24	Lecture and ICT method
Duration : 15 Hours **Prokaryotic Transcription:** Structure ofProkaryotic gene and role of RNA polymerase. Mechanism of transcription - Initiation, elongation and termination (rhodependent and rho independent). Post transcriptional modifications (eukaryotes) – capping, splicing and poly adenylation. **Genetic code :** General features, wobble hypothesis. **Prokaryotic Translation:** Mechanism of translation- Activation of Amino acids, amino acyl tRNA synthesis.	of Prokaryotic gene			
	• Role of RNA polymerase.	01	23/02/24	Lecture and ICT method
	• Mechanism of transcription - Initiation, elongation	01	01/03/24	Lecture and ICT method
	• Termination (rho-dependent and rho independent).	01	15/03/24	Lecture and ICT method
	• Post transcriptional modifications (eukaryotes)	01	22/03/24	Lecture and ICT method
	• General features of genetic code and wobble hypothesis.	02	23/03/24	Special class to compensate the class missed Lecture and ICT method
	• Introduction to translation, Mechanism of translation- Activation of Amino acids, amino acyl tRNA synthesis.			
	• Mechanism of translation- Initiation	01	12/04/24	Lecture and ICT method
	• Mechanism of translation- elongation	01	13/04/24	Special Class to

Initiation, elongation and termination of protein synthesis. Inhibitors of protein synthesis.	• Mechanism of translation-termination of protein synthesis. Inhibitors of protein synthesis.	01	15/04/24	compensate the class missed Lecture and ICT method
Unit 2 and Unit 4	**Transcription,Translation, Genetic Code and Overview of immunology Immunology**	**01**	**16/04/24 To 20/04/24**	**Internal Assessment C1Written Test**
			25/04/24	**Display of C1 Internal test markson the notice board**
Posttranslational modifications. **Regulation of Gene expression :** General aspects of regulation, Gene expression in prokaryotes; inducible and repressible systems - concept of Lac	• Post translational modifications	01	26/04/24	Lecture and ICT method
	• General aspects of regulation, Gene expression in prokaryotes	01	02/05/24	Lecture and ICT method
	• Inducible system concept of Lac operon	01	17/05/24	Lecture and ICT method
	• Repressible systems - concept of trp operon.	01	24/05/24	Lecture and ICT method
operon and trp operon. Functional unit in a typical eukaryotic gene – Promoter, introns and exons.	• Functional unit in a typical eukaryotic gene – Promoter, introns and exons.	01	25/05/24	Special Class to complete the unit Lecture and ICT method

2. Name of the Faculty: Madhuri R

Hrs/week: 2 **Total Hrs: 30**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
UNIT 1: **DNA Replication and Mutation** **Duration – 15Hrs** Introduction: Nucleic acids as genetic information carriers, experimental evidences – Griffith, Avery Macleod and McCarty experiment, Hershey and Chase experiment.	• Nucleic acids as genetic information carriers.	01	14/02/24	Lecture method
	• Experimental evidences – Griffith, Avery Macleod and McCarty experiment	01	16/02/24	Lecture and ICT method
	• Hershey and Chase experiment. Central dogma of molecular biology and its modification.	01	21/02/24	Lecture and ICT method
	• **Replication:** DNA			

Central dogma of molecular biology and its modification. Replication: DNA replication, types of replications - conservative, semi conservative and dispersive. Meselson and Stahl experiment. Enzymes and protein factors involved in replication, Mechanism of semi-conservative replication in prokaryotes. **Mutation:** Definition, Somatic and germline	replication, types of replication - conservative, semi conservative and dispersive.	01	23/02/24	ICT method
	• Meselson and Stahl experiment	01	28/02/24	ICT method
	• . Enzymes and protein factors involved in replication.	01	01/03/24	ICT method
	• Mechanism of semi-conservative replication in prokaryotes	01	06/03/24	Lecture and ICT method
	• **Mutation:** Definition, Somatic and germline mutation	01	07/03/24	Special Class to complete the Unit. Lecture method
	• Spontaneous and induced mutation.	01	13/03/24	Lecture method
tion, spontaneous and induced mutation, Concept of gene mutation- a) Point mutation- silent, missense and nonsense mutation b) frameshift mutation (addition and deletion). Mutagens and types of mutagens. Effect of mutagens -effect of HNO_2, alkylating agents,intercalating agents and UV radiation.	• Concept of gene mutation- Point mutation- silent, missense	01	14/03/24	Special Class to cover the Unit Lecture and ICT Lecture method
	• Nonsense mutation b) frameshift mutation (addition and deletion).	01	15/03/24	ICT method
	• Mutagens and types of mutagens.	01	20/03/24	ICT method
	• Effect of mutagens -effect of HNO_2	01	22/03/24	ICT method
	• Effect of mutagens alkylating agents.	01	27/03/24	Lecture method
	• Effect of intercalating agents and UV radiation.	01	28/03/24	Special Class to cover the Unit Lecture and ICT Lecture method
Unit 1	**Assessment 2- Quiz**	**30 min**	**25/04/24**	**Submission of Assessment C1 Assignment**
			29/05/24	**Display of C1 Assignment marks on the notice board**

UNIT 3: **Genetic Engineering** **Duration – 15Hrs** **Introduction:** Historical development, aim and scope of genetic engineering.Isolation of DNA, Restriction endonucleases –Types, staggered cut and blunt end cut **Outline techniques of Genetic Engineering**: Cutting of genomic DNA, Vectors- plasmid (pBR 322), bacteriophage,	• **Introduction:** Historical development. Aim and scope of genetic engineering.	01	03/04/24	Lecture method
	• Isolation of DNA, Restriction endonucleases	01	04/04/24	Special Class to complete the Unit. Lecture method
	• Types, staggered cut and blunt end cut.	01	10/04/24	ITC method
	• Cutting of genomic DNA.	01	12/04/24	ITC method
	Internal test C1		**16/04/24 to 20/04/24**	
	• Vectors- plasmid (pBR 322), bacteriophage.	01	24/04/24	Lecture method
	• Definition and examples of cosmids	01	25/04/24	Special Class to complete the Unit. Lecture method
	• phagemid and plant vectors	01	26/04/24	Lecture and ICT method
	•			
definition and examples of cosmids, phagemid and plant vectors. Insertion of foreign DNA into vectors- linkers, adaptors and homopolymer tailing. Transfection of vectors into host cells. cDNA. Principle and applications of polymerase chain reaction. **Blotting techniques**: Principle and applications of Southern blotting, Northern blotting, Western blotting, Dot blot technique and	• Insertion of foreign DNA into vectors- linkers, adaptors and homopolymer tailing.	01	03/05/24	Lecture and ICT method
	• Transfection of vectors into host cells	01	04/05/24	Special Class to cover the Unit Lecture and ICT Lecture method
	• cDNA. Principle and applications of polymerase chain reaction	01	08/05/24	ICT method
	• **Blotting techniques**: Principle and applications of Southern blotting.	01	15/05/24	ICT method
	• Northern blotting and Western blotting.	01	16/05/23	Special Class to cover the Unit Lecture and ICT Lecture method
	• Dot blot technique and DNA finger printing.	01	17/05/24	ICT method

DNA finger printing **Applications of Genetic engineering -** Transgenic plants, transgenic animals and gene therapy. Human genome project.	• **Applications of Genetic engineering -** Transgenic plants and Transgenic animals	01	22/05/24	ICT method
	• Gene therapy. Human genome project.	01	24/05/24	ICT method
Unit 3	**Assessment 1- Assignment**		**13/05/24**	**Submission of Assessment C1 Assignment**
			15/05/24	**Display of C1 Assignment markson notice board**

3. Name of the Faculty:

Hrs/week: 01 **Total Hrs: 15**

Curriculum as prescribed by institution	**Topic**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit 4: Immunology **Duration – 15hrs** **Overview of the Immune system:** Immunity, types - Innate	• Overview of the Immune system: Immunity, types - Innate and acquired immunity. (Passive and active immunity). Cellular and humoral immunity.	01	17/02/24	Lecture, discussion & ICT method
and acquired immunity. (Passive and active immunity). Cellular and humoral immunity. Role of immunologically important organs and cells - bone marrow, thymus, spleen and lymphocytes. Cellular components of immune system, Formation and functions of T & B Lymphocytes. Helper T-cells and killer T-cells. **Antigens:** Definition, types, chemical nature and antigenicity. Epitopes, haptens and	• Role of immunologically important organs and cells - bone marrow, thymus.	01	24/02/24	Lecture & discussion method
	• Role of immunologically important organs and cells - spleen and lymphocytes.	01	02/03/24	Lecture & discussion method
	• Cellular components of immune system. Helper T-cells and killer T-cells.	01	09/03/24	Lecture & discussion method
	• Formation and functions of T Lymphocytes	01	16/03/24	Lecture & discussion method
	• Formation and functions of B Lymphocytes	01	23/03/24	Lecture & discussion method
	• **Antigens:** Definition, types, chemical nature and antigenicity.	01	30/03/24	Lecture & discussion method

adjuvants **Antibodies:** Definition, types and structure of a typical immunoglobulin (IgG), paratope.	• Epitopes, haptens and adjuvants.	01	06/04/24	Lecture & discussion method
	• **Antibodies:** Definition, types and structure of a typical immunoglobulin (IgG), paratope.	01	13/04/24	Lecture, discussion & ICT method
Unit 2 and Unit 4	**Transcription,Translation, Genetic Code and Overview of immunology Immunology**	**01**	**16/04/24 To 20/04/24**	**Internal Assessment C1Written Test**
			25/04/24	**Display of C1 Internal test markson the notice board**
Polyclonal and monoclonal antibodies. Production and applications of monoclonal antibodies. **Immunization:** Vaccines and their preparations**,** primary and secondary immune response.	• Polyclonal and monoclonal antibodies. Production and applications of monoclonal antibodies.	01	27/04/24	Lecture, discussion & ICT method
	• Immunization: Vaccines and their preparations, primary and secondary immune response.	01	04/05/24	Lecture, discussion & ICT method
	• Immunological disorders: Autoimmune disorder - Definition, example - systemic lupus erythomatous.	01	11/05/24	Lecture, discussion & ICT method
Immunological disorders and Hypersensitivity reactions: Autoimmune disorder - Definition, example - systemic lupus erythomatous, Hypersensitivity reactions and its types. **Ag-Ab reactions and Immunological techniques:** Formation of antigen-antibody complex. Agglutination and precipitation reactions. Principle, procedure and applications of immunodiffusion, RIA and ELISA.	• Hypersensitivity reactions: Hypersensitivity reactions and its types.	01	18/05/24	Lecture, discussion & ICT method
	• Ag-Ab reactions and Immunological techniques: Formation of antigen-antibody complex. Agglutination and precipitation reactions.	02	20/05/24 and 21/05/24	Need special class to complete Lecture, discussion & ICT method
	• Principle, procedure and applications of immunodiffusion, RIA and ELISA.			

Subject: Biochemistry **(VI SEM**)
[Course code: **232670**]
Title of the Paper – **DSC8 - Lab – Molecular Biology and Immunology**
Total contact hours **– 60**
No of teaching hours/week**: 04**
Term Period: 12/02/2024to **25/05/2024**

1. Name of the Faculty: Ramya.Vand Radhika P

Hrs/week: 04 **Total Hrs: 60**

Curriculum as prescribed by the Institution	**Experiments**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
1. Isolation of DNA from banana/endosperm of coconut or any other source. **2.** Isolation of RNA from spinach leaves/any other source. **3.** Estimation of DNA by DPA method **4.** Estimation of RNA by orcinol method. **5.** Demonstration of Single Radial immuno-diffusion assay(SRID) **6.** Determination of Antigen	Experiment 1To Experiment 7	04 Hours/ week	14/02/24 to 28/03/24	Discussion and Experimental and Method
specificity/Ag-Ab reaction by Outcherlonydouble diffusion method **7.** Identification of blood group and Rh factor by Hemeagglutination reaction				
Experiment 1 to 7		**02**	**17/04/24** **18/04/24**	**Practical Internal Assessment C1 - Test**
			22/04/24	**Display of practical C1 testmarks on the notice board**

8. Determination of lambda max of proteins and nucleic acid 9. Determination of purity of nucleic acids 10. Electrophoretic separation of nucleic acids by Agarose gel electrophoresis. 11. Purification of Immunoglobulin G from egg yolk 12. Demonstration of pregnancy test 13. Demonstration of Westernblotting. 14. Demonstration of WIDAL test.	Experiment 8 To Experiment 14	04 Hours/ week	10/03/24 to 16/05/24	Discussion and Experimental and Method
Experiment 8- 12		**02**	**08/05/24** **09/05/24**	**Practical Internal Assessment C2 - Test**
			13/05/24	**Display of practical C2 test marks on thenotice board**

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Course Plan of Odd Semester 2023-24

Department : Biotechnology
Title of the Paper : Cell Biology and Genetics (Theory)
[Course Code – 212159**]**
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Gagantaara
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit I (14 hours)	Lesson plan and introduction	1 hour	11/09/23	POs and Course Outcomes of the units discussed
	Cell as a Basic unit of Living Systems and Cellular Organelles Concept, development and scope ofbiotechnology	1 hour	15/09/23	Lecture and ICT teaching
	Historical perspectives. Discovery ofcell, the cell theory.	1 hour	21/09/23	**One special class**
	Ultra structure of a eukaryotic cell- plant cell	1 hour	22/09/23	Lecture and ICT teaching
	Ultra structure of a eukaryotic cell animal cell.	1 hour	29/09/23	Lecture and ICT teaching
	Surface Architecture: Structural organization plasma membrane	1 hour	06/10/2023	Lecture and ICT teaching
	functions of plasma membrane	1 hour	13/10/2023	Lecture and ICT teaching
	Cell wall of bacteria and plants.	1 hour	20/10/2023	Lecture and ICT teaching
	Cellular Organelles: Structure and functions of cell organelles – Endoplasmic reticulum, Golgi complex	1 hour	27/10/2023	Lecture and ICT teaching
	Mitochondria, Chloroplast	1 hour	03/11/2023	Lecture and ICT teaching
	Ribosome, Lysosomes	1 hour	10/11/2023	Lecture and ICT teaching

	Peroxisomes, Nucleus	1 hour	24/11/2023	Lecture and ICT teaching
	Nuclear envelope with nuclear pore complex	1 hour	01/12/2023	Lecture and ICT teaching
	Nucleolus, Nucleoplasm and Chromatin Vacuole	1 hour	08/12/2023	Lecture and ICT teaching
	Cytosol and Cytoskeleton structures	1 hour	15/12/2023	Lecture and ICT teaching
	Microtubules Microfilaments and Intermediate filaments).	1 hour	16/12/2023	**One special class**
Unit-I & Unit – II	C1 Internal test	3 Hour	15.11.2023 to 18.11.2023	C1 Internal Test
Unit II (14 hours)	Chromosomes and Cell Division General introduction	1 hour	13/09/2023	Lecture and ICT teaching
	Discovery, morphology and structural organization – Centromere	1 hour	20/09/2023	Lecture and ICT teaching
	Secondary constriction, telomere, chromonema,	1 hour	25/09/2023	Lecture and ICT teaching
	Euchromatin and heterochromatin	1 hour	27/09/2023	Lecture and ICT teaching
	Chemical composition and karyotype	1 hour	04/10/2023	Lecture and ICT teaching
	C2 Internal Test Unit-II & Unit – IV	01 Week	10-12-23 to 15-12-23	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	Single-stranded and multi-stranded hypothesis- folded fibre	1 hour	09/10/2023	Lecture and ICT teaching
	nucleosome models	1 hour	11/10/2023	Lecture and ICT teaching
	Special type of chromosomes: Salivary gland and lampbrush	1 hour	16/10/2023	Lecture and ICT teaching

	chromosmes.			
	Cell Division: Cell cycle, phases of cell cycle.	1 hour	18/10/2023	Lecture and ICT teaching
	Regulation of cell cycles cell cycle checkpoints,	1 hour	25/10/2023	Lecture and ICT teaching
	Enzymes involved in regulation.	1 hour	06/11/2023	Lecture and ICT teaching
	Significance of cell cycle, interphase nucleus,	1 hour	08/11/2023	Lecture and ICT teaching
	Stages of mitosis and meiosis, achromatic apparatus, synaptonemal complex.	1 hour	13/11/2023	Lecture and ICT teaching
	Cell senescence and programmed cell death.	1 hour	20/11/2023	Lecture and ICT teaching
Unit III (14 hours)	**History of genetics:** Introduction and brief history of genetics.	1 hour	22/11/2023	Display of C1 Internal Test marks on the notice board
	Mendelian theory: Laws of inheritance- dominance	1 hour	23/11/2023	**One special class**
	Segregation, incomplete dominance, co dominance with an example.	1 hour	27/11/2023	Lecture and ICT teaching
	Law of independent assortment, test cross, back cross.	1 hour	29/12/2023	Lecture and ICT teaching
	Gene interaction: Deviations to Mendelian inheritance	1 hour	01/12/2023	**One special class**
	Supplementary factors: comb pattern in fowls,	1 hour	02/12/2023	**One special class**
	Complementary genes- Flower colour in sweet peas,	1 hour	04/12/2023	Lecture and ICT teaching
	Multiple factors–Skin colour in human beings,	1 hour	06/12/2023	Lecture and ICT teaching
	Epistasis– Plumage colour in poultry (13:3),	1 hour	11/12/2023	Lecture and ICT teaching
	Multiple allelism: Blood groups in Humans- ABO and Rh.	1 hour	13/12/2023	Lecture and ICT teaching

	Maternal Inheritance: Plastid inheritance in Mirabilis,	1 hour	14/12/2023	**One special class**
	petite characters in yeast and Kappa particles in paramecium,	1 hour	15/12/2023	**One special class**
	Sex-linked inheritance blindness, hemophilia, - Colour Y-linked traits	1 hour	16/12/2023	**One special class**
Unit IV (14 hours)	**Mutations:** Types of mutations, spontaneous and induced.	1 hour	16/09/2023	Lecture and teaching ICT
	Mutagens: Physical mutagens.	1 hour	23/09/2023	Lecture and teaching ICT
	chemical mutagens.	1 hour	30/09/2023	Lecture and teaching ICT
	Mutation at the molecular level, application of mutation-plants	1 hour	07/10/2023	Lecture and teaching ICT
	Mutation at the molecular level, application of mutation animals and microbes	1 hour	17/10/2023	Lecture and teaching ICT
	Chromosomal variations: A general account of structural and numerical aberrations,	1 hour	21/10/2023	Lecture and teaching ICT
	chromosomal evolution of wheat and cotton	1 hour	04/11/2023	Lecture and teaching ICT
	Linkage and Crossing Over Introduction,	1 hour	11/11/2023	Lecture and teaching ICT
	chromosome theory of inheritance	1 hour	18/11/2023	Lecture and teaching ICT
	Coupling and repulsion hypothesis	1 hour	25/11/2023	Lecture and teaching ICT
	Linkage in maize and Drosophila	1 hour	28/11/2023	**One special class**
	Mechanism of crossing over and its importance,	1 hour	02/12/2023	Lecture and teaching ICT
	chromosome mapping-linkage map in maize.	1 hour	09/12/2023	Lecture and teaching ICT
	Revision lecture	1 hour	16/12/2023	Display of C2 Internal Test marks on the notice board

Department : Biotechnology
Title of the Paper : Cell Biology and Genetics (practical)
[Course Code – 212159**]**
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Gagantaara
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
1. Study and maintenance of simple and compound microscope 2. Use of Micrometer and calibration, measurement of onion epidermal cells and yeast 3. Study of divisional stages in mitosis from onion root tips 4. Study of divisional stages in meiosis in grasshopper testes/onion or Rhoeo flower buds. 5. Mounting of polytene chromosomes 6. Buccal smear - Barr bodies	**Experiment 1 to 6**	**03 / week**	**11/09/2023 to 17/10/2023**	**Practical experiments and demonstration experiments**
C1 Practical Internal test	**Experiment 1,2,4,5 &6**	1 Hour	06-11-23	C1 Practical Internal Test
7. Karyotype analysis - Humanand Onion 8. Human – Normal and Abnormal – Down and Turner's syndromes 9. Isolation of Mitochondria and chloroplast and marker enzyme assay. 10. Morphological study of Wild male and female Drosophila and mutants of drosophila (Eye, Wing and body mutation). 11. Counting yeast Cell using haemocytometer. 12. Simple genetic problems based on theory	**Experiment 7 to 12**	**03 / week**	**20/10/2023 to 04/12/2023**	**Practical experiments and demonstration experiments**

C2 Practical Internal test	**Experiment 3, 7-12**	1 Hour	09/11/2023	C2 Practical Internal Test

Department : Biotechnology
Title of the Paper : Biomolecules (Theory)
[Course Code – 222359**]**
Term Period :11.09.2023 to 16.12.2023
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Gagantara
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit I (14 hours)	**Lesson plan discussion**	1 hour	11/09/2023	POs and Course Outcomes of the units discussed
	Carbohydrates: Introduction, classification of carbohydrates	1 hour	16/09/2023	Lecture and ICT teaching
	Structure, function and properties of carbohydrates.	1 hour	23/09/2023	Lecture and ICT teaching
	Monosaccharides- Isomerism and ring structure	1 hour	25/09/2023	Lecture and ICT teaching
	Sugar derivatives – amino sugars and ascorbic acid.	1 hour	30/09/2023	Lecture and ICT teaching
	Disaccharides – Maltose, Lactose and Sucrose	1 hour	07/10/2023	Lecture and ICT teaching
	Polysaccharides – Classification as homo and heteropolysaccharides.	1 hour	09/10/2023	Lecture and ICT teaching
	Homopolysaccharides - storage polysaccharides (starch and glycogen- structure, reaction and properties	1 hour	12/10/2023	**One special class**
	Structural polysaccharides (cellulose and chitin-structure, properties).	1 hour	16/10/2023	Lecture and ICT teaching
	Heteropolysaccharides - glycoproteins and proteoglycans (structure and functions).	1 hour	18/10/2023	**One special class**

	b) Amino Acids, Peptides and Proteins: Introduction, classification	1 hour	21/10/2023	Lecture and ICT teaching
	Structure of amino acids.	1 hour	25/10/2023	**One special class**
	Concept of – Zwitterion, isoelectric point, pKa values.	1 hour	26/10/2023	Lecture and ICT teaching
	Essential and nonessential amino acids.	1 hour	30/10/2023	**One special class**
	Peptide bond and peptide	1 hour	31/10/2023	**One special class**
Unit-I & Unit – II	C1 Internal test	3 Hour	15.11.2023 to 18.11.2023	C1 Internal Test
Unit II (14 hours)	Structural organization of proteins [primary, secondary (α, beta, tertiary and quaternary].	1 hour	04/11/2023	Lecture and ICT teaching
	Fibrous and globular proteins	1 hour	06/11/2023	Lecture and ICT teaching
	Denaturation and renaturation of proteins	1 hour	09/11/2023	**One special class**
	Lipids: Classification and function of lipids	1 hour	13/11/2023	Lecture and ICT teaching
	Saturated and unsaturated fatty acids properties (saponification value, acid value, iodine number, rancidity)	1 hour	20/11/2023	Lecture and ICT teaching
	C2 Internal Test Unit-II & Unit – IV	01 Week	10-12-23 to 15-12-23	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	Hydrogenation of fats and oils. General structure and biological functions of - phospholipids	1 hour	25/11/2023	Display of C1 Internal Test marks on the notice board
	Sphingolipids, glycolipids, lipoproteins, prostaglandins, cholesterol, ergosterol.	1 hour	27/11/2023	Lecture and ICT teaching
	b) Enzymes Introduction, nomenclature and classification.	1 hour	02/12/2023	Lecture and ICT teaching

	Enzyme kinetics: Enzyme activity, specific activity	1 hour	05/12/2023	**One special class**
	Factors influencing enzyme activity (temperature, pH, substrate concentration), metalloenzymes, activation energy and transition state.	1 hour	06/12/2023	**One special class**
	Cofactors, Coenzymes and their functions (one reaction involving TPP, FAD, NAD).	1 hour	09/12/2023	Lecture and ICT teaching
	Enzyme inhibition- Irreversible and reversible (competitive, non-competitive and uncompetitive inhibition with an example each)	1 hour	11/12/2023	Lecture and ICT teaching
	Zymogens (trypsinogen, chymotrypsinogen and pepsinogen)	1 hour	14/12/2023	**One special class**
	Isozymes (LDH, Creatine kinase and their clinical significance)	1 hour	16/12/2023	Lecture and ICT teaching
Unit III **(14 hours)**	Vitamins: Water and fat soluble vitamins, dietary source and biological role of vitamins.	1 hour	15/09/2023	Lecture and ICT teaching
	Deficiency manifestation of vitamin A, B, C, D, E and K	1 hour	22/09/2023	Lecture and ICT teaching
	b) Nucleic acids: Structure of nucleosides, nucleotides in DNA and RNA.	1 hour	26//09/2023	**One special class**
	Structure and functions of DNA and RNA	1 hour	29/09/2023	Lecture and ICT teaching
	Watson and Crick model of DNA and other forms of DNA (A and Z).	1 hour	06/10/2023	Lecture and ICT teaching
	Types of RNA (rRNA, tRNA,	1 hour	13/10/2023	Lecture and ICT teaching
	mRNA, snRNA,	1 hour	25/10/2023	**One special class**
	hnRNA, miRNA),	1 hour	27/10/2023	Lecture and ICT teaching
	ribozymes	1 hour	03/11/2023	Lecture and ICT teaching

	c) Hormones: Classification of hormones based on chemical	1 hour	10/11/2023	Lecture and ICT teaching
	nature			
	Mechanism of action of hormones	1 hour	24/11/2023	Lecture and ICT teaching
	Chemical structure and functions of Glucagon,	1 hour	01/12/2023	Lecture and ICT teaching
	insulin, Epinephrine,	1 hour	08/12/2023	Lecture and ICT teaching
	Testosterone and Estradiol	1 hour	15/12/2023	Lecture and ICT teaching
Unit IV **(14 hours)**	**a) Electrophoresis:** Principle, procedure	1 hour	12/09/2023	Lecture and ICT teaching
	Applications of electrophoresis (paper electrophoresis	1 hour	19/09/2023	Lecture and ICT teaching
	Gel electrophoresis –PAGE	1 hour	26/09/2023	Lecture and ICT teaching
	SDS- PAGE & agarose electrophoresis	1 hour	03/10/2023	Lecture and ICT teaching
	Isoelectric focusing	1 hour	10/10/2023	Lecture and ICT teaching
	b) Spectroscopy: Colorimetry	1 hour	17/10/2023	Lecture and ICT teaching
	UV-Vis spectrophotometry	1 hour	19/10/2023	Lecture and ICT teaching
	Spectrofluorimetry,	1 hour	26/10/2023	Lecture and ICT teaching
	IR and NMR spectroscopy,	1 hour	31/10/2023	Lecture and ICT teaching
	Atomic absorption spectroscopy	1 hour	07/11/2023	**One special class**
	Mass spectroscopy	1 hour	21/11/2023	Lecture and ICT teaching
	c) Radioisotope techniques: Radioactivity	1 hour	28/11/2023	Lecture and ICT teaching
	Half life, radioisotopes	1 hour	05/12/2023	Lecture and ICT teaching
	GM counter	1 hour	12/12/2023	Lecture and ICT teaching
	Scintillating counting	1 hour	13/12/2023	Lecture and ICT teaching

	Autoradiography, applications,	1 hour	15/12/2023	Display of C2 Internal Test marks
				on the notice board
	Biosafety	1 hour	16/12/2023	Lecture and ICT teaching

Department : Biotechnology
Title of the Paper : Biomolecules (Practical)
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Gagantaara
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	**Experiments**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
1. Introduction to basic instruments: Principle, standard operating procedure with demonstration of colorimeter, Spectrophotometer, Ph meter, Centrifuge, Electrophoresis unit. 2. Definitions and calculations: Molarity, Molality, Normality, Mass percent % (w/w), Percent by volume (% v/v), parts per million (ppm), parts per billion (ppb), Dilution of concentrated solutions. Standard solutions, stock solution, solution of acids. Reagent bottle label reading and precautions. 3. Preparation of standard buffers by Hendersen-Hasselbach equation – Acetate, phosphate, Tris and determination of pH of solution using pH meter. 4. Estimation of maltose by DNS method 5. Determination of α-amylase	**Experiment 1 to 5**	**03 / week**	**11/09/2023 to 17/10/2023**	**Practical experiments and demonstration experiments**
activity by DNS method				

C1 Practical Internal test	**Experiment 1 to 5**	1 Hour	08.11.2023 To 20.11.2023	C1 Practical Internal Test
6. Estimation of proteins by Biuret method 7. Estimation of amino acid by Ninhydrin method 8. Extraction of protein from soaked/sprouted green gram by salting out method 9. Separation of amino acids by circular paper chromatography 10. PAGE 11. Determination of iodine number of lipids	**Experiment 6 to 11**	**03 / week**	**20/10/2023 to 04/12/2023**	**Practical experiments and demonstration experiments**
C2 Practical Internal test	**Experiment 6 to 11**	1 Hour	27/11/2023 To 29.11.2023	C2 Practical Internal Test

Department : Biotechnology
Title of the Paper : Genetic Engineering (Theory)
[Course Code – 232559]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Gagantaara
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
	Lesson plan and introduction	1 hour	11/09/2023	POs and Course Outcomes of the units discussed
	Definition, scope, and historical overview of genetic engineering.	1 hour	14/09/2023	Lecture and teaching ICT
	DNA Structure and Manipulation - Techniques for DNA isolation	1 hour	21/09/2023	Lecture and teaching ICT

Unit I (15 hours)	Techniques for DNA purification.	1 hour	25/09/2023	Lecture and teaching ICT
	Methods for quantification of DNAsamples	1 hour	27/09/2023	**One special class**
	Characterization of DNA samples.	1 hour	05/10/2023	Lecture and teaching ICT
	RNA Analysis and Gene Expression- Methods for RNA isolation	1 hour	09/10/2023	Lecture and teaching ICT
	RNA purification.	1 hour	12/10/2023	Lecture and teaching ICT
	Analysis of gene expression.	1 hour	16/10/2023	Lecture and teaching ICT
	Recombinant DNA technology – Introduction to molecular cloning	1 hour	17/10/2023	**One special class**
	Overview of cloning vectors. Plasmids, phage, cosmid, BAC,	1 hour	19/10/2023	Lecture and teaching ICT
activity by DNS method				
C1 Practical Internal test	**Experiment 1 to 5**	1 Hour	08.11.2023 To 20.11.2023	C1 PracticalInternal Test
6. Estimation of proteins byBiuret method 7. Estimation of amino acid byNinhydrin method 10. Extraction of protein from soaked/sprouted green gram bysalting out method 11. Separation of amino acids by	**Experiment 6 to 11**	**03 / week**	**20/10/2023 to 04/12/2023**	**Practical experiments and demonstration experiments**

circular paper chromatography 10. PAGE 11. Determination of iodine number of lipids				
C2 Practical Internal test	**Experiment 6 to 11**	1 Hour	27/11/2023 To 29.11.2023	C2 PracticalInternal Test
x	and YAC.			
	Features and applications of cloning vectors in genetic engineering.	1 hour	26/10/2023	Lecture and ICT teaching
	Enzymes used in recombinant DNA technology: Restriction endonucleases	1 hour	30/10/2023	Lecture and ICT teaching
	Polymerases, Ligase, kinases, and phosphatases.	1 hour	31/10/2023	Lecture and ICT teaching
	Techniques for molecular cloning of DNA or RNA fragments in bacterial	1 hour	02/10/2023	Lecture and ICT teaching
	Cloning of DNA or RNA fragments in eukaryotic systems	1 hour	03/11/2023	**One special class**
Unit-I & Unit – II	C1 Internal test	3 Hour	15.11.2023 to 18.11.2023	C1 Internal Test
	Recombinant Protein Expression and Purifications.	1 hour	06/11/2023	Lecture and ICT teaching
	Affinity tag	1 hour	07/11/2023	**One special class**

Unit II **(15** hours**)**	Techniques for expressing recombinant proteins using bacterial,	1 hour	09/11/2023	Lecture and teaching ICT
	Techniques for expressing recombinant proteins using animal, and plant expression systems.	1 hour	13/11/2023	Lecture and teaching ICT
	Strategies for protein purification and characterization.	1 hour	20/11/2023	Lecture and teaching ICT
	C2 Internal Test Unit-II & Unit – IV	01 Week	10-12-23 to 15-12-23	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	Hybridization techniques, Southern, Northern,	1 hour	23/11/2023	Lecture and teaching ICT
	Western, FISH	1 hour	27/11/2023	Display of C1 Internal Test marks on the notice board
	Polymerase Chain Reaction (PCR) and its types	1 hour	28//11/2023	**One special class**
	Molecular probes	1 hour	01/12/2023	**One special class**
	DNA sequencing- Sanger's, Next Generation Sequencing	1 hour	04/12/2023	Lecture and teaching ICT
	Gene Manipulation Techniques - Methods of gene delivery. Physical (electroporation, micro-injection, gene gun)	1 hour	07/12/2023	Lecture and teaching ICT
	Chemical (liposome mediated, Calcium phosphate)	1 hour	11//12/2023	Lecture and teaching ICT
	Biological methods (Transformation, transfection)	1 hour	13/12/2023	**One special class**
	Gene knockout techniques in	1 hour		Lecture and ICT

	bacterial and eukaryotic organisms.		14/12/2023	teaching
	Genome Editing - Introduction to genome editing techniques- Principles and applications of genome editing techniques.	1 hour	15/12/2023	**One special class**
	CRISPR-Cas9, site- directed mutagenesis, and other genome editing methods.	1 hour	16/12/2023	**One special class**
Unit III (15 hours)	Introduction and diverse applications of genetic engineering.	1 hour	11/09/2023	Lecture and ICT teaching
	Gene therapy	1 hour	25/09/2023	
	Potential in treating genetic disorders	1 hour	09/10/2023	Lecture and ICT teaching
	Strategies for gene delivery in therapeutic applications.	1 hour	16/10/2023	Lecture and ICT teaching
	Diagnostic Applications.	1 hour	20/10/2023	**One special class**
	DNA fingerprinting and its applications in forensics.	1 hour	30/10/2023	**One special class**
	Molecular diagnostic techniques	1 hour	06/11/2023	Lecture and ICT teaching
	Molecular diagnostic role in disease diagnosis.	1 hour	13/11/2023	Lecture and ICT teaching
	Use of genetic engineering in the development of therapeutics	1 hour	20/11/2023	Lecture and ICT teaching
	Use of genetic engineering in vaccines.	1 hour	27/11/2023	Lecture and ICT teaching
	Production of biopharmaceuticals using recombinant DNA technology.	1 hour	04/12/2023	Lecture and ICT teaching
	Revision lecture	1 hour	11/12/2023	Lecture and ICT teaching
	Industrial applications of genetic engineering,such as	1 hour	13/09/2023	Lecture and ICT teaching

Unit IV (15 hours)	enzyme production,			
	Biofuel production,	1 hour	20/09/2023	Lecture and ICT teaching
	Bioremediation.	1 hour	27/09/223	Lecture and ICT teaching
	Scale-up techniques	1 hour	04/10/2023	Lecture and ICT teaching
	Process optimization in industrial settings.	1 hour	11/10/2023	Lecture and ICT teaching
	Introduction to synthetic biology	1 hour	18/10/2023	Lecture and ICT teaching
	synthetic biology integration with genetic engineering.	1 hour	25/10/2023	Lecture and ICT teaching
	Design and construction of artificial biological systems.	1 hour	08/11/2023	Lecture and ICT teaching
	Ethical and Regulatory Considerations	1 hour	22/11/2023	**One special class**
	Discussion of ethical implications associated with genetic engineering.	1 hour	29/11/2023	Lecture and ICT teaching
	Introduction to regulatory guidelines	1 hour	06/12/2023	
	Safety considerations for genetic engineering research	1 hour	13/12/2023	Lecture and ICT teaching
	Genetic engineering research applications	1 hour	16/12/2023	Display of C2 Internal Test marks on the notice board

Department : Biotechnology
Title of the Paper : Genetic engineering (Practical)
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Gagantaara
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
1. Introduction to Laboratory Techniques - Safety guidelines and laboratory protocols Aseptic techniques and proper handling of materials. Basic equipment and instrument operation Preparation of reagents and media 2. Nucleic Acid Extraction and Quantification (DNA/RNA) DNA extraction from different sources (e.g., bacteria/plant/ animal). Quality assessment and quantification of nucleic acids (DNA/RNA) (spectrophotometry, gel electrophoresis). 3. Polymerase Chain Reaction (PCR) Primer design and optimization PCR setup and cycling conditions Agarose gel electrophoresis for PCR product analysis	**Experiment 1 to 3**	**02 / week**	**11/09/2023 to 17/10/2023**	**Practical experiments and demonstration experiments**
C1 Practical Internal test	**Experiment 1 to 3**	1 Hour	10.11.2023 To 22.11.2023	C1 Practical Internal Test

4. Cloning and Plasmid Manipulation Isolation of Plasmid Restriction enzyme digestion Ligation reactions Transformation of bacterial cells with recombinant plasmids Colony selection and screening for successful cloning 5. Gel Electrophoresis and DNA Analysis Agarose gel electrophoresis for DNA fragment separation and analysis DNA size determination using molecular weight markers DNA band visualization techniques (e.g., Ethidium bromide staining, DNA intercalating dyes)	**Experiment 4 to 5**	**03 / week**	**20/10/2023 to 04/12/2023**	**Practical experiments and demonstration experiments**
C2 Practical Internal test	**Experiment 3 to 5**	1 Hour	28/11/2023 To 02.12.2023	C2 Practical Internal Test

Department : Biotechnology
Title of the Paper : Plant and Animal Biotechnology (Theory)
[Course Code – 232560**]**
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Gagantaara
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
	Lesson plan and introduction	1 hour	11/09/2023	POs and Course Outcomes of the units discussed
	Introduction, principle, history, definition, hypothesis of plant tissue culture	1 hour	12/09/2023	Lecture and ICT teaching
	Cellular totipotency	1 hour	13/09/2023	Lecture and ICT teaching
	Media and laboratory organization	1 hour	19/09/2023	Lecture and ICT teaching
Unit I	Types of culture; callus culture, seed culture, embryo culture, meristem culture, bud culture	1 hour	20/09/2023	Lecture and ICT teaching

(15 hours)	Culture limitations and applications	1 hour	26/09/2023	Lecture and ICT teaching
	Concept of morphogenesis, differentiation	1 hour	27/09/2023	Lecture and ICT teaching
	Direct, indirect organogenesis	1 hour	03/10/2023	Lecture and ICT teaching
	Somatic embryogenesis, synthetic seeds.	1 hour	04/10/2023	Lecture and ICT teaching
	In vitro propagation	1 hour	10/10/2023	Lecture and ICT teaching
	Micropropagation,	1 hour	17/10/2023	Lecture and ICT teaching
	Secondary metabolites, In vitro secondary metabolite production	1 hour	18/10/2023	Lecture and ICT teaching
	Suspension cultures, cell cultures	1 hour	25/10/2023	Lecture and ICT teaching
	Growth vs secondary metabolite production	1 hour	26/10/2023	**One special class**
	Bioreactors and scaling up of secondary metabolite production	1 hour	31/10/2023	Lecture and ICT teaching
	Limitations, and applications.	1 hour	02/11/2023	**One special class**
Unit-I & Unit – II	C1 Internal test	3 Hour	15.11.2023 to 18.11.2023	C1 Internal Test
	Overview of transgenic plants and their significance in agriculture.	1 hour	07/11/2023	Lecture and ICT teaching
	Techniques for introducing foreign genes into plants: Agrobacterium mediated transformation	1 hour	08/11/2023	Lecture and ICT teaching
	Biolistics, and other methods.	1 hour	21/11/2023	**One special class**
	Selection and screening of transformed plants.	1 hour	22/11/2023	**One special class**
Unit II (15 hours)	Applications of Transgenic Plants - Improved crop traits through genetic engineering: pest resistance	1 hour	27/11/2023	Lecture and ICT teaching
	C2 Internal Test Unit-II &			

	Unit – IV	01 Week	10-12-23 to 15-12-23	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	Herbicide tolerance, disease resistance, and abiotic stress tolerance.	1 hour	28/11/2023	Display of C1 Internal Test marks on the notice board
	Biosafety assessment of transgenic plants: potential risks and benefits.	1 hour	29/11/2023	**One special class**
	International regulatory frameworks for releasing and commercializing genetically modified organisms (GMOs).	1 hour	05/12/2023	Lecture and teaching ICT
	Ethical and socio-economic impacts of transgenic crops.	1 hour	06/12/2023	Lecture and teaching ICT
	Intellectual property rights and access to transgenic technologies.	1 hour	12/12/2023	Lecture and teaching ICT
Unit III (15 hours)	History and laboratory organization	1 hour	16/09/2023	Lecture and teaching ICT
	Types of Media (Natural media, artificial media	1 hour	19/09/2023	**One special class**
	serum free media, chemically defined media and protein free media).	1 hour	23/09/2023	Lecture and teaching ICT
	Cell types and culture characters	1 hour	30/09/2023	Lecture and teaching ICT
	Trans differentiation, Reprogramming	1 hour	07/10/2023	Lecture and teaching ICT
	Biology and characterization of cultured cells- cell adhesion,	1 hour	12/10/2023	**One special class**
	proliferation, differentiation, morphology of cells, and identification.	1 hour	21/10/2023	Lecture and teaching ICT

	The basic technique of mammalian cell culture in vitro	1 hour	27/10/2023	Lecture and teaching ICT
	Measuring parameters of growth in cultured cells	1 hour	04/11/2023	Lecture and teaching ICT
	(Lag phase, log phase, and plateau phase)	1 hour	11/11/2023	Lecture and teaching ICT
	cell viability, and cytotoxicity	1 hour	23/11/2023	**One special class**
	Large-scale culture of cell lines-monolayer, suspension, and immobilized cultures.	1 hour	25/11/2023	Lecture and ICT teaching
	Organ and histotypic culture: Technique, advantages, limitations and applications.	1 hour	02/12/2023	Lecture and teaching ICT
	Stem cells: types (embryonic, adult, induced pluripotent)	1 hour	08/12/2023	**One special class**
	Isolation, identification, expansion, differentiation and uses	1 hour	09/12/2023	Lecture and ICT teaching
	Stem cell engineering and ethical issues.	1 hour	16/12/2023	Lecture and teaching ICT
Unit IV (15 hours)	Gene constructs promoter/ enhancer sequences for transgene expression in animals.	1 hour	14/09/2023	Lecture and ICT teaching
	Selectable markers for animal cells- thymidine kinase.	1 hour	21/09/2023	Lecture and teaching ICT
	Transfection of animal cells-calcium phosphate coprecipitation, electroporation	1 hour	05/10/2023	Lecture and ICT teaching
	lipofection, peptides, direct DNA transfer, viral vectors,	1 hour	12/10/2023	Lecture and teaching ICT
	Retrovirus, microinjection.	1 hour	19/10/2023	Lecture and ICT teaching
	Transgene identification methods. Transgenic and genome-edited animals	1 hour	26/10/2023	Lecture and ICT teaching
	Ethical issues in transgenesis	1 hour	02/11/2023	Lecture and ICT

				teaching
	Recent advances and applications in the field.	1 hour	09/11/2023	Lecture and teaching ICT
	Manipulation of animal reproduction and characterization of animal genes	1 hour	23/11/2023	Lecture and teaching ICT
	Embryo transfer in cattle and applications	1 hour	07/12/2023	Lecture and teaching ICT
	Somatic cell cloning - cloning of Dolly, Ethical issues.	1 hour	14/12/2023	Lecture and teaching ICT
	Production of recombinant vaccines.	1 hour	15/12/2023	Display of C2 Internal Test marks on the notice board
		1 hour	16/12/2023	**One special class**

Department : Biotechnology
Title of the Paper : Plant and Animal Biotechnology (Practical)
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Gagantaara
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
1. Bacterial growth curve. 2. Calculation of the thermal death point (TDP) of a microbial sample. 3. Study of fermenter-Demonstration. 4. Production of wine. 5. Estimation of the percentage of alcohol, total acidity & volatile acidity in wine.	**Experiment 1 to 5**	**03 / week**	**02/04/2024 to 14/05/2024**	**Practical experiments and demonstration experiments**
C1 Practical Internal test	**Experiment 6 to 10**	1 Hour	10.11.2023 To 22.11.2023	C1 Practical Internal Test

6. Production and analysis of ethanol. 7. Production and analysis of amylase. 8. Production and analysis of lactic acid. 9. Isolation of industrially important microorganisms from natural resources. 10. Standard analysis of Water (Biological oxygen demand, toxic chemicals and estimation of total dissolved solids, microbial examination of given water sample).	**Experiment 6 to 10**	**03 / week**	**12/02/2024 to 19/03/2024**	**Practical experiments and demonstration experiments**
C2 Practical Internal test	**Experiment 1-5**	1 Hour	01/05/2024 To 08.05.2024	C2 Practical Internal Test

Department : Biotechnology
Title of the Paper : Microbiological Methods (Theory)
[Course Code – 212259]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Amoolya
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
	Lesson plan and introduction	1 hour	12/02/2024	POs and Course Outcomes of the units discussed
	General Microbiology and Instrumentation: General Introduction to Microbiology, Scope and relevance of microbiology	1 hour	16/02/2024	Lecture and teaching ICT
	Important contributions by Robert Koch, Leeuwenhoek, Jenner, Pasteur, Flemming, Ivanowsky.	1 hour	23/02/2024	Lecture and teaching ICT

Unit I (14 hours)	General account on structure, classification and reproduction of bacteria,	1 hour	01/03/2024	Lecture and teaching ICT
	Structure, classification and reproduction of virus and fungi	1 hour	15/03/2024	Lecture and teaching ICT
	Microscopy: Principles and applications of Compound microscope	1 hour	22/03/2024	Lecture and teaching ICT
	Dark field microscope, Phase contrast microscope	1 hour	28/03/2024	**One special class**
	Fluorescence Microscope, Confocal microscope,.	1 hour	05/04/2024	Lecture and teaching ICT
	Electron Microscopes- TEM and SEM.	1 hour	12/04/2024	Lecture and teaching ICT
	Analytical techniques: Working principles and applications:	1 hour	26/04/2024	Lecture and teaching ICT
	Centrifuge			
	Ultracentrifuge, Spectrophotometer,	1 hour	03/05/2024	Lecture and teaching ICT
	Chromatography: Paper,	1 hour	16/05/2024	**One special class**
	TLC, Column (adsorption, gel-filtration)	1 hour	17/05/2024	Lecture and teaching ICT
	Column (ion exchange, affinity	1 hour	21/05/2024	**One special class**
	HPLC, GC	1 hour	24/05/2024	Lecture and teaching ICT
Unit-I & Unit – II	C1 Internal test	3 Hour	16.04.2024 to 20.04.2024	C1 Internal Test
	Definition of terms-sterilization, disinfectant	1 hour	12/02/2024	Lecture and teaching ICT
	Antiseptic, sanitizer, germicide, microbicidal agents	1 hour	14/02/2024	Lecture and teaching ICT
	Micro biostatic agent and antimicrobial agent.	1 hour	19/02/2024	Lecture and teaching ICT
	Physical methods of control: Principle, construction and applications of moist heat sterilization- Pasteurization	1 hour	21/02/2024	Lecture and teaching ICT

Unit II (14 hours)	**C2 Internal Test (Unit III and IV)**	01 Week	01/05/2024 To 07/05/2024	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	Boiling, Fractional sterilization-Tyndallization and autoclave.	1 hour	26/02/2024	Lecture and teaching ICT
	Dry heat sterilization-Incineration and hot air oven.	1 hour	28/02/2024	Lecture and teaching ICT
	Filtration – Diatomaceous earth filter, seitz filter,	1 hour	04/03/2024	Lecture and teaching ICT
	Membrane filter, HEPA filter	1 hour	06/03/2024	Lecture and teaching ICT
	Radiation : Ionizing radiation-γ rays	1 hour	11/03/2024	Lecture and teaching ICT
		1 hour	13/03/2024	Lecture and ICT
	Non ionizing radiation- UV rays			teaching
	Chemical methods: Alcohol, aldehydes,	1 hour	18/03/2024	Lecture and ICT teaching
	Phenols, halogen,	1 hour	20/03/2024	Lecture and ICT teaching
	Metallic salts, quaternary ammonium compounds	1 hour	21/03/2024	**One special class**
	Sterilizing gases as antimicrobial agents.	1 hour	22/03/2024	**One special class**
	Culture Media: Components of media	1 hour	25/03/2024	Lecture and ICT teaching
	Nnatural and synthetic media	1 hour	27/03/2024	Lecture and ICT teaching
	Chemically, defined media,	1 hour	1/04/2024	Lecture and ICT teaching
	complex media, selective,	1 hour	03/04/2024	Lecture and ICT teaching
	Differential, indicator, enriched	1 hour		Lecture and ICT

	and enrichment media.		08/04/2024	teaching
Unit III (14 hours)	**Pure culture methods**: Serial dilution	1 hour	10/04/2024	Lecture and ICT teaching
	Plating methods (pour, spread, streak)	1 hour	15/04/2024	Lecture and ICT teaching
	Cultivation, maintenance	1 hour	23/04/2024	Lecture and ICT teaching
	Preservation/stocking of pure cultures	1 hour	24/04/2024	Display of C1 Internal Test marks on the notice board
	Cultivation of anaerobic bacteria.	1 hour	29/04/2024	Lecture and ICT teaching
	Microbial growth and its measurements: Growth curve,	1 hour	06/05/2024	Lecture and ICT teaching
	Enumeration methods (turbidity,	1 hour		Lecture and ICT
	cell counting,		08/05/2024	teaching
	colony counting	1 hour	13/05/2024	Lecture and ICT teaching
	Stains and staining techniques: Principles of staining,	1 hour	15/05/2024	Lecture and ICT teaching
	Types of stains simple stains.	1 hour	20/05/2024	Lecture and ICT teaching
	Revision class	1 hour	22/05/2024	Lecture and ICT teaching
	Antimicrobial Agents	1 hour	17/02/2024	Lecture and ICT teaching
	Antibiotic sensitivity testing methods: Disc diffusion techniques	1 hour	24/02/2024	Lecture and ICT teaching
	Agar well diffusion techniques.	1 hour	02/03/2024	Lecture and ICT

				teaching
	Five modes of action with one example each: Inhibitor of nucleic acid synthesis;	1 hour	09/03/2024	Lecture and ICT teaching
Unit IV (14 hours)	Inhibitor of cell wall synthesis;	1 hour	16/03/2024	Lecture and ICT teaching
	Inhibitor of cell membrane function;	1 hour	23/03/2024	Lecture and ICT teaching
	Inhibitor of protein synthesis;	1 hour	30/03/2024	Lecture and ICT teaching
	Inhibitor of metabolism.	1 hour	06/04/2023	Lecture and ICT teaching
	Antifungal agents: Mechanism of action of Amphotericin B,	1 hour	13/04/2023	Lecture and ICT teaching
	Mechanism of action of	1 hour	22/04/2023	**One special class**
	Griseofulvin			
	Antiviral agents: Mechanism of action of Amantadine	1 hour	27/04/2023	Lecture and ICT teaching
	Mechanism of action of Acyclovir,	1 hour	04/05/2023	Lecture and ICT teaching
	Mechanism of action of Azidothymidine	1 hour	11/05/2023	Display of C2 Internal Test marks on the notice board
	Antibiotic resistance, MDR, XDR,	1 hour	18/05/2023	Lecture and ICT teaching
	MRSA, NDM-.1	1 hour	25/05/2023	Lecture and ICT teaching

Department : Biotechnology
Title of the Paper : Microbiological methods(Practical)
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Amoolya
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
1. To study the principle and applications of important instruments (biological safety cabinets, autoclave, incubator, BOD incubator, hot air oven, light microscope, pH meter) used in the microbiology and Biotechnology laboratory. 2. Sterilization of medium using Autoclave and assessment for sterility 3. Sterilization of glassware using Hot Air Oven and assessment for sterility 4. Sterilization of heat sensitive material by membrane filtration and assessment for Sterility. 5. Preparation of culture media for bacteria, fungi and their cultivation. 6. Plating techniques: Spread plate, pour plate and streak plate.	**Experiment 1 to 7**	**04 / week**	**12/02/2024 to 19/03/2024**	**Practical experiments and demonstration experiments**
7. Isolation of bacteria and fungi from soil, water and air				
C1 Practical Internal test	**Experiment 1 to 7**	1 Hour	01.04.2024 To 08.04.2024	C1 Practical Internal Test
8. Study of Rhizopus, Penicillium, Aspergillus using temporary mounts 9. Colony characteristics study of bacteria from air exposure plate				

10. Staining techniques: Bacteria– Gram, Negative, Capsule, Endospore staining 11. Fungi – Lactophenol cotton blue staining 12. Water analysis - MPN test 13. Biochemical Tests – IMViC, Starch hydrolysis, Catalase test, Gelatin hydrolysis 14. Bacterial cell motility - hanging drop technique.	**Experiment 8 to 14**	**04 / week**	**02/04/2024 to 14/05/2024**	**Practical experiments and demonstration experiments**
C2 Practical Internal test	**Experiment 8-14**	1 Hour	01/05/2024 To 08.05.2024	C2 Practical Internal Test

Department : Biotechnology
Title of the Paper : Molecular Biology (Theory)
[Course Code – 222459**]**
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Amoolya
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
	Lesson plan and introduction	1 hour	12/02/2024	POs and Course Outcomes of the units discussed
	DNA as genetic material,Replication and Repair:	1 hour	17/02/2024	Lecture and ICT teaching
	Experimental proof of DNA as genetic material Griffith's,	1 hour	24/02/2024	Lecture and ICT teaching
	Avery-Mcleod-McCarty, Martha -Chase Experiment	1 hour	02/03/2024	Lecture and ICT teaching
Unit I	Central dogma,	1 hour	09/03/2024	Lecture and ICT teaching

(14 hours)	Replication of DNA in prokaryotes	1 hour	16/03/2024	Lecture and ICT teaching
	Replication of DNA in eukaryotes	1 hour	23/03/2024	Lecture and ICT teaching
	Semiconservative mod e(Messelson and Stalh experiment),	1 hour	30/03/2024	Lecture and ICT teaching
	Enzymes and proteins involved inreplication-DNA polymerases,	1 hour	06/04/2024	Lecture and ICT teaching
	Theta, linear and rolling circle models.	1 hour	13/04/2024	Lecture and ICT teaching
	Helicases, gyrases,	1 hour	27/04/2024	Lecture and ICT teaching
	Lligase, SSB proteins, RNAse H	1 hour	04/05/2024	Lecture and ICT teaching
	The replication complex: Pre-primming proteins, Primosome,	1 hour	11/05/2024	Lecture and ICT teaching
	replisome,			
	Unique aspects of eukaryoticchromosome replication,	1 hour	18/05/2024	Lecture and ICT teaching
	Fidelity of replication.	1 hour	25/05/2024	Lecture and ICT teaching
Unit-I & Unit – II	C1 Internal test	3 Hour	16.04.2024 to 20.04.2024	C1 Internal Test
	Transcription and RNA processing: Transcriptio n in prokaryotes	1 hour	12/02/2024	Lecture and ICT teaching
	RNA polymerase,	1 hour	15/02/2024	Lecture and ICT teaching
	Sigma factor, promoter,	1 hour	19/02/2024	Lecture and ICT teaching
	Initiation, elongation	1 hour	22/02/2024	Lecture and ICT teaching
	C2 Internal Test Unit III and IV	01 Week	01/05/2024 To 07/05/2024	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
Unit II	Transcription termination.	1 hour	26/02/2024	Lecture and ICT teaching

(14 hours)	Transcription in eukaryotes: Eukaryotic RNA polymerases,	1 hour	29/02/2024	Lecture and teaching ICT
	Transcription factors	1 hour	04/03/2024	Lecture and teaching ICT
	Promoters, enhancers	1 hour	07/03/2024	Lecture and teaching ICT
	Mechanis m of transcription initiation,	1 hour	11/03/2024	Lecture and teaching ICT
	Promoter clearance	1 hour	14/03/2024	Lecture and teaching ICT
	Transcription elongation	1 hour	18/03/2024	Lecture and teaching ICT
	Transcription termination.	1 hour	21/03/2024	Lecture and teaching ICT
	RNA processing of pre-mRNA: 5'cap formation,	1 hour	25/03/2024	Lecture and teaching ICT
	Polyadenylation, splicing..	1 hour		Lecture and ICT
			28/03/2024	teaching
Unit III **(14 hours)**	**Translation:** Genetic code and itscharacteristics	1 hour	01/04/2024	Lecture and teaching ICT
	Wobble hypothesis.	1 hour	04/04/2024	Lecture and teaching ICT
	Translation- in prokaryotes	1 hour	08/04/2024	Lecture and teaching ICT
	Translation eukaryotes-ribosomes,enzymes	1 hour	15/04/2024	Lecture and teaching ICT
	Factors involved in translation.	1 hour	22/04/2024	Lecture and teaching ICT
	Activation of amino acids	1 hour	25/04/2024	Display of C1 Internal Test marks on the notice board
	Aminoacyl tRNA synthetases.	1 hour	29/04/2024	Lecture and teaching ICT
	Mechanism of initiation, translation-elongation	1 hour	02/05/2024	Lecture and teaching ICT
	Termination of polypeptide chain.	1 hour	06/05/2024	Lecture and teaching ICT
	Fidelity of translation,	1 hour	09/05/2024	Lecture and teaching ICT
	Inhibitors of translation Chloramphenicol	1 hour	13/05/2024	Lecture and teaching ICT

	Inhibitors of translation Tetracycline	1 hour	16/05/2024	Lecture and ICT teaching
	Post translational modifications of proteins Phophorylation	1 hour	20/05/2024	Lecture and ICT teaching
	Post translational modifications Methylation	1 hour	23/05/2024	Lecture and ICT teaching
Unit IV **(14 hours)**	**Regulation of gene expression:** Prokaryotic gene regulation-operon concept	1 hour	13/02/2024	Lecture and ICT teaching
	Regulation of *lac* operon	1 hour	20/02/2024	Lecture and ICT teaching
	Regulation of *trp* operon	1 hour	27/02/2024	Lecture and ICT teaching
	Attenuation control.	1 hour	05/03/2024	Lecture and ICT teaching
	Eukaryotic gene regulation-Activators,	1 hour	12/03/2024	Lecture and ICT teaching
	Repressors binding to enhancers	1 hour	19/03/2024	Lecture and ICT teaching
	coordinated control (tissue specific gene expression),	1 hour	26/03/2024	Lecture and ICT teaching
	DNA methylation,	1 hour	02/04/2024	Lecture and ICT teaching
	chromatin remodeling,	1 hour	23/04/2024	Lecture and ICT teaching
	Translational control of gene expression-ferritin mRNA regulation,	1 hour	30/04/2024	Lecture and ICT teaching
	RNAi	1 hour	07/05/2024	Lecture and ICT teaching
	miRNA	1 hour	14/05/2024	Display of C2 Internal Test marks on the notice board
	siRNA.	1 hour	21/05/2024	Lecture and ICT teaching

Department : Biotechnology
Title of the Paper : Molecular biology (Practical)
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Amoolya
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	**Experiments**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
1. Estimation of DNA by DPA method 2. Estimation of RNA by Orcinol method 3. DNA isolation from plant/ animal/ microbial sources	**Experiment 1 to 3**	**03 / week**	**12/02/2024 to 19/03/2024**	**Practical experiments and demonstration experiments**
C1 Practical Internal test	**Experiment 1 to 2**	1 Hour	01.04.2024 To 08.04.2024	C1 Practical Internal Test
4. Concentration and purity of isolated DNA samples 5. Agarose gel electrophoresis of DNA 6. Charts on- DNA replication, transcription, translation, Types of DNA, RNA	**Experiment 4 to 6**	**03 / week**	**02/04/2024 to 14/05/2024**	**Practical experiments and demonstration experiments**
C2 Practical Internal test	**Experiment 3-6**	1 Hour	01/05/2024 To 08.05.2024	C2 Practical Internal Test

Department : Biotechnology
Title of the Paper : Immunology (Theory) [Course Code – 232659]Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Amoolya
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I (15 hours)	Lesson plan discussion	1 hour	12/02/2024	POs and Course Outcomes of the units discussed
	Introduction to the Immune System	1 hour	14/02/2024	Lecture and ICT teaching
	History of Immunology,	1 hour	21/02/2024	Lecture and ICT teaching
	Types of Immunity: first and second line of defense,	1 hour	28/02/2024	Lecture and ICT teaching
	innate and acquired/adaptive immunity,	1 hour	06/03/2024	Lecture and ICT teaching
	Specificity, diversity.	1 hour	13/03/2024	Lecture and ICT teaching
	Cells of the immune system:	1 hour	20/03/2024	Lecture and ICT teaching
	Antigenpresenting cells (APCs),	1 hour	27/03/2024	Lecture and ICT teaching
	Role of B and T-lymphocytes in Humoral immunity	1 hour	03/04/2024	Lecture and ICT teaching
	cell-mediated immunity,	1 hour	10/04/2024	Lecture and ICT teaching
	Primary and secondary immune response,	1 hour	24/04/2024	Lecture and ICT teaching
	Immunization, memory.	1 hour	08/05/2024	Lecture and ICT teaching
	Organs of the Immune system: Thymus,	1 hour	15/05/2024	Lecture and ICT teaching
	bone marrow, spleen,Lymph Node,	1 hour	22/05/2024	Lecture and ICT teaching
	peripheral lymphoid organs	1 hour	24/05/2024	**One Special class**
Unit-I & Unit – II	C1 Internal test	3 Hour	16.04.2024 to 20.04.2024	C1 Internal Test

	Antigens and haptens	1 hour	12/02/2024	Lecture and ICT teaching
	Properties (foreignness, molecular size, heterogeneity).	1 hour	13/02/2024	Lecture and ICT teaching
	Adjuvants, Antigenicity and Immunogenicity.	1 hour	19/02/2024	Lecture and ICT teaching
	Affinity and Avidity.	1 hour	20/02/2024	Lecture and ICT teaching
	C2 Internal Test (Unit III and IV)	01 Week	01/05/2024 To 07/05/2024	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	B and T cell epitopes, Superantigens	1 hour	26/02/2024	Lecture and ICT teaching
	Immunoglobulins: Classification, structure, and function.	1 hour	27/02/2024	Lecture and ICT teaching
	Antibody diversity,	1 hour	04/03/2024	Lecture and ICT teaching
	Monoclonal and polyclonal antibodies.	1 hour	05/03/2024	Lecture and ICT teaching
	Major histocompatibility complexes: Classification, structure, and function.	1 hour	11/03/2024	Lecture and ICT teaching
Unit II (15 hours)	Antigen processing pathways – Cytosolic and Endocytic,	1 hour	12/03/2024	Lecture and ICT teaching
	Complement Pathways,	1 hour	18/03/2024	Lecture and ICT teaching
	Cytokines: Classification and function,	1 hour	19/03/2024	Lecture and ICT teaching
	Hypersensitivity: Reactions – Types I, II,	1 hour	25/03/2024	Lecture and ICT teaching
	Reactions – Types III. Delayed Type	1 hour	26/03/2024	Lecture and ICT
	Hypersensitive Response.			teaching
	Structure of antigens	1 hour	01/04/2024	Lecture and ICT teaching

Unit III (15 hours)	properties of antigens- iso- and allo-antigens,	1 hour	02/04/2024	Lecture and ICT teaching
	antigen specificity,	1 hour	08/04/2024	Lecture and ICT teaching
	Cross-reactivity,	1 hour	15/04/2024	Lecture and ICT teaching
	Precipitation,	1 hour	22/04/2024	Lecture and ICT teaching
	Ouchterlony double diffusion,	1 hour	23/04/2024	Display of C1 Internal Test marks on the notice board
	Immunoelectrophoresis.	1 hour	29/04/2024	Lecture and ICT teaching
	Agglutination: Agglutination reactions.	1 hour	30/04/2024	Lecture and ICT teaching
	ELISA,	1 hour	06/05/2024	Lecture and ICT teaching
	RIA.	1 hour	07/05/2024	Lecture and ICT teaching
	Immunocytochemistry,	1 hour	13/05/2024	Lecture and ICT teaching
	Fluorescent Techniques.	1 hour	14/05/2024	Lecture and ICT teaching
	Immunodiffusion reactions: Radial immunodiffusion,	1 hour	20/05/2024	Lecture and ICT teaching
	Revision	1 hour	21/05/2024	Lecture and ICT teaching
Unit IV (15 hours)	Transplantation immunology: Phases in graft rejection, immunosuppressors.	1 hour	12/02/2024	Lecture and ICT teaching
	Autoimmune Disorders: Systemic	1 hour	19/02/2024	Lecture and ICT teaching
	Organ-specific Autoimmune disorders with examples	1 hour	26/02/2024	Lecture and ICT teaching
	Immunodeficiencies: Primary immunodeficiencies	1 hour	04/03/2024	Lecture and ICT teaching
	Secondary	1 hour	11/03/2024	Lecture and ICT

	immunodeficiencies;			teaching
	acquired immunodeficiency syndrome PIDD-SCID,	1 hour	18/03/2024	Lecture and ICT teaching
	X-Linked agammaglobulinemia	1 hour	25/03/2024	Lecture and ICT teaching
	Cancer and the immune system – immune surveillance,	1 hour	01/04/2024	Lecture and ICT teaching
	Immunological escape, cancer antigens,	1 hour	08/04/2024	Lecture and ICT teaching
	cancer immunotherapy	1 hour	15/04/2024	Lecture and ICT teaching
	Vaccines: Conventional (Killed vaccines, live attenuated vaccines, toxoids),	1 hour	22/04/2024	Lecture and ICT teaching
	peptide vaccines, subunit, DNA vaccines.	1 hour	29/04/2024	Lecture and ICT teaching
	Toxoids, antisera, edible vaccines,	1 hour	06/05/2024	Lecture and ICT teaching
	plantibodies, and Cancer vaccines (HPV)	1 hour	13/05/2024	Display of C2 Internal Test marks on the notice board
	Revision	1 hour	20/05/2024	Lecture and ICT teaching

Department : Biotechnology
Title of the Paper : Immunology (Practical)
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Amoolya
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
1. Hemagglutination of ABO Blood groups 2. Determination of Rh factor 3. Whole Count of WBC using Hemocytometer 4. Cells of the Immune System	**Experiment 1 to 4**	**03 / week**	**12/02/2024 to 19/03/2024**	**Practical experiments and demonstration experiments**
C1 Practical Internal test	**Experiment 1 to 4**	1 Hour	01.04.2024 To 08.04.2024	C1 Practical Internal Test
5. Radial immunodiffusion 6. Ouchterlony double diffusion 7. ELISA – Demonstrate 8. Serum Immuno-electrophoresis 9. Western Blotting	**Experiment 5 to 9**	**03 / week**	**02/04/2024 to 14/05/2024**	**Practical experiments and demonstration experiments**
C2 Practical Internal test	**Experiment 5-9**	1 Hour	01/05/2024 To 08.05.2024	C2 Practical Internal Test

Department : Biotechnology
Title of the Paper : Bioprocess and environmental Biotechnology (Theory)
[Course Code – 232660**]**
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Amoolya
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I (15 hours)	Lesson plan	1 hour	12/02/2024	POs and Course Outcomes of the units discussed
	Introduction to bioprocess technology	1 hour	14/02/2024	Lecture and ICT teaching
	Basic principle	1 hour	17/02/2024	Lecture and ICT teaching
	components of fermentation technology	1 hour	21/02/2024	Lecture and ICT teaching
	Strain improvement of industrially important microorganisms.	1 hour	24/02/2024	Lecture and ICT teaching
	Types of microbial culture	1 hour	26/02/2024	Lecture and ICT teaching
	growth kinetics– Batch	1 hour	28/02/2024	Lecture and ICT teaching
	Fed-batch	1 hour	02/03/2024	Lecture and ICT teaching
	Continuous culture.	1 hour	06/03/2024	Lecture and ICT teaching
	Principles of upstream processing	1 hour	09/03/2024	Lecture and ICT teaching
	Media preparation	1 hour	13/03/2024	Lecture and ICT teaching
	Inocula development	1 hour	16/03/2024	Lecture and ICT teaching
	sterilization	1 hour	20/03/2024	Lecture and ICT teaching
	Revision	1 hour	23/03/2024	Lecture and ICT teaching
Unit-I & Unit – II	C1 Internal test	3 Hour	16.04.2024 to 20.04.2024	C1 Internal Test
	Bioreactors and downstream processing	1 hour	27/03/2024	Lecture and ICT teaching
	Bioreactors- Significance of	1 hour	30/03/2024	Lecture and ICT

	Impeller, Baffles, Sparger;			teaching
	Specialized bioreactors- design and their functions	1 hour	03/04/2024	Lecture and teaching ICT
	Airlift bioreactor,	1 hour	06/04/2024	Lecture and teaching ICT
	C2 Internal Test (Unit III and IV)	01 Week	01/05/2024 To 07/05/2024	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	tubular bioreactors	1 hour	10/04/2024	Lecture and teaching ICT
Unit II (15 hours)	Membrane bioreactors bioreactors, tower	1 hour	13/04/2024	Lecture and teaching ICT
	Fluidized bed reactor, packed bed reactors	1 hour	24/04/2024	Lecture and teaching ICT
	Downstream processing- cell disruption, precipitation methods, solid-liquid separation	1 hour	27/04/2024	Display of C1 Internal Test marks on the notice board
	Liquid-liquid extraction	1 hour	01/05/2024	Lecture and teaching ICT
	Filtration, centrifugation	1 hour	04/05/2024	Lecture and teaching ICT
	Chromatography, drying devices (Lyophilization and spray dry technology)	1 hour	08/05/2024	Lecture and teaching ICT
	Crystallization, biosensors construction and applications	1 hour	11/05/2024	Lecture and teaching ICT
	Microbial production of ethanol	1 hour	15/05/2024	Lecture and teaching ICT
	Amylase production	1 hour	18/05/2024	Lecture and teaching ICT
	Single Cell Proteins production	1 hour	22/05/2024	Lecture and ICT teaching
	Revision class	1 hour	25/05/2024	Lecture and ICT teaching
	Fundamentals of Environmental Biotechnology	1 hour	15/02/2024	Lecture and ICT teaching

Unit III (15 hours)	Introduction to Environmental Biotechnology- Principles of Environmental Science.	1 hour	22/02/2024	Lecture and ICT teaching
	Role of Biotechnology in Environmental Conservation.	1 hour	29/02/2024	Lecture and ICT teaching
	Microbial Processes in Environmental Biotechnology.	1 hour	07/03/2024	Lecture and ICT teaching
	Pollution and Biotechnology – Major issues in environmental pollution	1 hour	14/03/2024	Lecture and ICT teaching
	Role of biotechnology in addressing them.	1 hour	21/03/2024	Lecture and ICT teaching
	Biotechnological Methods of Pollution environmental pollution	1 hour	28/03/2024	Lecture and ICT teaching
	General bioassay methods for pollution detection. Cell biological methods for assessing pollution levels.	1 hour	04/04/2024	Lecture and ICT teaching
	Use of biosensors in pollution monitoring.	1 hour	25/04/2024	Lecture and ICT teaching
	Biotechnological Methods in Pollution Abatement	1 hour	02/05/2024	Lecture and ICT teaching
	Reduction of CO2 emission using biotechnological approaches	1 hour	09/05/2024	Lecture and ICT teaching
	Addressing eutrophication through biotechnological interventions	1 hour	16/05/2024	Display of C2 Internal Test marks on the notice board
	Application of cell immobilization techniques in pollution abatement	1 hour	23/05/2024	Lecture and ICT teaching
	Bioremediation and Waste Management	1 hour	13/02/2024	Lecture and ICT teaching
	Importance of bioremediation in environmental cleanup.	1 hour	15/02/2024	Lecture and ICT teaching
	Types of contaminants suitablefor bioremediation.	1 hour	20/02/2024	Lecture and ICT teaching

Unit IV (15 hours)	Microorganisms used in bioremediation.	1 hour	22/02/2024	Lecture and ICT teaching
	In-situ Bioremediation Methods. – Bioaugmentation.	1 hour	27/02/2024	Lecture and ICT teaching
	Biostimulation.	1 hour	29/02/2024	Lecture and ICT teaching
	Bioventing.	1 hour	05/03/2024	Lecture and ICT teaching
	Phytoremediation.	1 hour	07/03/2024	Lecture and ICT teaching
	Ex-situ Bioremediation Methods – Composting, Land farming,	1 hour	12/03/2024	Lecture and ICT teaching
	Biopile and bioslurry systems.	1 hour	14/03/2024	Lecture and ICT teaching
	Xenobiotics.	1 hour	19/03/2024	Lecture and ICT teaching
	Bio metallurgy and biomining.	1 hour	21/03/2024	Lecture and ICT teaching
	Waste water Management.	1 hour	26/03/2024	Lecture and ICT teaching
	Waste water Characterization andComposition.	1 hour	28/03/2024	Lecture and ICT teaching
	Biological Processes in Waste water Treatment.	1 hour	02/05/2024	Lecture and ICT teaching
	Activated Sludge Process and Biological Nutrient Removal	1 hour	04/05/2024	Lecture and ICT teaching
	Anaerobic Digestion and Biogas Production.	1 hour	23/05/2024	Lecture and ICT teaching
	Solid Waste Management.	1 hour	25/05/2024	Lecture and ICT teaching

Department : Biotechnology
Title of the Paper : Bioprocess and Environmental Biotechnology (Practical)
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Priyanka Shenoy N, Dr. Anjani, Ms. Amoolya
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
1. Bacterial growth curve. 2. Calculation of the thermal death point (TDP) of a microbial sample. 3. Study of fermenter-Demonstration. 4. Production of wine. 5. Estimation of the percentage of alcohol, total acidity & volatile acidity in wine.	**Experiment 1 to 5**	**03 / week**	**02/04/2024 to 14/05/2024**	**Practical experiments and demonstration experiments**
C1 Practical Internal test	**Experiment 6 to 10**	1 Hour	01.04.2024 To 08.04.2024	C1 Practical Internal Test
6. Production and analysis of ethanol. 7. Production and analysis of amylase. 8. Production and analysis of lactic acid. 9. Isolation of industrially important microorganisms from natural resources. 10. Standard analysis of Water (Biological oxygen demand, toxic chemicals and estimation of total dissolved solids, microbial examination of given water sample).	**Experiment 6 to 10**	**03 / week**	**12/02/2024 to 19/03/2024**	**Practical experiments and demonstration experiments**
C2 Practical Internal test	**Experiment 1-5**	1 Hour	01/05/2024 To 08.05.2024	C2 Practical Internal Test

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Course Plan of Odd Semester 2023-24-I

Department: Business Administration
Title of the Paper: Fundamentals of Business accounting
Course Code: 214130
Term Period:11.09.2023 to 16.12.2023
Faculty Name: Dr.Shyla.S

Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Module 1:Introduction to Financial Accounting (8 hours)	Introduction–Meaningand Definition–Objectives of Accounting–FunctionsofAccounting–UsersofAccountingInformation–LimitationsofAccounting–AccountingCycle	3 hours	11-09-2023 to 15-09-23	Class room teaching
	AccountingPrinciples–AccountingConceptsandAccountingConventions	3 hours	16-09-23 to 21-09-23	Class room teaching
	AccountingStandards–objectives- significance ofaccountingstandards.List ofIndianAccountingStandards	2 hours	22-09-23 to 23-09-23	Class room teaching
Module 2: Accounting Process (12 hours)	Meaning of Double entry system – Process of Accounting – Kinds of Accounts – Rules Transaction Analysis	4 hours	25-9-23 to 3 -10-23	Class room teaching
	Journal–Ledger–Balancing of Accounts–Trial Balance–Problems on Journal, Ledger Posting and Preparation of Trial Balance.	8 hours	4-10-23 to 18-10-23	Class room teaching
Module 3: Subsidiary Books (14 hours)	Meaning – Significance – Types of Subsidiary Books – Preparation of Purchases Book, Sales Book, Purchase Returns Book, Sales Return Book, Bills Receivable Book, Bills Payable Book	3 hours	19-10-23 to 21-10-23	Class room

				teaching
	Types of Cash Book- Simple Cash Book, Double Column Cash Book, Three Column Cash Book and Petty Cash Book (Problems only on Three Column Cash Book and Petty Cash Book)	8 hours	25-10-23 to 4-11-23	Class room teaching
	Bank Reconciliation Statement – Preparation of Bank Reconciliation Statement(Problems on BRS)	3 hours	6-11-23 to 11-11-23	Class room teaching
Unit 2&3	**Accounting Process & Subsidiary Books**	1 hour	16-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module 4:Final Accounts of Proprietary Concern (10 hours)	Preparation of Statement of Profit and Loss and Balance Sheet of a proprietary concern.	2 hours	20-11-23 to 22-11-23	Class room teaching
	With special adjustments like depreciation, outstanding and prepaid expenses, outstanding and received in advance of incomes, provision for doubtful debts, drawings and interest on Capital	10 hours	23-11-23 to 6-12-23	Class room teaching 24-11-23 Display of C1 Internal Test Marks sheet on the notice board
Module 5Accounting Software (2 hours)	Meaning of Tally software – Features – Advantages- Creating a New Company- Basic Reports in Tally-	2 hours	7-12-23 to 9-12-23	Class room teaching &Workshop
	Revision Classes	4 hours	9-12-23 to 16-12-23	

Department : Business Administration

Title of the Paper : Marketing Management
[Course Code – 214131]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name :Dr. Anita B R
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Module No. 1 INTRODUCTION TO MARKETING (10 hours)	Meaning and Definition, Concepts of Marketing	3 hours	11-09-23 to 13-09-23	lecture method
	Approaches to Marketing, Functions of Marketing.	4 hours	14-09-23 to 21-09-23	lecture method
	Recent trends in Marketing-E-business, Tele-marketing, M-Business, Green Marketing, Relationship Marketing, Concept Marketing, Digital Marketing, social media marketing and E-tailing (Meaning only).	3 hours	22-09-23 to 25-09-23	lecture method
Module No. 2 MARKETING ENVIRONMENT (10 hours)	**Micro Environment** – The company, suppliers, marketing intermediaries	3 hours	26-09-23 to 30-09-23	lecture method
	competitors, public and customers	2 hours	3-10-23 to 4-10-23	lecture method
	Macro Environment- Demographic, Economic, Natural,	2 hours	6-10-23 to 10-10-23	lecture method
	Technological, Political, Legal, Socio-Cultural	3 hours	11-10-23 to	lecture method

	Environment		13-10-23	
Module No. 3 MARKET SEGMENTATION AND CONSUMER BEHAVIOUR (10 hours)	Meaning and Definition, Bases of Market Segmentation	3 hours	14-10-23 to 17-10-23	lecture method
	Requisites of Sound Market Segmentation;	2 hours	18-10-23 to 22-10-23	lecture method
	Consumer Behavior-Factors influencing.	3 hours	25-10-23 to 30-10-23	lecture method
	Consumer Behavior; Buying Decision Process	2 hours	2-11-23 to 06-11-23	lecture method
Unit 1&2	**Introduction to marketing & marketing environment**	1 hour	16-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module No. 4 MARKETING MIX (20 hours)	Meaning, Elements of Marketing Mix (Four P's) – Product, Price, Place, Promotion.	3 hours	8-11-23 to 11-11-23	lecture method
	Product-Product Mix, Product Line, Product Lifecycle, New Product Development, Reasons for Failure of New Product	5 hours	13-11-23 & 20-11-23 to 24-11-23	lecture method 24-11-23 Display of C1 Internal Test Marks sheet on the notice board
	Branding, Packing and Packaging,		25-11-23	

	Labeling(Concepts only)	3 hours	to 27-11-23	lecture method
	Pricing – Objectives, Factors influencing Pricing Policy, Methods of Pricing;	5 hours	29-11-23 to 01-12-23	lecture method
	Physical Distribution–Meaning, Factors affecting Channel Selection (Concepts only)	2 hours	02-12-23 to 04-12-23	lecture method
	Promotion – Meaning and Significance of Promotion, Personal Selling and Advertising (Meaning Only)	2 hours	05-12-23 to 07-12-23	lecture method
Module No. 5 SERVICES MARKETING (6 hours)	*Meaning and definition of services, difference between goods and services,*	3 hours	08-12-23 to 12-10-23	lecture method
	Features of services, seven P's of services marketing (concepts only).	3 hours	13-12-23 to 16-12-23	lecture method

Department : Business Administration
Title of the Paper : Management Principles and Practice
[Course Code –214129]
Term Period :11.09.2023 to 16.12.2023
Faculty Name :Dr. Nirmala N &Dr.Anita B RTotal

Hrs: 56 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deploymentand Remark**
Module 1 Introduction toManagement	Meaning, nature, characteristics, functions and scope	4 hours	11-09-2-23 To 15-09-2023	Class room teaching
	Schools of management thought(Brief)	2 hours	16-09-2023 To 20-09-2023	Lecture method

(10 hours)	Management as Science, Art or profession	2 hours	21-09-2023 To 25-9-2023	Lecture method
	Management and Profession	1 hour	26-9-2023	Lecture method
	Principles of Management	1 hour	27-09-2023	Lecture method
Module 2 Planning and Decision Making(8 hours)	Nature, importance and purpose of planning	3 hours	29-9-2023 To 5-10-2023	Lecture method
	Planning process, and Objectives	2 hours	6-10-2023 To 10-10-2023	Lecture method
	Types of plans	1 hour	11-10-2023	Lecture method
	Decision making, importance and steps,MBO and MBE (meaning only)	2 hours	13-10-2023 To 21-10-2023	Lecture method
Module 3 Organizing andStaffing (12hours)	Nature and Purpose of Organization	2 hours	25-10-2023 To 30-10-2023	Lecture method
	Principles of Organizing	1 hour	31-10-2023	Lecture method
	Delegation and Authority	1 hour	2-11-2023	Lecture method
	Types of Organization-Departmentation and committees	3 hours	3-11-2023 To 9-11-2023	Lecture method
	Centralization v/s Decentralization of Authority and Responsibility	2 hours	10-11-2023 To 20-11-2023	Lecture method
	Span of Control	1 hour	21-11-2023	Lecture method
	Nature and Importance of Staffing	2 hours	22-11-2023 To 23-11-2023	Lecture method
Unit 1&2	**Introduction to Management &Planning and Decision Making**	1 hour	17-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module 4 Directing and Communicating(12 hours)	Meaning and Nature of Direction	2 hours	24-11-2023 To 25-11-2023	Lecture method 24-11-23 Display of C1 Internal Test Marks

				sheet on the notice board
	Principles of Direction	1 hour	27-11-2023	Lecture method
	Communication meaning and importance	1 hour	28-11-2023	Lecture method
	Communication Process, Types and Barriers to Communication	3 hours	29-12-2023 To 5-12-2023	Lecture method
	Leadership, meaning, formal and informal leadership, characteristics of Leadership,	2 hours	6-12-2023 To 7-12-2023	Lecture method
	Leadership styles- Autocratic style, democratic style, participative style, laissez faire leadership style, Transition leadership and charismatic leadership style.	3 hours	8-12-2023 To 12-12-2023	Lecture method (An Activitywas also done)
Module 5 Co-ordinating and Controlling (10 hours)	Co-ordination-meaning, importance, and Process	3 hours	11-09-2023 To 11-10-2023	Lecture method
	Steps in Controlling and Essentials of Effective control system	4 hours	12-10-2023 12-11-2023	Lecture method
	Techniques of control (in brief)	3 hours	13-11-2023 To 16-12-2023	Lecture method
odule 6 Business Social Responsibility and ManagerialEthics (4 hours)	Business social responsibility-meaning, arguments for and against business social responsibility	1 hour	13-12-2023	Lecture method
	Green management-meaning and concepts	1 hour	14-12-2023	Lecture method
	Managerial ethics-meaning, importance of ethics in business, factors that determine ethical or unethical behaviour	2 hours	15-12-2023 To 16-12-2023	Lecture method

Department: Business Administration
Term Period: 11.09.2023 to 16.12.2023
Title of the Paper: Business Organization (Open elective- I Semester)
Course Code: 210EBBA102]
Faculty Name: Dr.Manjunatha V
Total hours: 45

Curriculum as prescribed by theInstitution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Module No :1 **INTRODUCTIONTOBUSINESS**	Business: Meaning, Nature, Scope and Social responsibility of Business	3	11.9.2023 to 16.9.2023	Class room teaching
	Objectives, Essentials of successful business;	2	18.9.2023 to 21.9.2023	Class room teaching
	Functional areas of business	3	22.9.2023 to 27.9.2023	Class room teaching
	Concept of Business Organization	2	29.9.2023 to 4.10.2023	Class room teaching
Module No. 2: **FORMS OF BUSINESS ORGANIZATION**	Sole proprietorship: Definitions, Features, Merits and Demerits	4	5.10.2023 to 14.10.2023	Class room teaching
	Partnership: Definitions, partnership deed, Features, Merits and Demerits	3	16.10.2023 to 21.10.2023	Class room teaching
	Joint Stock Company: Definitions, Features, Merits and Demerits	3	23.10.2023 to 28.10.2023	Class room teaching
	Co-operatives: Definitions, Features, Merits and Demerits	2	30.10.2023 to 4.11.2023	Class room teaching
Module :3	DepartmentalUndertaking:Definitions,Features,MeritsandDemerits	2	5.11. 2023 to 9.11. 2023	Class room teaching

PUBLIC ENTERPRISES	Public Corporations: Definitions, Features, Merits and Demerits	2	10.11.2023 to 14.11.2023	Class room teaching
	Government Companies: Definitions, Features, Merits and Demerits	4	19.11.2023 to 23.11.2023	Class room teaching
Unit 1	**Introductiontobusiness& forms of business organization**	1 hour	16-11-2023	15-11-23 TO 18-11-23 C1 InternalTest
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module No. 4: **BUSINESS COMBINATIONS**	Meaning Definitions, Causes, Types,Forms, merits and demerits of Business Combinations	4	24.11.2023 to 30.11.2023	Class room teaching **24-11-23 Display of C1 Internal Test Marks sheet on the notice board**
	Recent Trends in Business Combinations	4	25.11.2023 to 30.11.2023	Class room teaching
Module No. 5: **MANAGEMENT OF**	Management- Meaning, Definitions, Difference between Management andAdministration	3	1.12.2023 to 4.12.2023	Class room teaching
	Levels of Management, Objectives of Management,	1	6.12.2023	Class room teaching

ORGANIZATIONS	Functions of management-planning,organizing, staffing, directing, coordinating, controlling	2	7.12.2023 to 11.12.2023	Class room teaching
	Principle of Management .	1	13.12.2023	Class room teaching

Title of the Paper: Statistics for Business Decisions
Course Code: 224331
Term Period:11.09.2023 to 16.12.2023
Faculty Name:Dr.Shyla.S
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Module 1:Introduction to Statistics (8 hours)	Introduction – Meaning, Functions and Uses of Statistics Collection of Data – Techniques of Data Collection Census Technique and Sampling Technique (Concepts).	3 hours	11-09-2023 to 15-09-23	Class room teaching
	Meaning and Methods of Classification of Data. Tabulation: Meaning, Parts of a Table Simple problems on Tabulation	3 hours	16-09-23 to 21-09-23	Class room teaching
	Diagrammatic Presentation: Bar Diagrams – Simple Bars Multiple Bars, Percentage Sub-divided Bar Diagram. Two Dimensional Diagrams – Pie Diagram	2 hours	22-09-23 to 23-09-23	Class room teaching
Module 2: Measures of Central Tendency and Dispersion: (12 hours)	Measures of Central Tendency Calculation of ArithmeticMean, Median and Mode for Individual, Discrete and Continuous Series – Problems	4 hours	25-9-23 to 3 -10-23	Class room teaching
	Measures of Dispersion: Absolute and Relative measures of Range, Quartile deviation, Standard Measures of Skewness Calculation of Karl Pearson's (Uni-modal) and Bowley's Co-efficient of Skewness .	8 hours	4-10-23 to 18-10-23	Class room teaching
Module 3:Correlation and Regression Analysis	Correlation Analysis - Meaning, Types of Correlation, Calculation of Karl Pearson's Coefficient of CorrelationReturn Book	3 hours	19-10-23 to 21-10-23	Class room teaching

(14 hours)	Computation of Probable Error, Spearman's Rank Coefficient of correlation- problems	8 hours	25-10-23 to 4-11-23	Class room teaching
	Regression Analysis – Concept of Regression, Regression equations- Problems	3 hours	6-11-23 to 11-11-23	Class room teaching
Unit 1&2	**Introduction to Statistics& Measures of Central Tendency and Dispersion**	1 hour	16-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module 4: Time Series Analysis (10 hours)	Meaning, Components, fitting a straight-line trend using Least Square Method (Problems where ΣX=0 only), calculation and estimation of trend values	10 hours	20-11-23 to 6-12-23	Class room teaching 24-11-23 Display of C1 Internal Test Marks sheet on the notice board
Module 5:Index Numbers (9 hours)	Index number, Construction of Index number, Methods of Index number - simple aggregate method, Weighted method (Laspeyres, Paashes, Marshal - Edgeworth and Fishers Ideal Index number). Tests of Adequacy (Unit test, TRT, FRT, Circular test). Consumer Price Index number	9 hours	7-12-23 to 16-12-23	Class room teaching

Department : Business Administration

Title of the Paper : Cost Accounting [Course Code –224329]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name :Dr. Anita B R
Total Hrs: 56 Hours

	Introduction: Meaning, Objectives, Importance and Uses of Cost Accounting, Functions of Cost Accounting Department in an Organization, Difference between Cost Accounting and Financial Accounting; Various elements of Cost and Classification of Cost;	2 hours	11-09-23 to 13-09-23	lecture method

Module No. 1 **:** INTRODUCTION TO COST ACCOUNTING (12 hours)	Cost Object, Cost Unit; Cost Reduction and Cost Control; Limitations of Cost Accounting; Cost Sheet: Meaning and Cost Heads in a Cost Sheet,	2 hours	14-09-23 to 16-09-23	lecture method
	Presentation of Cost information in Cost Sheet/Statement- Problems on Cost Sheet,	5 hours	19-09-23 to 25-09-23	chalk and board
	Tenders and Quotations, Methods of Costing	3 hours	26-09-23 to 30-09-23	chalk and board
Module No. 2 MATERIALS COST	**Materials**: Meaning, Importance and Types of Materials - Direct and Indirect Material. Materials Procurement: Procedure for procurement of materials and	3 hours	03-10-23 to 06-10-23	lecture method
(12 hours)	documentation involved in procurement of materials- (Bill of materials, Material requisition note, Purchase requisition note,, Purchase order, Goods received note);			
	Material Storage and Records: Duties of Store keeper, Store records- (Bin cards, Stores Ledger, Stock Control Cards); Material Issues and Valuation: Procedure for material issues, Documents used in material issues- (Material Requisition Note, Material Transfer Note, Materials Return Note);	2 hours	07-10-23 to 10-10-23	lecture method
	Valuation of material issues- preparation of Stores Ledger/ Account - FIFO, LIFO, - problems	5 hours	11-10-23 to 18-10-23	chalk and board

	Inventory Control: Inventory control techniques and determination of various stock levels- Problems on Level Setting and Computation of EOQ; ABC Analysis, FSN Inventory, VED Inventory, HML Inventory, (Concepts only).	2 hours	19-10-23 to 21-10-23	chalk and board
Module No. 3	**Employee Cost:** Meaning, Components, Classification and Importance of Employee (Labour) Cost in Organisations; ,	2 hours	25-10-23 to 27-10-23	lecture method
EMPLOYEE COST (10 hours)	Attendance Procedure- Time keeping and Time Booking, Idle Time- Causes and treatment of Normal and Abnormal Idle Time, Overtime- Causes and treatment (Theory only);	2 hours	30-10-23 to 02-11-23	lecture method
	Methods of Remuneration (Payment of Wages and Incentives) Problems on calculation of earnings under Time Rate (Straight time rate	3 hours	03-11-23 to 07-11-23	chalk and board
	Halsey and Rowan Methods) and Piece rate systems, Employee Turnover- Meaning, Reasons and Effects of LTO/ETO.	3 hours	08-11-23 to 13-11-23	chalk and board
Unit 1&2	**Introduction to cost accounting& materials cost**	1 hour	16-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
	Overheads: Meaning and Classification of Overheads; Accounting and Control of Manufacturing Overheads:;	2 hours	20-11-23 to 22-11-23	chalk and board

Module No. 4 OVERHEADS (12 hours)	Estimation and Collection, Cost allocation, Apportionment, Re-apportionment and Absorption of Manufacturing Overheads	2 hours	23-11-23 to 25-11-23	chalk and board 24-11-23 Display of C1 Internal Test Marks sheet on the notice board
	Problems on Primary distribution only; Absorption of overheads: Meaning and Methods of Absorption of overheads;	5 hours	27-11-23 to 29-11-23	chalk and board
	Problems on Machine hour rate	3 hours	02-12-23 to 04-12-23	chalk and board
Module No. 5 RECONCILIATION OF COST AND FINANCIAL ACCOUNTS (10 hours)	Reasons for differences in Profits under Financial and Cost Accounts;	2 hours	04-12-23 to 06-12-23	lecture method
	Procedure for Reconciliation –Ascertainment of Profits as per Financial Accounts and Cost Accounts	2 hours	06-12-23 to 08-12-23	chalk and board
	and Reconciliation of Profits of both sets of Accounts	2 hours	08-12-23 to 11-12-23	chalk and board
	Preparation of Reconciliation Statement – Problems	4 hours	12-12-23 to 16-12-23	chalk and board

Department : Business Administration
Title of the Paper : Organisational Behaviour
[Course Code – 224330**]**
Term Period :11.09.2023 to 16.12.2023
Faculty Name :Dr. Nirmala N &Dr.ManjunathaV
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remark
	OrganizationBehavior–Meaning,DefinitionofOB,ImportanceofOB,Foundationsof	3 hours	11-9-2023 To 20-9-2023	Class room teaching
Module 1 Organizational behaviour and foundationsofindividualbehaviour (10 hours)	OB			
	IndividualBehavior-PersonalFactors,EnvironmentalFactors, organizationsystemsandresources	2 hours	21-9-2023 To 25-9-2023	Lecture method
	Personality-Meaning,Nature,DeterminantsandTraitsofPersonality	2 hours	26-9-2023 To 30-9-2023	Lecture method
	Perception-Meaning,Factorsinfluencingperception,Perceptual Process,PerceptualErrors,ManagingPerceptions.	3 hours	3-10-2023 To 9-10-2023	Lecture method
Module 2 GroupandTeamDynamics (8 hours)	Group Dynamics-meaning,Types of Groups	2 hours	10-10-2023 To 16-10-2023	Lecture method
	Development of Groups- Stages of GroupDevelopment, Determinantsof GroupBehavior,	2 hours	17-10-2023 To 26-10-2023	Lecture method
	Team Dynamics-meaning, Types ofTeams	1 hour	27-10-2023	Lecture method
	Conflict-sources of conflict and ways of resolving conflict, managing interpersonalrelationships	3 hours	30-10-2023 To 8-11-2023	Lecture method
Unit 1&2	**Organizational behaviour and foundationsofindividualbehaviour &Groupand Team Dynamics**	1 hour	17-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module 3 ChangeManagement (10 hours)	Introduction to Change Management:Importance and Nature of PlannedChange	2 hours	12.9.2023 To 19.9.2023	Lecture method
	TheoriesofPlannedChange-ActionResearchModel,KurtLewin'sChangeModel	2hours	21.9.2023 To 30.9.2023	Lecture method
	IntroducingChangeEffectively:Basicsteps, FactorsInfluencingChange	2 hours	3.10.2023 To 13.10.2023	Lecture method
	ResistancetoChange,OvercomingResistancetoChange;	3 hours	16.10.2023 To	Lecture method

			25.10.2023	
	EmpoweringPeopletoManageChange	1 hour	26.10.2023	Lecture method
Module 4 OrganizationalDevelopment (12 hours)	OD:MeaningandNatureofOrganizationalDevelopment(OD)	3 hours	27.10.2023 To 14.11.2023	Lecture method
	Competencies ofanOD Practitioner	2 hours	20.11.2023 To 29.11.2023	Lecture method **24-11-23 Display of C1 Internal Test Marks sheet on the notice board**
	EthicalGuidelinesforODPractitioners	2 hours	20.11.2023 To 24.11.2023	Lecture method
	ProcessofOrganizationalDevelopment	2 hours	1.12.2023 To 8.11.2023	Lecture method
	MeaningofDiagnosing,ComprehensiveModelforDiagnosingOrganizationalSystems(OrganizationalLevel,GroupLevelandIndividualLevel)	3 hours	28.11.2023 To 14.12.2023	Lecture method
Module 5 Od Interventions (16hrs)	DesigningEffectiveODInterventions: HowtoDesignEffectiveInterventions	3 hours	9-11-2023 To 20-11-2023	Lecture method
	Overview of OD interventions - Human Process Interventions, Techno Structural Interventions,HRM Interventions and Strategic Change Interventions	3 hours	21-11-2023 To 27-11-2023	Lecture method
	Conditions for optimal successofOD	2hours	28-11-2023 To 4-12-2023	Lecture method
	(a) HumanProcessInterventions T-Groups, Process Consultation, Third–party Intervention; Team building;	4 hours	5-12-2023 To 11-12-2023	Lecture method
	OrganizationConfrontationMeeting,Inter-grouprelationIntervention:MicrocosmGroup;LargeGroupIntervention:Open–SystemsMethod,andOpen-SpaceMethod (in brief)			

	(b) TechnoStructuralInterventions RestructuringOrganization:StructuralDesign:Functionalstructures, Divisionalstructure - Productstructure,Geographicand Marketstructure,Metricsstructure, Networkstructure,Boundarylessorganization; (in brief)	4 hours	12-12-2023 To 16-12-2023	Lecture method

Department: Business Administration
Term Period: 11.09.2023 to 16.12.2023
Title of the Paper: RuralMarketing[Open elective)
Course Code: 220EBBA302
Faculty Name: Dr.Manjunatha V
Total hours: 45

Curriculum asprescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Module No :1 **IntroductiontoR uralMarketing**	Nature and scope of rural marketing, ruralvs urban markets, concepts and classification of rural markets	3	11.9.2023 to 16.9.2023	Class room teaching
	rural marketing environment: rural population, occupation pattern, income generation	2	18.9.2023 to 23.9.2023	Class room teaching
	location of the rural population, expenditurepattern, literacy level, land distribution	2	25.9.2023 to 29.9.2023	Class room teaching
	land use pattern, irrigation, developmentprograms, infrastructure facilities.	2	30.9.2023 to 6.10.2023	Class room teaching
ModuleNo.2:R ur alConsumerBe h avior	Consumer buying behavior in ruralmarkets,factors affectingconsumer behavior	3	30.9.2023 to 6.10.2023	Class room teaching
	rural consumer buying process, the rise ofrural consumerism	2	7.10.2023 to 13.10.2023	Class room teaching
	Market segmentation – Bases for segmenting rural consumer markets.	3	14.10.2023 to 19.10.2023	Class room teaching

ModuleNo.3:Rur alProductandPricingStrategy	Ruralproduct,Ruralproductclassification,p roductlifecycle,ProductLifeCyclestrategies in rural markets,	3	20.10.2023 to 25.10.2023	Class room teaching
	New Product Development in ruralmarkets, Branding for rural markets	2	26.10.2023 to 31.10.2023	Class room teaching
	Pricing for rural markets – Factors andstrategies	3	2.11.2023 to 10.11.2023	Class room teaching
Unit 1	**IntroductiontoRuralMarketing&RuralC onsumerBehavior**	1 hour	16-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
ModuleNo.4: Rural Distributiona nd Communicati on Strategy	Wholesaling and retailing in the rural market, rural mobile traders, rural distributionmodels	2	11.11.2023 to 13.11.2023	Class room teaching
	FMCGcompanies,durablecompanies,Serviceorganizations,emergingdistribution models	2	20.11.2023 to 23.11.2023	Class room teaching
	Ruralcommunicationstrategy,challenges in rural Communication	2	24.11.2023 to 26.11.2023	Class room teaching **24-11-23 Display of C1 Internal Test Marks sheet onthe notice board**
	creatingpromotionmixforruralaudiences:advertisement, salespromotion, publicity	2	27.11.2023 to 29.11.2023	Class room teaching
Module No. 5:Regulations andRecentTrendsinRural Marketing	*Regulatedmarket,RegulatedMarketinIndia,FutureofRegulatedMarketsinIndia,Role ofGovtinDevelopingruralmarketing*	3	30.11.2023 to 4.12.2023	Class room teaching
	Public Distribution Systems (PDS), Food Corporation of India, Self Help Groups (SHG's).	3	5.12.2023 to 7.12.2023	Class room teaching
	Agricultural Credit Policy, Digitalizingrural India, online marketing reach in the rural market	3	8.12.2023 to 11.12.2023	Class room teaching
	recent trends in packing, labelling, grading, transporting, order processing, payment methods, storage and warehousing and Corporate farming.	3	12.12.2023 to 15.12.2023	Class room teaching

Title of the Paper: Income Tax-l
Course Code: 234530
Term Period:11.09.2023 to 16.12.2023
Faculty Name:Dr.Shyla

Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Module 1: Basic Concepts ofIncomeTax (8 hours)	Introduction– Meaningoftax-,typesoftaxes,cannonsoftaxation.BriefhistoryofIndianIncomeTax,legalframeworkof taxation	3 hours	11-09-2023 to 15-09-23	Class room teaching
	Importantdefinitions,assessment,assessment year, previous year including exceptions, assesses, person, income,casualincome,Gross totalincome,Totalincome,Agriculturalincome,schemeof taxation.	3 hours	16-09-23 to 21-09-23	Class room teaching
	Exemptedincomesofanindividualundersection10.	2 hours	22-09-23 to 23-09-23	Class room teaching
Module 2: Residential Status and Incidence of Tax: (12 hours)	Introduction– Residentialstatusofanindividual.Determinationofresidentialstatusofanindividual.IncidenceoftaxorScopeofTotalincome	4 hours	25-9-23 to 3 -10-23	Class room teaching
	Problemsoncomputationof Gross total Income of an individual.	8 hours	4-10-23 to 18-10-23	Class room teaching
Module 3:Income from Salary (14 hours)	Introduction- MeaningofSalary- BasisofchargeDefinitions– Salary,Perquisitesandprofits inlieuofsalary	3 hours	19-10-23 to 21-10-23	Class room teaching
	DeductionsandProblemson Computationof TaxableSalary.	8 hours	25-10-23 to 4-11-23	Class room teaching
	ProvidentFund– Transferredbalance.- Retirement Benefits– Gratuity,pensionandLeavesalary	3 hours	6-11-23 to 11-11-23	Class room teaching
Unit 2&3	**Residential Status and Incidence of Tax&Income from Salary**	1 hour	15-11-2023	15-11-23 TO 18-11-23 C1 Internal Test

Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module 4: Income fromHousePr operty(10 hours)	Introduction-Basisforcharge-Deemedowners-Housepropertyincomesexemptfrom tax, composite rent and unrealized rent. Annual Value – Determination ofAnnual Value - Deductions from Annual Value - Problems on Computation ofIncomefromHousePropert y	10 hours	20-11-23 to 6-12-23	Class room teaching 24-11-23 Display of C1 Internal Test Marks sheet on the notice board
Module 5: Tax Deduction at Sources & Advance Tax Ruling (9 hours)	Introduction - Meaning of TDS - Provisions regarding TDS - TDS to be made from Salaries - Filing of Quarterly statement – Theory and Problems; Advance Tax: Meaning of advance tax - Computation of advance tax - Instalment of advance tax and due dates. Deductions under Section 80C, 80CCC, 80CCD, 80CCG, 80D, 80DD, 80DDB, 80E, 80G, 80GG, 80TTA and 80U as applicable to individuals under old regime. (Individuals only).	9 hours	7-12-23 to 16-12-23	Class room teaching

Department : Business Administration
Title of the Paper : Banking Law and Practice
[Course Code –234531]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name :Dr. Anita B R
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Module No. 1	A) Banker and Customer Relationship: Introduction – Meaning of Banker & Customer;	2 hours	11-09-23 to	lecture method

Banker and Customer (16 hours)			13-09-23	
	General and Special relationships between Banker & Customer, (Rights and Obligations of Banker & Customer).	3 hours	14-09-23 to 19-09-23	lecture method
	B) Customers and Account Holders: Types of Customer and Account Holders	3 hours	20-09-23 to 23-09-23	lecture method
	– Procedure and Practice in opening and operating the accounts of different types of customers – Minor, Joint Account Holders, Partnership Firms, Joint Stock Companies, Clubs, Non-Resident Account – NRI & NRE Accounts	8 hours	25-09-23 to 06-10-23	lecture method
Module No. 2 Banking Operations (8 hours)	Meaning – Duties and Responsibilities of Collecting Banker, Holder for Value	4 hours	07-10-23 to 12 -10-23	lecture method
	, Holder in Due Course; Statutory Protection to Collecting Banker.	4 hours	12-10-23 to 18-10-23	lecture method
Module No. 3 Paying Banker (12 hours)	Meaning – Precautions – Statutory Protection to the Paying Banker;	3 hours	19-10-23 to 21-10-23	lecture method
	Cheques – Crossing of Cheques – Types of Crossing;	2 hours	25-10-23 to 27-10-23	lecture method
	.Endorsements - Meaning, Essentials		30-10-23	

	and Kinds of Endorsement	3 hours	to 02-11-23	lecture method
	Dishonor of Cheque - Grounds for Dishonor of cheque.	2 hours	03-11-23 to 06-11-23	lecture method
Unit 1&2	**Banker and Customer & Banking Operations**	1 hour	16-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module No. 4 Lending Operations (12 hours)	Principles of Bank Lending, Kinds of lending - Loans, Cash Credit, Overdraft, Bills Discounting, Letters of Credit.	3 hours	07-11-23 to 10-11-23	lecture method
	Types of securities and Methods of creation of charge, Secured and Unsecured Advances; Procedure - Housing, Education and Vehicle loan's;	2 hours	11-11-23 to 13-11-23	lecture method
	Non-Performing Asset (NPA): Meaning, circumstances &impact;	3 hours	20-11-23 to 23-11-23	lecture method
	Government Regulations on Priority lending for commercial banks.	2 hours	24-11-23 to 27-11-23	lecture method 24-11-23 Display of C1 Internal Test Marks sheet on the notice board
	New technology in Banking – E-services – plastic cards . Internet Banking, ATM based services,	3 hours	28-11-23 to 02-12-23	lecture method

Module No. 5 Banking Innovations (12 hours)	ECS, MICR, RTGS, NEFT, DEMAT, IMPS UPI , AADHAR enabled payment system, USSD, E-Valet and application based payment systems,	2 hours	04-12-23 to 07-12-23	lecture method
	Role of artificial intelligence in banks,	3 hours	08-12-23 to 13-12-23	lecture method
	Block Chain – Meaning and features.	2 hours	14-12-23 to 16-12-23	lecture method

Department : Business Administration
Title of the Paper : Digital Marketing
[Course Code –23VOCBBA02]
Term Period :11.09.2023 to 16.12.2023
Faculty Name :Dr. Nirmala N.
Total Hrs: 45 hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deploymentand Remark**
Module 1 Introduction to Digital Marketing (10 hours)	Introduction, Overview of digital marketing, Evolutionof digital marketing , Importance and benefits of digital marketing,	5 hours	11-9-2023 To 16-9-2023	Class room teaching
	Digital marketing channels and platforms	2 hours	19-9-2023 To 22-9-2023	ICT
	Digital Marketing Strategy and Planning: Developing a digital marketing strategy, Setting goals and objectives,Budgeting and resource allocation	3 hours	23-9-2023 To 29-9-2023	ICT
	Campaign planning and execution, Monitoring andadjusting digital marketingcampaigns.	2 hours	30-9-2023 To 3-10-2023	ICT

Module 2 Email and Content Marketing (10 hours)	Introduction to email marketing, Building an emaillist, Creating effective emailcampaigns	2 hours	4-10-2023 To 6-10-2023	ICT
	Email automation andsegmentation, Email marketing metrics andanalytics.	3 hours	7-10-2023 To 10-10-2023	ICT
	Content Marketing: Understanding content marketing, Content strategyand planning, Content creation and distribution, Content promotion and amplification	3 hours	11-10-2023 To 19-10-2023	ICT
	Content marketing metrics and analytics	2 hours	20-10-2023 To 23-10-2023	ICT
Module 3 Social Media Marketing (SMM)(10 hours)	Social Media Marketing: Overview of social mediamarketing	1 hour	24-10-2023	ICT
	Social media platforms andtheir features,	3 hours	25-10-2023 To 30-10-2023	ICT
	Creating and optimizing social media profiles, Social media content strategy, Socialmedia advertising and analytics	5 hours	31-0-2023 To 4-11-2023	ICT
	Mobile Marketing: Mobilemarketing overview	1 hour	6-11-2023	ICT
Unit 1&2	**Introduction to DigitalMarketing &Email andContent Marketing**	1 hour	17-11-2023	15-11-23 TO 18-11-23 C1 InternalTest
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module 4 Web Analytics(5 hours)	Analytics and Reporting: Importance of analytics in digital marketing, Setting upweb analytics tools (e.g., Google Analytics),	3 hours	7-11-2023 To 13-11-2023	ICT

	Tracking and measuring key performance indicators (KPIs), Conversion tracking and optimization, Reporting and data visualization	2 hours	20-11-2023 To 22-11-2023	ICT **24-11-23 Display of C1 Internal Test Marks sheet on thenotice board**
Module 5 YouTube Advertising (Video Ads) andconversion (10 hours)	YouTube Advertising (VideoAds): YouTube advertising, its usages, Creating YouTube campaigns	3 hours	29-11-2023 To 4-12-2023	ICT
	Choose the audience for video ads, Instream ads, Invideo ads, In-search ads,In-display ads,	2 hours	5-12-2023 To 8-12-2023	ICT
	Measuring your YouTube adperformance. Conversions	2 hours	9-12-2023 To 12-12-2023	**ICT**
	Understanding Conversion Tracking, Types of Conversions, Setting up Conversion Tracking, Optimizing Conversions, Track offline conversions Analyzing conversion data, Conversion optimizer.	3 hours	13-12-2023 To 16-12-2023	ICT

Department: Business Administration

Term Period: 11.09.2023 to 16.12.2023
Title of the Paper: Production and Operations Management- V semester
[Course Code – DSC (15)-234529]
Faculty Name: Dr.Manjunatha V
Total hours: 60

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Module :1	Introduction-MeaningofProductionandOperations.	2 hours	11.9 .2023 to 13.9.2023	Class room teaching
	differencesbetweenProduction andOperationsManagement	1 hour	14.9.2023	Class room teaching
	ScopeofProductionManagement,ProductionSystem	2 hours	15.9.2023 to 21.9.2023	Class room teaching

Introductionto ProductionandOperationsManagement	Types of Production	2 hours	22.9.2023 to 26.9.2023	Class room teaching
	Benefits of Production Management	2 hours	27.9.2023 to 3.10.2023	Class room teaching
	Responsibility of a Production Manager	1 hour	4.10.203	Class room teaching
	Decisions of Production Management	1 hour	5.10.203	Class room teaching
	Operations management: Concept and Functions	1 hour	6.10.2023	Class room teaching
Module No 2 PlantLocationandlayout	Meaning and definition Factors affecting location	3 hours	9.10.2023 to 11.10.2023	Class room teaching
	Theory and practices, cost Factor in location – Plant layout Principles	3 hours	12.10.2023 to 16.10.2023	Class room teaching
	Space requirement – Different types of facilities	2 hours	17.10.2023 to 19.10.203	Class room teaching
	Organization of physical facilities – Building, Sanitation	2 hours	20.10.2023 to 25.10.2023	Class room teaching
	Lighting, Air Conditioning and Safety	2 hours	26.10.2023 to 30.10.2023	Class room teaching
Unit 1&2	**Introductionto ProductionandOperations Management & PlantLocationandlayout**	1 hour	15-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module No.3:Production PlanningandControl	Meaning and Definition-Characteristics of Production Planning and Control	3 hours	31.10.2023 to 6.11.2023	Class room teaching
	Objectives of Production Planning and Control Stages of Production Planning and Control, Scope of Production Planning & Control	3hours	7.11.2023 to 10.11.2023	Class room teaching
	Factors Affecting Production Planning and Control, Production PlanningSystem,ProcessPlanningManufacturing, PlanningandControlSystem	4 hours	20.11.2023 to 23.11.2023	Class room teaching

	Role of Production Planning and Control in Manufacturing Industry.	2hours	24.11.2023 to 29.11.2023	Class room teaching **24-11-23 Display of C1 Internal Test Marks sheet on the notice board**
Module No 4 **InventoryManage** **ment**	Inventory Management – Concepts, Classification: Objectives: Factors Affecting Inventory Control Policy, Inventorycosts	4 hours	30.11.2023 to 4.12.2023	Class room teaching
	Basic EOQ Model: Re-order Level: ABC Analysis. Quality Management - Quality Concepts,	3 hours	5.12.2023 to 7.12.2023	Class room teaching
	Difference between Inspections, Quality Control, Quality Assurances	2 hours	8.12.2023 to 11.12.2023	Class room teaching
	Total Quality Management: Control Charts: acceptance sampling.	3 hours	12.12.2023 to 14.12.2023	Class room teaching
Module No.5: **Maintenanceand Waste Management**	Introduction–Meaning–Objectives–Typesofmaintenance,Breakdown Spares planning and control	5 hours Special classes	15.12.2023 to 18.12.2023	Class room teaching
	Preventive routine, Relative Advantages	2 hours Special classes	19.12.2023 to 20.12.2023	Class room teaching
	Maintenance Scheduling, Equipment reliability and Modern Scientific Maintenance Methods - Waste Management Scrap and surplus disposal, Salvage and recovery	5 hours Special classes	21.12.2023 to 23.12.2023	Class room teaching

Department : Business Administration
Title of the Paper : Employability Skills
[Course Code – 23EMPBBA01]
Term Period :11.09.2023 to 16.12.2023
Faculty Name :Dr. Nirmala N.

Total Hrs: 45 hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remark
Module 1 Competitive Examinations (6 hours)	**Central Government Examinations:** UPSC, SSC, IBPS, LIC, RRB, RBI, NABARD and Department of Posts.	2 hours	11-9-2023 To 16-9-2023	Lecture method
	Karnataka State Government Examinations: KPSC, KEA, KSPEB. Eligibility criteria for various examinations. Common Examination pattern.	2 hours	19-9-2023 To 26-9-2023	Lecture method
	Private Organizations: Access vacancies fromNaukari.com; Indeed.com; shine.com; linkedin.com etc.,	1 hour	27-9-2023	Lecture method
	Practical: Explore various vacancies notified by the above-stated authorities.	1 hour	29-9-2023	Lecture method
Module 2 Quantitative aptitude, logical reasoning, and analytical ability (12 hours)	**Quantitative aptitude:** Percentage, Profit or loss calculation, Time and work, Speed and Distance, Ratio and proportion. (Simple problems)	4 hours	30-9-2023 To 9-10-2023	Chalk and board
	Logical Reasoning: Coding and Decoding, Blood Relations, Directions, and Venn Diagram.	4 hours	10-10-2023 To 21-10-2023	Chalk and board
	Analytical Ability: Statement and assumptions and Data interpretation.	3 hours	25-10-2023 To 27-10-2023	Chalk and board
	Practical: Conduct Mock competitive examination for quantitative aptitude, logical reasoning and analytical ability.	1 hour	30-10-2023	Chalk and board
Module 3 Digital Literacy	Basic computer skills: MS Word and MS Excel (only layout, basic operations and short cut keys)	3 hours	31-10-2023 To 6-11-2023	**ICT class**

(7 hours)	MS PowerPoint	1 hour	7-11-2023	**ICT class**
	Internet and web browsing skills, Email etiquette	2 hours	8-11-2023 To 13-11-2023	**ICT class**
	Practical: Draft an Email to the HR of a company as an aspirant for the job by attaching your resume	1 hour	20-11-2023	**ICT class**
Unit 1&2	**Competitive Examinations** **&Quantitative aptitude, logical reasoning, and analytical ability**	1 hour	18-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module 4 Soft Skills (10 hours)	**Communication Skills**: Verbal and Non-verbal communication, Effective listening skills, Excellent writing skills, and Presentation skills.	3 hours	21-11-2023 To 24-11-2023	**ICT class** 24-11-23 Display of C1 Internal Test Marks sheet on the notice board
	Interpersonal Skills: Understanding the importance of teamwork, Conflict resolution, and Building positive relationships with team members.	3 hours	25-11-2023 To 1-12-2023	**ICT class**
	Leadership skills: importance and Effective leadership.	3 hours	2-12-2023 To 6-12-2023	**ICT class**
	Practical: As a team leader write a draft appreciation letter to the team members for the completion of the project successfully.	1 hour	7-12-2023	**ICT class**
Module 5 Career Development and Workplace Etiquette (10 hours)	SWOC analysis for self-assessment, Setting career goals and creating a career plan, Job search strategies, Interview skills, and effective resume writing	5 hours	8-12-2023 To 12-12-2023	**ICT class**
	Workplace Etiquette: Time Management- importance and strategies for effective time management, Dress	5 hours	13-12-2023 To 16-12-2023	**ICT class**

	code, personal grooming, Office and workplace manners, Meeting etiquette. Work ethics and integrity.			

Department: Business Administration
Title of the Paper: Financial Management-l
(Advanced Corporate Financial Management)
Course Code: 23DSEBBA01
Term Period:11.09.2023 to 16.12.2023
Total Hrs: 45 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Module 1: Cost of Capital and Capital Structure Theories (10 hours)	Cost of Capital: Meaning and Definition – Significance of Cost of Capital – Types of Capital – Computation of Cost of Capital – Specific Cost – Cost of Debt – Cost of Preference Share Capital – Cost of Equity Share Capital – Weighted Average Cost of Capital – Problems	3 hours	11-09-2023 to 15-09-23	Class room teaching
	Computation of Cost of Capital – Specific Cost – Cost of Debt – Cost of Preference Share Capital – Cost of Equity Share Capital – Weighted Average Cost of Capital – Problems.	3 hours	16-09-23 to 21-09-23	Class room teaching
	Theories of capital structures: The Net Income Approach, The Net Operating Income Approach, Traditional Approach and MM Hypothesis – Problems.	4 hours	22-09-23 to 30-09-23	Class room teaching
Module 2: Risk Analysis in Capital Budgeting (10 hours)	Risk Analysis – Types of Risks – Risk and Uncertainty – Techniques of Measuring Risks – Risk adjusted Discount Rate Approach – Certainty Equivalent Approach – Sensitivity Analysis -	5 hours	4-10-23 to 14-10-23	Class room teaching
	Probability Approach - Standard Deviation and Co-efficient of Variation – Decision Tree Analysis – Problems.	5 hours	16-10-23 to 25-10-23	Class room teaching
Module 3: Dividend Decision & Theories of Dividend	Introduction - Dividend Decisions: Meaning - Types of Dividends – Types of Dividends Polices – Significance of Stable Dividend Policy - Determinants of Dividend Policy	5 hours	26-10-23 to 7-11-23	Class room teaching

(10 hours)	Dividend Theories: Theories of Relevance – Walter's Model and Gordon's Model and Theory of Irrelevance – The Miller-Modigliani (MM) Hypothesis - Problems.	5 hours	8-11-23 to 22-11-23	Class room teaching
Unit 2&3	**Cost of Capital and Capital Structure Theories&Risk Analysis in Capital Budgeting**	1 hour	16-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module 4: Mergers and Acquisitions (10 hours)	Meaning - Reasons – Types of Combinations - Types of Merger – Motives and Benefits of Merger – Financial Evaluation of a Merger - Merger Negotiations – Leverage buyout, Management Buyout	5 hours	23-11-23 to 29-11-23	Class room teaching 24-11-23 Display of C1 Internal Test Marks sheet on the notice board
	Meaning and Significance of P/E Ratio. Problems on Exchange Ratios based on Assets Approach, Earnings Approach and Market Value Approach and Impact of Merger on EPS, Market Price and Market capitalization	5 hours	1-12-23 to 7-12-23	Class room teaching
Module 5: Ethical and Governance Issues (5 hours)	Introduction to Ethical and Governance Issues: Fundamental Principles, Ethical Issues in Financial Management, Agency Relationship, Transaction Cost Theory, Governance Structures and Policies, Social and Environmental Issues, Purpose and Content of an Integrated Report.	5 hours	8-12-23 to 16-12-23	Class room teaching

Department : Business Administration
Title of the Paper : HRM-1(Compensation and Performance Management
[Course Code –23DSEBBA03]
Term Period :11.09.2023 to 16.12.2023
Faculty Name :Dr. Nirmala N.

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remark**
Module 1 Introduction to Compensation Management (10 hours)	Compensation - Definition - Classification - Types - Wages, Salary, Benefits, DA, Consolidated Pay; Equity based programs, Commission, Reward, Remuneration, Bonus,	3 hours	11-9-2023 To 16-9-2023	Lecture method
	Short term and Long term Incentives	2 hours	19-9-2023 To 22-9-2023	Lecture method
	Social Security, Retirement Plan,	2 hours	23-9-2023	Lecture method

	Pension Plans, Profit Sharing Plan, Stock Bonus Plan, ESOP ,Employer Benefits and Employer Costs for ESOP, Individual Retirement Account.		To 26-9-2023	
	Compensation Management-Compensation and Non-compensation Dimensions	3 hours	27-9-2023 To 30-9-2023	Lecture method
	Concept in Compensation Management, Compensation as Retention Strategy, Compensation Issues. Compensation Strategy: Organizational and External Factors Affecting CompensationStrategies, Compensation Policies.	3 hours	2-10-2023 To 6-10-2023	Lecture method
Module 2 Job Evaluation (6 hours)	Definition of Job Evaluation, Major Decisions in Job Evaluation, Job Evaluation Methods, Point Factor Method of Job Evaluation: Combining Point factor and Factor Comparison Methods	4 hours	7-10-2023 To 11-10-2023	Lecture method
	Job Evaluation Committee, Factor Evaluation System (FES), Position Evaluation Statements	2 hours	12-10-2023 To 16-10-2023	Lecture method
Module 3 Wage and Salary Administration (10 hours)	Theories of Wages - Wage Structure - Wage Fixation - Wage Payment - Salary Administration	4 hours	17-10-2023 To 21-10-2023	Lecture method
	Difference between Salary and Wages - Basis for Compensation Fixation-	2 hours	25-10-2023 To 27-10-2023	Lecture method
	Components of Wages - Basic Wages - Overtime Wages - Dearness Allowance - Basis for calculation - Time Rate Wages and Efficiency Based Wages	2 hours	30-10-2023 To 3-11-2023	Lecture method
	Incentive Schemes - Individual Bonus Schemes, Group Bonus Schemes - Preparation of Pay Roll	2 hours	4-11-2023 To 9-11-2023	Lecture method
Unit 1&2	**Introduction to Compensation Management &** **Job Evaluation**	1 hour	17-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to	Theory Assignment

			2-12-23	
Module 4 Performance Management (12 hours)	Evolution of Performance Management, Definitions of Performance Management,	2 hours	10-11-2023 To 13-11-2023	Lecture method
	Importance of Performance Management, Aims and Purpose of Performance Management, Principles and Dimensions of Performance Management,	3 hours	20-11-2023 To 24-11-2023	Lecture method **24-11-23** **Display of C1 Internal Test Marks sheet on the notice board**
	Performance Appraisal Methods: Traditional Methods, Modern Methods	4 hours	25-11-2023 To 29-11-2023	Lecture method
	Performance Appraisal Feedback: Role, Types and Principles, Levels of Performance Feedback, 360-Degree Appraisal,	2hours	1-12-2023 To 4-12-2023	Lecture method
	Ethics in Performance Appraisal.	1 hour	5-12-2023	Lecture method
Module 5 Issues In Performance Management (7 hours)	Team Performance Management, Performance Management and Learning Organizations, Role of Line Managers in Performance Management, Performance Management and Reward,	4 hours	6-12-2023 To 11-12-2023	Lecture method
	Linking Performance to Pay - Linking Performance to Total Reward, Challenges of Linking Performance and Reward.	3 hours	12-12-2023 To 16-12-2023	Lecture method

Department : Business Administration
Title of the Paper : MK 1 Consumer Behaviour
[Course Code –23DSEBBA02]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name :Dr. Anita B R
Total Hrs: 45 Hours

Module No. 1 Introduction to Consumer Behavior (10 hours)	Meaning and Definition, Need for Consumer Behaviour, consumer and customer. Buyers and users. Need to study consumer behaviour.	2 hours	11-09-23 to 12-09-23	lecture method
	Applications in Marketing, Consumer research process –Understanding consumer through Research process.	2 hours	13-09-23 to 20-09-23	lecture method

	Factors influencing Consumer Behaviour. External factors – Culture, Sub Culture, Social Class,	3 hours	21-09-23 to	lecture method
	Reference Groups, Family,		26-09-23	
	Internal factors– Needs & Motivations, Perception, Personality, Lifestyle, Values, Learning, Memory, Beliefs & Attitudes.	3 hours	29-09-23 to 04-10-23	lecture method
Module No. 2 Individual Determinants of Consumer Behaviour (8 hours)	Consumer Needs & Motivation; Personality and Self-Concept; Consumer	2 hours	04-10-23 to 07-10-23	lecture method
	Perception; Learning &Memory; Nature of Consumer Attitudes – Psychological:	3 hours	09-10-23 to 12-10-23	lecture method
	Motivation, Perceptions, Learning, Belief and Attitudes. Consumer Attitude, Formation and Change.	3 hours	16-10-23 to 20-10-23	lecture method
Module No 3 Environmental Determinants of Consumer Behaviour (12 hours)	Family Influences; Influence of Culture; Subculture & Cross-Cultural Influences;	4 hours	25-10-23 to 30 -10-23	lecture method
	Group Dynamics and Consumer Reference Groups; Social Class:	4 hours	31-10-23 to 06-11-23	lecture method
	Family role. Person's Age, Life cycle stage, Occupational and economic circumstances.	4 hours	07-11-23 To 09-11-23	lecture method

Unit 1&2	**Introduction to Consumer Behavior& Individual Determinants of Consumer Behaviour**	1 hour	16-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module No. 4 Consumers Decision-Making Process (9 hours)	Opinion leadership, dynamics of opinion leadership process,	3 hours	10-11-23 to 13 -11-23	lecture method
	The Motivation behind opinion leadership- The Diffusion Process	2 hours	13-11-23 to 20-11-23	lecture method
	The adoption process- levels of consumer decision making	3 hours	21-11-23 to 25-11-23	lecture method **24-11-23** **Display of C1 Internal Test Marks sheet on the notice board**
	- Models of consumer decision making.	2 hours	27-11-23 to 02-12-23	lecture method
Module No. 5 Consumer	Concept of Consumer Satisfaction; Working towards enhancing	3 hours	04-12-23 to	lecture method
Satisfaction & Consumerism (6 hours)	Consumer Satisfaction;		07-12-23	
	Sources of Consumer Dissatisfaction; Dealing with Consumer Complaint.	2 hours	08-12-23 to 12-12-23	lecture method

	Concept of Consumerism; Consumerism in India; Reasons for Growth of Consumerism in India.	3 hours	14-12-23 to 16-12-23	lecture method

Department: Business Administration
Term Period: 11.09.2023 to 16.12.2023
Title of the Paper:RM-I(Fundamentals of Retail Management)-
[Course Code – DSE (2)-23DSEBBA04
Faculty Name: Dr.Manjunatha V
Total hours: 45

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Module 1 **IntroductiontoRetailBusiness**	Definition, functions and types of retail Ownership- Independent Retailer, Chain Stores, Franchising, Leased departmental stores	4 hours	11.9 .2023 to 14.9.2023	Class room teaching
	Vertical Marketing system, Consumer co-operatives; forms of retail business ownership	2 hours	15..9.2023 to 16.9.2023	Class room teaching
	Indian Retail Scenario- Factors influencing retail business in India; Ethical Issues in Retailing	2 hours	17.9.2023 to 19.9.2023	Class room teaching
	International perspective in retail business- FDI in Indian Organized Retail Sector.	2 hours	20.9.9.2023 to 23.9.2023	Class room teaching
Module 2 **Consumer Behaviour in Retail Business**	Buying decision process and its implication on retailing – Customer shopping Behavior	2 hours	25.9.2023 to 26.9.2023	Class room teaching
	Customer service and customer satisfaction. Retail planning process	2 hours	27.9.2023 to 30.9.2023	Class room teaching
	Factors to consider in preparing a business plan – implementation – risk analysis	4 hours	3.10.2023 to 9.10.2023	Class room teaching
Module 3 **Retail Organization andFunctional Management**	*Business Models in Retailing, Classification of Retailing Formats*	2 hours	10.10.2023 to 13.10.2023	Class room teaching
	Operational Stages in	2 hours	16.10.2023	Class room

	Retailing, Factors influencing Location of stores		to 19.10.2023	teaching
	Stores Designing, Space planning, Inventory Management, Merchandising Management,	2 hours	20.10.2023 to 25.10.2023	Class room teaching
	Selection and optimization of Workforce. Retail Accounting and Cash Management.	2 hours	26.10.2023 to 31.10.2023	Class room teaching
Unit 1&2	**IntroductiontoRetailBusiness & Consumer Behaviour in Retail Business**	1 hour	17-11-2023	15-11-23 TO 18-11-23 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	20-11-23 to 2-12-23	Theory Assignment
Module 4 **Retail Marketing Mix**	Introduction -Product: Decisions related to selection of goods (Merchandise Management) Product Assortment and display, new product launch	2 hours	2.11.2023 to 4.11.2023	Class room teaching
	PLC in Retailing; Pricing-Influencing factors	1 hours	6.11.2023	Class room teaching
	Approaches to pricing – pricesensitivity - Value pricing – Markdown pricing. Place: Supply channel,Retail logistics	3 hours	7.11.2023 to 11.11.2023	Class room teaching
	Computerized replenishment system, corporate replenishment Policies. Promotion : Setting objectives, communication effects, promotional mix.; Retail distribution- In Store and Online Store, Factors influencing retail distribution	4hours	20.11.2023 to 25.11.2023	Class room teaching **25-11-23 Marks sheet of C1 Internal Test was displayed on the Notice Board**
	Human Resource Managementin Retailing- Selection and Optimization of work force.	2 hours	28.11.2023 to 30.11.2023	
Module 5 **Impact of**	*Non-store retailing (e-retailing) -The impact of Information Technology in retailing*	2 hours	1.12.2023 to 4.12.2023	Class room teaching

Information Technology in Retailing	Integrated systems and networking –EDI – Bar coding – Electronic article surveillance – Electronic shelf labels	2 hours	5.12.2023 to 8.12.2023	Class room teaching
	Customer database management system. Legal aspects in retailing	2 hours	11.12.2023 to 13.12.2023	Class room teaching
	Social issues in retailing, Ethical issuesin retailing.	1 hours	14.12.2023	Class room teaching

Title of the Paper:Financial Accounting & Reporting
Course Code: 214229
Term Period:12.02.2023 to 25.05.2024
Faculty Name:Dr.Shyla.S

Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Module 1:Final Accounts of Partnership Firm (10 hours)	Meaning of Partnership Firm, Partnership deed-clauses in partnership deed, Preparation of Final accounts of partnership firm-Trading and Profit and Loss Account.	3 hours	12-02-2024 to 20-02-24	Class room teaching
	Profit and Loss Appropriation Account, Partners capital account and Balance sheet.	3 hours	21-02-24 to 27-02-24	Class room teaching
	Goodwill- Nature, Factors influencing goodwill and methods of valuation of goodwill (Average and super profitmethods)	4 hours	28-02-24 to 02-03-24	Class room teaching
Module 2: Issue of Shares(12 hours)	Meaning of Share, Types of Shares – Preference shares and Equity shares – Issue of Shares at par, at Premium, at Discount: Forfeiture and Re-issue of Shares (Theory only), Pro-Rata Allotment	4 hours	04-03-24 to 11 -03-24	Class room teaching
	Journal Entries relating to issue of shares; Preparation of respective ledger accounts; Preparation of Balance Sheet in the Vertical form (Practical Problems).	8 hours	12-03-24 to 25-03-24	Class room teaching
Module 3: Final Accounts of Joint Stock Companies (12 hours)	Statutory Provisions regarding preparation of Company Final Accounts – Treatment of Special Items, Managerial Remuneration, Tax deducted at source, Advance payment of Tax, Provision for Tax, Depreciation, Interest on debentures, Dividends, Rules regarding payment of dividends, Transfer to Reserves.	5 hours	26-03-24 to 4 -04-24	Class room teaching

	Preparation of Profit and Loss Account and Balance Sheet (Vertical Form Schedule -III) (Practical Problems).	7 hours	5-04-24 to 15 -04-24	Class room teaching
Unit 1&2	**Final Accounts of Partnership Firm& Issue of Shares**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
Module 4: Financial Statements Analysis	Comparative Statements - Comparative Income Statement, Comparative Balance Sheet; Common size Statements – Common Size Income Statement, Common Size Balance Sheet – Trend Percentages. (Analysis and Interpretation)	10 hours	22-04-24 to 4 -05-24	Class room teaching 26-4-24 Display of C1 Internal Test Marks sheet on the notice board
Module 5:Corporate Financial Reporting& Practices (2 hours)	Corporate Financial Reporting - meaning, types, characteristics of Corporate financial report, users of corporate financial report; Components corporate financial report. Corporate Governance Report.	8 hours	6-05-24 to 15 -05-24	Class room teaching
	Revision Classes	6 hours	16-05-24 to 25 -05-24	

Department: Business Administration
Title of the Paper: Human Resource Management
[Course Code –224230]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr. Anita B R
Total Hrs: 56 Hours

Module No. 1 Introduction to Human Resource Management (10 hours)	Meaning and Definition of HRM – Features Objectives,	3 hours	13-02-24 to 20-02-24	lecture method
	Differences between Human Resource Management and Personnel Management, Importance	2 hours	22-02-24 to 23-02-24	lecture method
	, Functions and Process of HRM,	3 hours	27-02-24 to	lecture method

			5-03-24	
	Role of HR Manager, Trends influencing HR practices	2 hours	07-03-24 to 12-03-24	lecture method
Module No. 2 Human Resource Planning, Recruitment & Selection (14 hours)	**Human Resource Planning**: Meaning and Importance of Human Resource Planning, Process of HRP **HR Demand Forecasting**- Meaning and Techniques (Meanings Only) and	4 hours	14-03-24 to 21-03-24	lecture method
	HR supply forecasting. **Job Analysis**: Meaning and Uses of Job Analysis, Process of Job Analysis – Job Description, Job Specification**,** Job Enlargement, Job	2 hours	22-03-24 to 26-03-24	lecture method
	Rotation, Job Enrichment (Meanings Only)			
	Recruitment – Meaning, Methods of Recruitment, Factors affecting Recruitment, Sources of Recruitment	3 hours	28-03-24 to 30-3-24	lecture method
	Selection – Meaning, Steps in Selection Process, Psychometric tests for Selection, Barriers to effective Selection, Making Selection effective; Placement, Gamification – Meaning and Features	5 hours	30-3-24 to 4-4-24	lecture method
Unit 1&2	**Introduction to Human Resource Management& Human Resource Planning, Recruitment & Selection**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment

Module No. 3 Induction, Training and Compensation (10 hours)	**Induction:** Meaning, Objectives and Purpose of Induction.	2 hours	5-04-24 to 9-04-24	lecture method
	Training: Need for training, Assessment of Training Needs and Methods of Training and Development;.	4 hours	9-04-24 to 23-04-24	lecture method
	Kirkpatrick Model; Career Development	2 hours	25-4-24 to 26-04-24	lecture method
	Compensation: Direct and Indirect forms of Compensation (Meaning Only).	2 hours	30-04-24 to 2-05-24	lecture method 26-4-24 Display of C1 Internal Test Marks sheet on the notice board
Module No. 4 Performance Appraisal, Promotion & Transfers (14 hours)	**Performance appraisal:** Meaning and Definition, Objectives and Methods of Performance Appraisal –	3 hours	3-05-24 to 9-05-24	lecture method
	Uses and Limitations of Performance Appraisal, Process of Performance Appraisal	2 hours	10-5-24 to 14-05-24	lecture method
	Promotion: Meaning and Definition of Promotion, Purpose of Promotion, Basis of Promotion .	3 hours	16-05-24 to 21-05-24	lecture method
	Transfer: Meaning of Transfer, Reasons for Transfer, Types of Transfer	2 hours	23-05-24 to 24-05-24	lecture method
Module No. 5 Employee Engagement and	**Employee Engagement (EE)**: Meaning and Types of EE,	3 hours	13-05-24 to 17-05-24	lecture method
	Drivers of Engagement -.	2 hours	18-05-24 to 21-05-24	lecture method

Psychological Contract (8 hours)	Measurement of EE, Benefits of EE	3 hours	22-05-24 to 25-05-24	lecture method

Department : Business Administration

Title of the Paper : Business Mathematics
[Course Code –214232 **]**
Term Period :12.02.2024 to 25.05.2024
Faculty Name :Dr. Nirmala N.
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remark**
Module 1 Number System(4 hours)	Introduction – Natural Numbers - Even Numbers – Odd Numbers – Integers – Prime Numbers – Rational and Irrational numbers, Real Numbers,	2 hours	12-2-2024 To 13-2-2024	Class room teaching
	HCF and LCM (Simple problems).	2 hours	15-2-2024 To 16-2-2024	Chalk and board
Module 2 Theory of Equations(10 hours)	Introduction – Meaning - Types of Equations – Simple/ Linear Equations	3 hours	19-4-2024 To 22-2-2024	Chalk and board
	Simultaneous Equations (only two variables), Elimination and Substitution Methods only.	4 hours	23-2-2024 To 29-2-2024	Chalk and board
	Quadratic Equation - Factorization and Formula Method ($ax^2 + bx + c = 0$ form only). Simple problems.	3 hours	1-3-2024 To 5-3-2024	Chalk and board
Module 3 Matrices and Determinants (16 hours)	Meaning – types – operation on matrices – additions – subtractions and multiplication of two matrices – transpose	7 hours	7-3-2024 To 19-3-2024	Chalk andboard
	determinants – minor of an element – co-factor of an element – inverse	6 hours	21-3-2024 To 28-3-2024	Chalk andboard

	crammers rule in two variables – problems.	3 hours	1-4-2024 To 4-4-2024	Chalk andboard
Unit 1&2	**Number System &Theoryof Equations**	1 hour	17-4-2024	16-4-24 TO 20-4-24 C1 InternalTest
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
Module 4 Commercial Arithmetic (16 hours)	Simple Interest, Compound Interest including yearly and half yearly calculations	10 hours	5-4-2023 To 25-4-2024	Chalk and board
	Percentages	3 hours	26-4-2024 To 30-4-2024	Chalk and board 26-4-24 Display of C1 Internal Test Marks sheet on the notice board
	Ratios and proportions	3 hours	2-5-2024 To 6-5-2024	Chalk and board
Module 5 Progressions (10 hours)	Arithmetic Progression - Finding the 'nth' term of AP and Sum to nth term of AP.	5 hours	7-5-2024 To 16-5-2024	Chalk andboard
	Finding the 'nth' term of GP and sum to 'nth' term of GP .	5 hours	17-5-2024 To 24-5-2024	Chalk andboard

Department: Business Administration
Term Period: 11.09.2023 to 16.12.2023
Title of the Paper: RETAILMANAGEMENT [Open elective)Course Code: 21OEBBA202
Faculty Name: Dr.Manjunatha V
Total hours: 45

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
	Definition – functions of retailing -types of retailing – forms of retail business ownership	3	12.02.2024 to 15.02.2024	Class room teaching

ModuleNo.1: INTRODUCTION TO RETAIL BUSINESS	Retailtheories– WheelofRetailing– Retaillifecycle.Retailbusinessin India:Influencing factors	3	16.02.2024 to 20.02.2024	Class room teaching
	presentIndianretailscenario	2	21.02.2024 to 24.02.2024	Class room teaching
ModuleNo.2: CONSUMER BEHAVIOUR IN RETAIL BUSINESS	Buyingdecisionprocessanditsimplicationonretailing	2	26.02.2024 to 28.02.2024	Class room teaching
	Influence of group and individualfactors,Customershoppingbehaviour	4	29.02.2024 to 06.03.2024	Class room teaching
	Customerserviceandcustomersatisfaction	2	07.03.2024 to 13.03.2024	Class room teaching
Module No. 3: RETAIL OPERATIONS	FactorsinfluencinglocationofStore-Marketareaanalysis– Tradeareaanalysis	2	14.03.2024 to 18.03.2024	Class room teaching
	RatingPlanmethod- Siteevaluation.RetailOperations	2	19.03.2024 to 22.03.2024	Class room teaching
	StoresLayoutandvisualmerchandising,Stores designing, Spaceplanning,	2	23.03.2024 to 28.03.2024	Class room teaching
	Inventorymanagement, Merchandise Management, CategoryManagement.	2	30.03.2024 to 05.04.2024	Class room teaching
Unit 1&2	Introduction to retail business & consumer behaviour in retail business	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
ModuleNo.4: RETAIL MARKETING MIX	Introduction -Product: Decisions related to selection of goods (Merchandise Managementrevisited)	5	06.04.2024 to 15.04.2024	Class room teaching

	Decisionsrelatedtodelivery ofservice	2	22.04.2024 to 25.04.2024	Class room teaching **26-4-24 Display of C1 Internal Test Marks sheet on the notice board**
	Pricing: Influencingfactors– approaches to pricing – price sensitivity - Value pricing	2	26.04.2024 to 29.04.2024	Class room teaching
	Markdown pricing. Place: Supplychannel–SCMprinciples	2	30.04.2024 to 04.05.2024	Class room teaching
	Corporate replenishment policies. Promotion: Setting objectives	2	06.05.2024 to 09.05.2024	Class room teaching
	Communication effects - promotional mix.	1	11.05.2024	Class room teaching
ModuleNo.5: INFORMATION TECHNOLOGY IN RETAILING	Non-store retailing (e-retailing) - The impact of Information Technology in retailing - Integratedsystemsand networking	3	13.05.2024 to 17.05.2024	Class room teaching
	EDI – Bar coding – Electronic article surveillance	2	18.05.2024 to 21.05.2024	Class room teaching
	Electronic shelf labels – customer database management system.	2	22.05.2024 to 24.05.2024	Class room teaching

Department: Business Administration Term
Period: 12.02.2024 to 25.05.2024
Title of the Paper: FINANCIAL MANAGEMENT
Course Code: 224432
Faculty Name: Dr.Shyla.S & Dr.Manjunath. V
Total hours: 56

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment andRemarks**
Module No. 1:	Introduction – Meaning of		12-02-24	

Introduction To Financial Management	Finance, Business Finance, Finance Functions, Organization structure of Finance Department;	4	TO 19-02-24	Class room teaching
	Financial Management -Goals of Financial Management, Financial Decisions	2	21.2.2024 TO 27-02-24	Class room teaching
	Role of a Financial Manager; Financial Planning – Steps in Financial Planning	3	21.2.2024 TO 27-02-24	Class room teaching
	Principles of Sound Financial Planning, Factors influencing a Sound Financial Plan	3	28.2.2024 TO 7-03-24	Class room teaching
Module No. 2: Time Value Of Money	Meaning, Need, Future Value (Single Flow, Uneven Flow & Annuity);	4 Hours	12-02-24 TO 19-02-24	Class room teaching
	Present Value (Single Flow – Uneven Flow & Annuity);	4 Hours	20-02-24 TO 28-02-24	Class room teaching
	Doubling Period; Concept of Valuation- Valuation of Bonds, Debentures and Shares (Simple Problems)	4 Hours	4-03-24 TO 13-03-24	Class room teaching

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment andRemarks**
Module No. 3: Financing & Dividend Decisions	Financing Decision: Sources of Long-Term Finance -- Meaning of Capital Structure	2 Hours	14-03-24 TO 18-03-24	Class room teaching
	Factors influencing Capital Structure, capital structure theories	2 Hours	21-03-24 TO 25-03-24	Class room teaching
	Optimum Capital Structure – EBIT, EPS Analysis, Leverages – Problems Dividend Decision	4 Hours	28-03-24 TO 15-04-24	Class room teaching

Unit 2&3	**Time value of money& financing & dividend decisions**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
Module No. 3: Financing & Dividend Decisions	Meaning & Determinants of Dividend Policy, Types of Dividends, Bonus Shares (Meaning only)	4 Hours	22-04-24 TO 02-05-24	Class room teaching 26-4-24 Display of C1 Internal Test Marks sheet on the notice board
Module No. 4: Investment Decision	Meaning and Scope of Capital Budgeting, Features & Significance	2 Hours	6-05-24 TO 8-05-24	Class room teaching
	Techniques --Payback Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return and Profitability Index (Problems)	6 Hours	13-05-24 TO 25-05-24	Class room teaching
Module No. 5: Working Capital Management	Working Capital -- Concept of Working Capital, Significance of Adequate Working Capital	3	11.3.2024 TO 18-03-24	Class room teaching
	Types of Working Capital, Problems of Excess or Inadequate Working Capital	3	19.3.2024 TO 26-03-24	Class room teaching
	Determinants of Working Capital, Sources of Working Capital,	2	27.3.2024 TO 8-04-24	Class room teaching
	Estimation of Working Capital (Simple Problems)	2	10.4.2024 TO 30-04-2024	Class roomteaching

Department : Business Administration
Title of the Paper : Management Accounting[Course Code –224429]
Term Period : 12.02.2024 to 25.05.2024Faculty Name : Dr. Anita B R
Total Hrs: 56 Hours

Module No. 1 INTRODUCTIO N TO MANAGEMEN T ACCOUNTING (8 hours)	Introduction- Meaning and Definition – Objectives – Nature	2 hours	12-02-24 to 14-02-24	lecture method
	Scope–Functions- Role of Management Accountant,	2 hours	16-10-24 to 20-02-24	lecture method
	Relationship between Financial Accounting and Management Accounting, Relationship between Cost Accounting and Management Accounting,	2 hours	22-02-24 to 24-02-24	lecture method
	advantages and limitations of Management Accounting.	2 hours	26-02-24 to 28-02-24	lecture method
ModuleNo.4: RETAIL MARKETING MIX	Introduction -Product: Decisions related to selection of goods (Merchandise Managementrevisited)	5hours	06.04.202 4 to 15.04.202 4	Class roo m teac hing
	Decisionsrelatedtodelivery ofservice	2hours	22.04.202 4 to 25.04.202 4	Class room teaching **26-4-24 Display of C1 Internal Test Marks sheet on the notice board**
	Pricing: Influencingfactors–	2hours	26.04.202 4	Class room

	approaches to pricing – price sensitivity - Value pricing		to 29.04.2024	teaching
	Markdown pricing. Place: Supplychannel–SCMprinciples	2hours	30.04.2024 to 04.05.2024	Class room teaching
	Corporate replenishment policies. Promotion: Setting objectives	2hours	06.05.2024 to 09.05.2024	Class room teaching
	Communication effects - promotional mix.	1hours	11.05.2024	Class room teaching
ModuleNo.5: INFORMATION TECHNOLOGYIN RETAILING	Non-store retailing (e-retailing) - The impact of Information Technology in retailing - Integratedsystemsand networking	3hours	13.05.2024 to 17.05.2024	Class room teaching
	EDI – Bar coding – Electronic article surveillance	2hours	18.05.2024 to 21.05.2024	Class room teaching
	Electronic shelf labels – customer database management system.	2hours	22.05.2024 to 24.05.2024	Class room teaching
Module No. 2 RATIO ANALYSIS (14 hours)	Introduction-Meaning and Definition of ratio, Meaning of Accounting ratio, and–	2 hours	29-02-24 to 01-03-24	lecture method
	Ratio Analysis – Uses and Limitations	2 hours	02-03-24 to 06-3-24	lecture method
	Classification of ratios- Liquidity ratios, Profitability ratios and Solvency ratios.	2 hours	07-03-24 to 12-03-24	chalk and board
	Problems on conversion of financial statements into ratios and ratios into financial statements.	8hours	13-03-24 to 26-03-24	chalk and board

Module No. 3 CASH FLOW ANALYSIS (12 hours)	Meaning and Definition of Cash Flow Statement – Concept of Cash and Cash Equivalents - Uses of Cash Flow Statement	2 hours	27-03-24 to 30-03-24	lecture method
	– Limitations of Cash Flow Statement– Differences between Cash Flow Statement and Fund Flow Statement – Provisions of Ind. AS-7.	2 hours	01-04-24 to 03-04-24	lecture method
	Procedure for preparation of Cash Flow Statement – Cash Flow from Operating Activities – Cash Flow from Investing Activities and Cash Flow from Financing Activities –	2 hours	04-04-24 to 08-04-24	chalk and board
	Preparation of Cash Flow Statement according to Ind. AS- 7	6 hours	12-04-24 to 25-04-24	chalk and board
Unit 2&3		1 hour	16-4-2024	16-4-24 TO
				20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
Module No. 4	Introduction-Meaning and definition of marginal cost, marginal costing, features of marginal costing-	2 hours	26-04-24 to 27-04-24	lecture method 26-4-24 Display of C1 Internal Test Marks sheet on the notice board

MARGINAL COSTING (12 hours)	terms used in marginal costing – P/V ratio, BEP, Margin of Safety, Angle of Incidence and	2 hours	27-04-24 to 29-04-24	chalk and board
	. Break-Even Chart. Break Even Analysis- assumption and uses- problems.	6 hours	29-04-24 to 06-05-24	chalk and board
	Decision Making-Make or Buy, - problems on decision making.	2 hours	07-05-24 to 09-02-24	chalk and board
Module No. 5 STANDARD	Historical costing - Introduction – Meaning & Definition of Standard Cost and Standard Costing - Advantages & Disadvantages of	2 hours	12-02-24 to	lecture method
COSTING (10 hours)	Standard Costing		13-05-24	
	–preliminaries in establishing system of standard costing – Variance Analysis – Material Variance, Labour Variance and Overheads Variance	2 hours	13-05-24 to 15-05-24	chalk and board
	– Problems on Material Variances and Labor Variances only.	6 hours	16-05-24 to 25-05-24	chalk and board

Department : Business Administration
Title of the Paper : Financial Markets & Services
Course Code – 224431
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr. Nirmala N & Dr.Manjunatha V
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remark
Module 1	Financial System – Features	2 hours	13-2-2024 To 14-2-2024	Class room teaching
Overview of Financial System (10 hours)	Constituents of Financial System; Financial Institutions;Financial Services; Financial Markets and Financial Instruments.	8 hours	20-2-2024 To 6-3-2024	Lecture method
Module 2	Characteristics of	1 hour	12-3-2024	Lecture
Financial Institutions (14 hours)	Financial Institutions,			method
	Broad Categories – Money Market Institutions and Capital Market Institutions	4 hours	13-3-2024 To 26-3-2024	Lecture method
	Objectives and Functions of Industrial Finance Corporation of India, Industrial Development Bank of India, State Financial Corporations, Industrial Credit and Investment Corporation of India, EXIM Bank of India, National Small Industrial Development Corporation, National Industrial Development Corporation, RBI Measures for NBFCs.	9 hours	27-3-2024 To 30-3-2024	Lecture method
Module 3 Financial Services(12 hours)	Financial Services – Meaning, Objectives, Functions, Characteristics	6 hours	12-2-2024 To 7-3-2024	Lecture method

	Types of Financial Services - Merchant Banking – Functions and Operations, Leasing, Mutual Funds, Venture Capital & Credit Rating.	6 hours	12-2-2024 To 7-3-2024	Lecture method
Unit 1&2	**Overview of Financial System & Financial Institutions**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 InternalTest
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24	Theory Assignment
			to 13-5-24	
Module 4 Financial Marketsand Instruments (10 hours)	Meaning and Definition, Role and Functions of Financial Markets	3 hours	11-3-2024 To 22-3-2024	Lecture method
	Constituents of Financial Markets; Money Market Instruments, Capital Market and Instruments	4 hours	26-3-2024 To 12-4-2024	Lecture method
	SEBIguidelines for Listing of Shares and Issue of Commercial Papers.	3 hours	15-4-2024 To 30-4-2024	Lecture method 26-4-24 Display of C1 Internal Test Marks sheet on the notice board
Module 5 stock market(10 hours)	Introduction - Functions of Stock Exchange	2 hours	7-5-2024 To 8-5-2024	Lecture method

	Stock Market Operations - Trading, Settlement and Custody (Brief discussion on NSDL & CSDL); Brief discussion of BSE, NSEand OTCEI.	8 hours	14-5-2024 To 22-5-2024	Lecture method

Department: Business Administration
Title of the Paper:Income Tax-ll
Course Code: 234630
Term Period:12.02.2023 to 25.05.2024
Faculty Name:Dr.Shyla.S

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
ModuleNo.1: **ProfitsandGainsofBusinessandProfession** (15 hours)	Introduction-Meaning and definition of Business, Profession and Vocation. - Expenses Expressly allowed - Expenses Expressly Disallowed - Allowable losses - Expressly disallowed expenses and losses, Expenses allowed on payment basis. Problems on computation of income from business of a sole trading concern.	7 hours	12-02-2024 to 27-02-24	Class room teaching
	Problems on computation of income from profession: Medical Practitioner - Advocate and Chartered Accountants.	8 hours	28-02-24 to 07-03-24	Class room teaching
Module 2: **CapitalGains**(12 hours)	Introduction - Basis for charge - Capital Assets - Types of capital assets – Transfer - Computation of capital gains – Short term capital gain and Long term capital gain.	7 hours	09-03-24 to 20 -03-24	Class room teaching
	Exemption under section 54, 54B, 54EC, 54D, 54F, and 54G. Problems covering the above sections.	5hours	21-03-24 to 28-03-24	Class room teaching
Module 3: **IncomefromotherSources** (12 hours)	Introduction - Incomes taxable under Head income other sources – Securities - Types of	12 hours	30-03-24 to 15-04-24	

	Securities - Rules for Grossing up. Ex-interest and cum-interest securities. Bond Washing Transactions - Computation of Income from other Sources.			Class room teaching
Unit 1&2	**ProfitsandGainsofBusinessandProfession & CapitalGains**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
Module 4: **SetOffandCarry ForwardofLosses&Assessment ofindividuals.** (10 hours)	Introduction – Provisions of Set off and Carry Forward of Losses (Theory only) Computation of Total Income and tax liability of an Individual.	10 hours	22-04-24 to 4 -05-24	Class room teaching 26-4-24 Display of C1 Internal Test Marks sheet on the notice board
Module 5:AssessmentProcedureandIncomeTaxAuthorities (8 hours)	Due date of filing returns, Filing of returns by different assessees, E-filingof returns, Types of Assessment, Permanent Account Number -Meaning, Procedure for obtaining PAN and transactions were quoting of PAN is compulsory. Income Tax Authorities their Powers and duties	8 hours	6-05-24 to 15 -05-24	Class room teaching
	Revision Classes	6 hours	16-05-24 to 25 -05-24	

Department : Business Administration
Title of the Paper :International Business
[Course Code –234631 **]**
Term Period :12.02.2024 to 25.05.2024
Faculty Name :Dr. Nirmala N

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remark**
Module 1 Introduction to International Business	Introduction- Meaning and definition of international business, need and	3 hours	12-2-2024 To	Class room teaching

(12 hours)	importance of international business,		16-2-2024	
	stages of internationalization	1 hour	17-2-2024	Lecture method
	tariffs and non-tariff barriers to international business.	2 hours	19-2-2024 To 21-2-2024	Lecture method
	Mode of entry into international business - exporting (direct and indirect), licensing and franchising, contract manufacturing, turnkey projects, management contracts, wholly owned manufacturing facility, Assembly operations, Joint Ventures, Third country location, Mergers and Acquisition, Strategic alliance, Counter Trade; Foreign investments.	6 hours	23-2-2024 To 4-3-2024	Lecture method
Module 2 International Business Environment (12 hours)	Overview, Internal and External environment	1hour	6-3-2024	ICT
	Economic environment, Political environment, Demographic environment,	6 hours	9-3-2024 To 16-3-2024	ICT
	Social and Cultural environment, Technological and Natural environment.	5 hours	18-3-2024 To 23-3-2024	ICT
Module 3 Globalization (12 hours)	Meaning, features, essential conditions favoring globalization, challenges to globalization	6 hours	25-3-2024 To 5-4-2024	Lecture method
	MNCs, TNCs - Meaning, features, merits and demerits	3 hours	6-4-2024 To 10-4-2024	ICT
	Technology transfer - meaning and issues in technology transfer.	3 hours	12-4-2024 To 15-4-2024	ICT
Unit 1&2	**Introduction to International Business &International Business Environment**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
Module 4 Organizations Supporting International Business (10 hours)	Meaning, Objectives and functions of - IMF, WTO, GATT, GATS, TRIM, TRIP	5 hours	22-4-2024 To 26-4-2024	ICT **26-4-24 Display of C1 Internal Test**

				Marks sheet on the notice board
	Regional Integration- EU, NAFTA, SAARC, BRICS.	5 hours	27-4-2024 To 4-5-2024	ICT
Module 5 International Operations Management (10 hours)	Global Supply Chain Management- Global sourcing, Global manufacturing strategies,	5 hours	6-5-2024 To 15-5-2024	ICT
	International Logistics, International HRM - Staffing policy and it's determinants;	4 hours	17-5-2024 To 24-5-2024	ICT
	Expatriation and Repatriation (Meaning only).	1 hour	25-5-2024	ICT

Department : Business Administration
Title of the Paper : Business Law
[Course Code –234629]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name :Dr. Anita B R
Total Hrs: 60 Hours

Module No. 1 Indian Contract Act, 1872 (16 hours)	Introduction – Definition of Contract, Essentials of Valid Contract, .	2 hours	12-02-24 to 14-02-24	lecture method & Case study
	Offer and acceptance, consideration, contractual capacity, free consent	9 hours	15-02-24 to 28-04-24	lecture method & Case study
	Classification of Contract, Discharge of a contract,	2 hours	01-03-24 to 03-03-24	lecture method & Case study
	Breach of Contract and Remedies to Breach of Contract.	3 hours	04-03-24 to 07-03-24	lecture method & Case study
Module No. 2 The Sale of Goods Act, 1930 (12 hours)	Introduction - Definition of Contract of Sale, Essentials of Contract of Sale, .	4 hours	11-03-24 to 15-03-24	lecture method & Case study
	Conditions and Warranties, Transfer of ownership in goods including sale by a non-owner and exceptions	3 hours	18-03-24 to 21-03-24	lecture method & Case study
	Performance of contract of sale - Unpaid seller,	2 hours	22-03-24 to 25-03-24	lecture method

	rights of an unpaid seller against the goods and against the buyer.	3 hours	27-03-24 to 30-03-24	lecture method & Case study
Unit 1&2	**Indian Contract Act, 1872 &The Sale of Goods Act, 1930**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
Module No. 3 Negotiable Instruments Act 1881 (12 hours)	Introduction – Meaning and Definition of Negotiable Instruments – Characteristics of Negotiable Instruments	2 hours	01-04-24 to 02-04-24	lecture method & Case study
	– Kinds of Negotiable Instruments – Promissory Note, Bills of Exchange and Cheques (Meaning, Characteristics and types)	4 hours	04-04-24 to 10-04-24	lecture method & Case study
	– Parties to Negotiable Instruments –Dishonour of Negotiable Instruments –	2 hours	12-04-24 to 15-04-24	lecture method
	Notice of dishonour – Noting and Protesting.	2 hours	22-04-24 to 23-04-24	lecture method
Module No. 4 Consumer Protection Act 1986 (10 hours)	Definitions of the terms – Consumer, Consumer Dispute, Defect, Deficiency, Unfair Trade Practices, and Services,.	3 hours	24-04-24 to 26-04-24	**26-4-24 Display of C1 Internal Test Marks sheet on the notice board** lecture method & Case study
	Rights of Consumer under the Act,	3 hours	29-04-24 to 02-05-24	lecture method & Case study
	Consumer Redressal Agencies – District Forum, State Commission and National Commission	4 hours	03-05-24 to 08-05-24	lecture method
Module No. 5 Environment Protection Act 1986 (10 hours)	Introduction - Objectives of the Act, Definitions of Important Terms – Environment, Environment Pollutant, Environment Pollution,	4 hours	09-05-24 to 15-05-24	lecture method
	Hazardous Substance and Occupier, Types of Pollution,	3 hours	16-05-24 to 21-05-24	lecture method
	Powers of Central Government to protect Environment in India.	3 hours	22-05-24 to 25-05-24	lecture method

Department: Business Administration
Term Period: 12.02.2024 to 25.05.2024
Title of the Paper: Enterprise ResourcePlanning
[Course Code – 23VOCBBA04]
Faculty Name: Dr.Manjunatha V
Total hours: 45

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
ModuleNo.1:IntroductiontoERP	Enterprise Resource Planning - Defining ERP	2	12.02.2024 to 15.02.2024	Class room teaching
	Origin and Need for an ERP System	2	16.02.2024 to 19.02.2024	Class room teaching
	Benefits of an ERP System - Reasons for the Growth of ERP Market	4	20.02.2024 to 26.02.2024	Class room teaching
	Risk of ERP - Road map for successful ERP	4	27.02.2024 to 4.03.2024	Class room teaching
Module No. 2: ERP related Technologies and Modules	Business Process Re-engineering – Product life cycle – Customer relationship management	3	5.03.2024 to 11.03.2024	Class room teaching
	Functional Modules- Sales and Distribution, service	3	11.03.2024 to 15.03.2024	Class room teaching
	Human Resource - Finance – Production -	3	15.03.2024 to 21.03.2024	Class room teaching
	Materials Management – Purchasing – Quality Management	3	22.03.2024 to 28.03.2024	Class room teaching

ModuleNo.3:ERPimplementation	ERP Implementation Life cycle – Transition strategies - ERP Implementation Process	3	30.03.2024 to 4.04.2024	Class room teaching
	ERP Vendor Selection - Role of the Vendor - Consultants: Types of consultants - Role of a Consultant	3	5.04.2024 to 12.04.2024	Class room teaching
	Vendors and Employees -Resistance by employees	3	5.04.2024 to 12.04.2024	Class room teaching
	Dealing with employee resistance - Project team	3	6.04.2024 to 15.04.2024	Class room teaching

Unit 1&2	**IntroductiontoERP & ERP related Technologies and Modules**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
ModuleNo.4:ERPpostimplementation	Success and Failure factor of ERP implementation	4	22.04.2024 to 26.04.2024	Class room teaching **26-4-24 Display of C1 Internal Test Marks sheet on the notice board**
	ERP operations and maintenance – Data Migration	4	27.04.2024 to 6.05.2024	Class room teaching
	Project Management and Monitoring - Maximizing the ERP system	4	7.05.2024 to 13.05.2024	Class room teaching
ModuleNo.5:FuturedirectionsinERP	New Trends in ERP- ERP to ERP II - Implementation of Organization Wide ERP	4	14.05.2024 to 17.05.2024	Class room teaching
	Development of New Markets and Channels-Latest ERP Implementation Methodologies	4	18.05.2024 to 22.05.2024	Class room teaching
	ERP and E- business	4	23.05.2024 to 25.05.2024	Class room teaching

Department: Business Administration
Title of the Paper: Financial Management-ll
Course Code: 23DSEBBA05
Term Period:12.02.2023 to 25.05.2024
Faculty Name: Dr.Shyla.S

Total Hrs: 45 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Module 1: **IntroductiontoInvestments**	Introduction- Investment process, Criteria for Investment, types of Investors, Investment, Speculation and Gambling. Elements of Investment,	4 hours	16-02-2024 To 22-3-2024	Class room teaching

(8 hours)	Investment Avenues, Factors influencing selection of investment alternatives			
	Security Market- Introduction, functions, Secondary Market Operations. Stock Exchanges in India, Security Exchange Board of India, Government Securities Market, Corporate Debt Market and Money Market Instruments.	4 hours	5-4-2024 to 24-05-24	Class room teaching
Module 2: **Risk-ReturnRelationship** (12 hours)	Meaning of risk, types off risk, measuring risk, risk preference of investors.	6 hours	12-02-2024 to 27-02-24	Class room teaching
	Meaning of return, measures of return, holding period of return, Annualized return, expected return, investors' attitude towards risk and return..	6 hours	28-02-24 to 20-03-28	Class room teaching
Module 3: **Fundamental Analysis** (10 hours)	Introduction- Investment Analysis, Fundamental Analysis, Macro Economic Analysis, Industry Analysis.	05hours	21-03-24 to 10-04-24	Class room teaching
Unit 2&3	**Risk-ReturnRelationship&Fundamental Analysis**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment 26-4-24 Display of C1 Internal Test Marks sheet on the notice board
Module 3: **Fundamental Analysis** (10 hours)	Company Analysis, Trend Analysis, and Ratio Analysis.	05 hours	12-04-24 to 24-04-24	Class room teaching
Module 4: **Technical Analysis** (8 hours)	Meaning of Technical Analysis, Fundamental vs Technical Analysis, Charting techniques, Technical Indicators, Testing Technical Trading Rules and Evaluation of Technical Analysis.	8 hours	25-04-24 to 18 -05-24	Class room teaching

Module 5:Portfolio Management (8 hours)	Framework-Portfolio Analysis – Selection and Evaluation – Meaning of portfolio – Reasons to hold portfolio – Diversification analysis.	4 hours	18-05-2024 To 20-5-2024	Class room teaching
	Markowitz's Model – Assumptions –Specific model – Risk and return optimization – Efficient frontier – Efficient portfolios –Leveraged portfolios – Corner portfolios – Sharpe's Single Index model – Portfolio-evaluation measures – Sharpe's Performance Index – Treynor's Performance Index – Jensen's Performance Index.	4 hours	21-05-2024 To 25-05-2024	

Department: Business Administration
Title of the Paper: HRM II (Human Resource Development)
[Course Code –23DSEBBA07]
Term Period:12.02.2024 to 25.05.2024
Faculty Name: Dr. Nirmala N
Total Hrs: 45 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remark**
Module 1 Conceptual Analysis of HRD (8 hours)	Introduction – Meaning and Definition of HRD - Need for HRD	2 hours	12-2-2024 To 14-2-2024	Class room teaching
	Multiple Goals of HRD – HRD Department and its Task	2 hours	15-2-2024 To 16-2-2024	Lecture method
	HRD for Organizational Effectiveness –	2 hours	17-2-2024 To 19-2-2024	Lecture method
	HRD in the Indian Context -HRD Mechanisms.	2 hours	20-2-2024 To 21-2-2024	Lecture method
Module 2 Frame Work of Human Resource Development (10 hours)	Frame work of Human Resource Development – HRD Processes	2 hours	22-2-2024 To 23-2-2024	Lecture method
	Assessing HRD Needs- HRD Model - Designing Effective HRD Program - HRD Interventions	4 hours	24-2-2024 To 29-2-2024	Lecture method
	Training Methods- Training - On-the-Job and Off-the-Job training- Brain Storming - Case Studies -	4 hours	1-3-2024 To 5-3-2024	Lecture method

	Role Plays -Simulations – T-Groups - Transactional Analysis.			
Module 3 Human Resource Performance (10 hours)	Introduction -HR Performance and Bench Marking	2 hours	7-3-2024 To 11-3-2024	Lecture method
	Impact of Globalization on HRD- Diversity of Work Force - Work Force Reduction	4 hours	12-3-2024 To 19-3-2024	Lecture method
	Realignment and Retention - HRD programs for diverse employees.	4 hours	21-3-2024 To 28-3-2024	Lecture method
Unit 1&2	**Conceptual Analysis of HRD** **&Frame Work of Human Resource Development**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
Module 4 HRD Evaluating Programs (9 hours)	Evaluating HRD Programs- Models and Frame Work of Evaluation -	4 hours	1-4-2024 To 8-4-2024	Lecture method
	Assessing the Impact of HRD Programs - Human Resource Development - Applications -	3 hours	15-4-2024 To 30-4-2024	Lecture method **26-4-24** **Display of C1 Internal Test Marks sheet on the notice board**
	Fundamental Concepts of Socialization.	2 hours	2-5-2024 To 9-5-2024	Lecture method
Module 5 Employee Counselling Services (8 hours)	Introduction - Employee counselling – Counselling as an HRD Activity	3 hours	10-5-2024 To 15-5-2024	Lecture method
	Counselling Programs – components and characteristics	3 hours	16-5-2024 To 19-5-2024	Lecture method
	Issues in Employee Counselling.	2 hours	20-5-2024 To 23-5-2024	Lecture method

Department: Business Administration
Title of the Paper: MK 2 Advertising and Media Management
[Course Code –23DSEBBA06]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr. Anita B R
Total Hrs: 45 Hours

Module No. 1 Introduction to Integrated Marketing Communication (10 hours)	Integrated marketing communication, AIDA Model, Setting goals and objectives,	3 hours	12-02-24 to 15-02-24	lecture method
	concept of DAGMAR in setting objectives, elements of IMC;	2 hours	19-02-24 to 20-02-24	lecture method
	Role of advertising in India's economic development, Ethics in advertising,	3 hours	22-02-24 to 27-02-24	lecture method
	Social, Economic and Legal aspects of advertising.	2 hours	28-02-24 to 02-03-24	lecture method
Module No. 2 Consumer and Media (14 hours)	How advertising works: perception, cognition, affect, association, persuasion, behaviour,	2 hours	04-03-24 to 06-03-24	lecture method
	Associating feeling with brands, Use of research in advertising planning; Advertising Media	2 hours	11-03-24 to 13-03-24	lecture method
	industry structure, functions, advantages, disadvantages of print, Television, Radio, Internet, Outdoor	2 hours	15-03-24 to 19-03-24	lecture method
	Basic concept of media planning, media selection, Media Scheduling strategy, setting media budgets	8 hours	20-03-24 to 02-04-24	lecture method
Module No. 3 Advertising Program (10 hours)	Planning and managing creative strategies; Creative approaches;	2 hours	03-04-24 to 05-04-24	lecture method
	. Building Advertising Program: Message, Theme, advertising appeals;	2 hours	08-04-24 to 10-04-24	lecture method
	Advertising layout: how to design and produce advertisements	2 hours	12-04-24 to 15-04-24	lecture method
	Advertising Budget: nature and methods of advertising appropriation; Art of copywriting; Guidelines for copywriting; Copywriting for print, Audio, TV and outdoor media.	4 hours	22-04-24 to 27-04-24	lecture method
Unit 1&2	**Conceptual Analysis of HRD** **&Frame Work of Human Resource Development**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test

Unit I,II,III,IV ,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
Module No. 4 Other Elements of IMC- Sales Promotion , PR, Events and Experiences and Word of Mouth (10 hours)	Consumer and trade sales promotion,	2 hours	29-04-24 to 30-04-24	lecture method **26-4-24 Display of C1 Internal Test Marks sheet on the notice board**
	application of sales promotion in different domains;	2 hours	02-05-24 to 04-05-24	lecture method
	Using public relations in image building; Planning and executing events,	4 hours	06-05-24 to 13-05-24	lecture method
	event management; Viral marketing, building organic word of mouth communication.	2 hours	14-05-24 to 16-05-24	lecture method
Module No. 5 Measuring Effectiveness (5 hours)	Measuring Advertising Effectiveness: stages of evaluations and various types of testing-Pre and Post testing;	2 hours	18-05-24 to 21-05-24	lecture method
	Advertising agencies: history, role, importance, organizational structure, functions; Selection of agency, client agency relationship,	2 hours	22-05-24 to 23-05-24	lecture method
	compensation strategies	1 hours	25-05-24	lecture method

Department: Business Administration
Term Period: 12.02.2024 to 25.05.2024
Title of the Paper: RM II (RetailOperationsManagement)
[Course Code – 23DSEBBA08]
Faculty Name: Dr.Manjunatha V
Total hours: 45

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Module-1:RetailandLogisticsManagement	Introduction Retailing and economic significance- Functions of a retailer - Types ofretailers	2	12.02.2024 to 16.02.2024	Class room teaching
	Trends in retailing – International Retailing	2	17.02.2024 to 19.02.2024	Class room teaching
	Retailing as a career –Retail Management Decision Process -	2	20.02.2024 to 23.02.2024	Class room teaching
	Service Retailing.	1	26.02.2024	Class room teaching

Module-2:RetailingEnvironmentTheories	Theory of Retail Change: Theory of Natural Selection in retailing, Theory of Wheel ofretailing	3	27.02.2024 to 4.03.2024	Class room teaching
	General-Specific-General Cycle or Accordion Theory, Retail Life CycleTheory	3	5.03.2024 to 11.03.2024	Class room teaching
	Multi-channel retailing – Retail Aggregators Business Model	2	.12.2024 to 15.03.2024	Class room teaching
	Phases of growth of retail markets – Retail Mix.	2	16.2024 to 19.03.2024	Class room teaching
Module-.3:StoreLoyaltyManagementand RetailLocation	Types of customers – Variables influencing store loyalty – Store loyalty models	2	20.03.2024 to 26.03.2024	Class room teaching
	Influencing customers through visual merchandising – Value added through privatelabels – Retail location strategy	3	27.03.2024 to 03.04.2024	Class room teaching
	Importance of location decision – Retail location strategies and techniques –	3	04.04.2024 to 10.04.2024	Class room teaching
	Types of retail locations.	2	12.04.2024 to 15.04.2024	Class room teaching
Unit 1&2	**RetailandLogisticsManagement &RetailingEnvironmentTheories**	1 hour	16-4-2024	16-4-24 TO 20-4-24 C1 Internal Test
Unit I,II,III,IV,V	**Theory Assignment**	15 Days	22-4-24 to 13-5-24	Theory Assignment
Module-4:MerchandiseManagement	Meaning - Roles and responsibilities of the merchandiser and the buyer – Function of Buying for different types of Organizations	4	22.04.2024 to 26.04.2024	Class room teaching
	Process of Merchandise Planning – MerchandiseSourcing	2	27.04.2024 to 30.04.2024	Lecture method **26-4-24 Display of C1 Internal Test Marks sheet on the notice board**
	Methodsofprocuringmerchandise– Conceptofprivatelabel-RetailPricingpolicies.	4	02.05.2024 to 07.05.2024	Class room teaching
Module-5:CategoryManagement	Meaning - Definition of Category Management - Components of Category Management - Category Management Business process	3	08.05.2024 to 13.05.2024	Class room teaching

	CategoryDefinition-DefiningtheCategoryRole-DestinationCategory,RoutineCategory,SeasonalCategory,ConvenienceCategory	2	14.05.2024 to 16.05.2024	Class room teaching
	Category Assessment - Category Performance Measures - Category Strategies	2	17.05.2024 to 20.05.2024	Class room teaching
	CategoryTactics-CategoryPlanimplementation-CategoryReview.	1	21.05.2024	Class room teaching

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Jayalakshmipuram, Mysuru – 570 012 Karnataka, INDIA

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Department : Commerce
Title of the Paper : MANAGEMENT PRINCIPLES AND APPLICATIONS
[Course Code – 213130]
Term Period: 11/09/2023 to 16/12/2023
Faculty Name : Nikil B R
Total Hrs: 64 Hours (4Hrs/Week) Section A&B

Curriculum as prescribed by NEP	**Topics**	**No of Hours required to complete**	**Date**	**Method of Deployment**
Module I Introduction to Management14 hrs	Meaning and Definition- Nature and Characteristicsof Management-	**2 hrs**	11-09-23 to 12-09-23	**Introduction Class Course Outcomes of theUnits Lecture Case analysis**
	Scope of Management-Levels of Management-	**3 hrs**	13-09-23 to 15-09-23	**Lecture Case analysis Industry Examples**
	Administration Vs management-Functions of Management-	**3 hrs**	16-09-23 to 20-09-23	**Lecture Case analysis Industry Examples skill development**
	Evolution of Management	**3 hrs**	21-09-23	**Lecture**

	thought:. Contributions of F.W.Taylor and Henry Fayol	**3 hrs**	To 23-09-23 25-09-23 to 27-09-23	**Case analysis** **Industry Examples** **Lecture** **Case analysis** **Industry Examples**
	Meaning and Definition- Characteristics of Planning,	**2hrs**	29-09-23 to 30-09-23	**Lecture** **Case analysis** **Industry Examples**
Module IIPlanning 12 hrs	Importance and benefits ofPlanning-.	**3hrs**	03-10-23 to 05-10-23	**Lecture** **Case analysis** **Industry Examples**
	Steps in Planning- Types ofPlanning-	**3hrs**	06-10-23 to 09-10-23	**Lecture** **Case analysis** **Industry Examples** **skill development**
	Limitations of Planning-Decision Making	**4hrs**	10-10-23 to 13-10-23	**Lecture** **Case analysis** **Industry Examples**
Module III Organising 14hrs	Meaning and Definition- Principles of Organisation-	**2hrs**	16-10-23 to 17-10-23	**Lecture** **Case analysis** **Industry Examples**
	Formal Vs Informal Organisation	**2hrs**	18-10-23 to 19-10-23	**Lecture** **Case analysis** **Industry Examples**
	-Types of Organisation- Functional Organisation-	**2hrs**	20-10-23 to 21-10-23	**Lecture** **Case analysis** **Industry Examples** **skill development**
	Matrix Organisation- Team based Organisation-	**3hrs**	25-10-23 to 27-10-23	**Lecture** **Case analysis** **Industry Examples** **skill**

				development
	Departmentation – Decentralisation and	**3hrs**	30-10-23 to 03-11-23	**Lecture Case analysis Industry Examples**
	Delegation of Authority.	**2hrs**	04-11-23 to 06-11-23	**Lecture Case analysis Industry Examples**
Module IV Leadership12 hrs	Meaning- Qualities of a good leader-	**3hrs**	07-11-23 to 09-11-23	**Lecture Case analysis Industry Examples**
	Types of Leadership Styles-	**2hrs**	10-11-23 to 12-11-23	**Lecture Case analysis Industry Examples**
	Motivation concept and theories-	**2hrs**	13-11-23 to 14-11-23	**Lecture Case analysis Industry Examples skill development**
	Internal test		**15 to 18 Nov**	
	Maslow's Hierarchy of Needs - Herzberg's dual factor theory-	**3 hr**	20-11-23 to 23-11-23	**Lecture Case analysis Industry Examples 23-11-23 Test marks displayed on notice board**
	Mc Gregor's theory X and theory Y.	**2hrs**	24-11-23 to 25-11-23	**Lecture Case analysis Industry Examples**
Module V Controlling 12hrs	Meaning and Definition- Importance of Control	**3hrs**	27-11-23 to 29-11-23	**Lecture Case analysis Industry Examples**
	-Steps in Controlling- Techniques of Control- PERT,CPM,JIT	**4hrs**	01-12-23 to 05-12-23	**Lecture Case analysis Industry Examples skill development**
	- Co-ordination-Need for	**2hrs**	06-12-23	**Lecture**

	Co-ordination-		to 07-12-23	**Case analysis Industry Examples**
	Principles of Co-ordination	**3hrs**	08-12-23 to 11-12-23	**Lecture** **Case analysis Industry Examples**
Revision	All chapters	**5hrs**	12-12-23 to 16-12-23	**Presentations Assignment marks displayed and took the signature of students**

Department : commerce
Title of the Paper : Title of the Paper: Financial Accounting-I
[Course Code – 213129]
Term Period :11/09/2023 to 16/12/2023
Faculty Name :Vasagi S
Total Hrs: 64 Hours (4Hrs/Week) Section A&B

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Unit 1: Introduction to Financial Accounting (14Hrs)	Meaning, Definition and Scope of Accounting,	2 hours	11-09-23 to 12-09-23	**IntroductionClass Course Outcomes of the Units Lecture Case analysis**
	Objectives of Accounting, Functions of Accounting, Branches of Accounting	3hours	13-09-23 to 15-09-23	Lecture, Discussion & PPT
	Accounting Principles, Accounting Concepts and Conventions,	3 hours	16-09-23 to 21-09-23	Lecture, Discussion & PPT
	Accounting Standards: Meaning and Objectives, Indian Accounting Standards, IND AS, IFRS,	3 hours 4 hours	22-09-23 to 25-09-23 26-09-23 to	Lecture, Discussion & PPT

			28.10.23 `	
	Distinction between IND AS and IFRS	3 hours	29-10-23 to 05.10.23	Lecture, Discussion & PPT
	Meaning, Features of Hire purchase system	2 hours	06-10-23 to 07-10-23	Lecture, Discussion, Problem Solving
Unit 2: Accounting for Hire Purchase System: (10hrs)	Calculation of Interest Under Different Methods ascertainment of Cash Price of an Asset –	2 hours	09-10-23 to 10-10-23	Lecture, Discussion & PPT
	Repossession (theory)	2 hours	11-10-23 to 12-10-23	Lecture, Discussion & PPT
	Problems on Hire Purchase System (Assets Accrual Method only	4 hours	13-10-23 to 18-10-23	Lecture, Discussion, Problem Solving
	Meaning, Features of Instalment System	2 hours	19-10-23 to 20-10-23	Lecture, Discussion, Problem Solving
Unit 3: Accounting for Instalment System (14 Hrs)	Differences between Hire Purchase and Instalment System	3 hours	21-10-23 to 25-10-23	Lecture, Discussion & PPT
	Problems on Instalment System- includinginterest in instalments	3 hours	26-10-23 to 30-10-23	Lecture, Discussion, Problem solving
	Problems on Instalment System- Interest noincluded in instalments	3 hours	03-11-23 to 30-11-23	Lecture, Discussion, Problem solving
	Problems on Instalment System- when cashprice not given	3 hours	31-10-23 to 08-11-23	Lecture, Discussion, Problem solving
	Problems on Instalment System- when cashprice not given	3 hours	09.11.23 to 11.11.23	Lecture, Discussion & PPT
Unit 4: Royalty Accounts (10 Hrs)	Meaning and Definition, Terms used, Royalty Minimum Rent		Test - 15.11.23 To	(Test dates)

			18.11.23	
	Short workings, Surplus Royalty, Recoupment of Short working, Stoppage of Work due to Abnormal causes	3 hours	20-11-23 to 22-11-23	Lecture, Discussion & PPT
	Problems on Royalty including Minimum Rent Account	2hours	23-11-23 to 24-11-23	Lecture, Discussion, Problem Solving 23-11-23 Test marks displayed on the notice board
	Problems on Royalty withoutMinimum Rent Account	2 hours	26-11-23 to 27-11-23	Lecture, Discussion, Problem Solving
	Financial Statements,	3hours	26-11-23 to 27-11-23	Lecture, Discussion, Problem Solving
Unit 5: Final accounts of Sole Trading Concern (15 Hrs)	Preparation of Trading and Profit and Loss Account Balance sheet with Adjustments	3 hours	28-11-23 to 30-11-23	Lecture, Discussion, Problem Solving
	Balance sheet with Adjustments	3hours	01-12-23 to 04-11-23	Lecture, Discussion, Problem Solving
	Problems-on trading and P&L A/C	3hours	06-11-23 to 08-11-23	Lecture, Discussion, Problem Solving
	Problems onTradingP&lL A/c and Balancesheet	3 hours	12-12-23 to 16-12-23	Lecture, Discussion, Problem Solving **Assignment marks displayed andtook the signature of students**

Title of the Paper :: Principles of Marketing
[Course Code: 213131Term Period :11/09/2023 to 16/12/2023
Faculty Name :Ms. Rekha B Total
Hrs: 64 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit -1 Introduction tomarketing (12 hours)	Meaning and Definition of Market, Marketing-Core Marketing Concepts - Marketing Mix - Marketing environment - Functions of Marketing.	4 hours	11-09-2023 to 14-09-23	**Introduction class Course Outcomes of the units**
	4Ps and 7Ps of marketing mix.	2 hours	19-09-23 to 21-09-23	Chalk and Black board
	Online Marketing- Relationship between Technology, Globalisation.	3 hours	22-09-23 to 25-09-23	Chalk and Black board
	Social Responsibility and online marketing.	3 hours	26-9-23 to 30-9-23	Chalk and Black board
Unit-II Product (12 hours)	Meaning of a Product - Product Plan -– Diffusion (Adoption) of Innovations-	3 hours	3-10-23 to 6 -10-23	Chalk and Black board
	New Product idea - Stages in New Product Development- Causes for Failure of a new product.	4 hours	7-10-23 to 11-10-23	Chalk and Black board
	Product life cycle and Marketing strategy.	5 hours	12-10-23 to 17-10-23	Chalk and Black board
	Price: Meaning – Pricing Strategy – Types of Pricing Strategies.	5 hours	18-10-23 to 25-10-23	Chalk and Black board
Unit 3 Pricing Promotion	Promotion: Meaning and Role of Promotion – Types of Promotion – Personal selling	4 hours	26-10-23 to 2-11-23	Chalk and Black board

	Advertising – Publicity and Sales promotion - Elements of Promotional mix – Factors affecting Promotion Mix.	7hours	3-11-23 To 11-11-23	Chalk and Black board
Unit 4 **Place in Marketingmix 14 hrs**	Channels of Distribution–Types of Channels of Distribution-Middlemen and Distribution-	5 hours	13-11-2023 To 24-11-23	15-11-2023 To 18-11-2023 C1 Internal Test was conducted **Test marks were displayed on the college Notice Board**
	Selection of the type of Channel-Retailing–Nature and Importance–Non-store retailing-	5 hours	25-11-23 to 1--12-23	Chalk and Black board
	Wholesaling and Physical Distribution-Nature and Importance of Wholesaling and Physical Distribution	4hours	2-12-23 To 6-12-23	Chalk and Black board
Consumer Behaviour10 hrs	Meaning -Features–Scope-Importance-Models of Consumer Behaviour	5 hours	7-12-2023 To 12-12-23	Chalk and Black board
	Meaning -Features–Scope-Importance-Models of Behaviour	5 hours	13-12-23to 16--12-23	Revision of All the Chapters Chalk and Black board **Assignment marks displayed and took the signature of students**

Department: Commerce
Title of the Paper; Principles of Marketing [Course Code: 213131]Term Period:11.09.2023 to 16.12.2023
Faculty Name: Mr. Sunil N

Total Hrs: 64Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit -1 Introduction to marketing (12 hours)	Meaning and Definition of Market, Marketing-Core Marketing Concepts - Marketing Mix - Marketing environment - Functions of Marketing.	4 hours	11-09-2023 to 14-09-23	Chalk and Black board Course outcomes discussed
	4Ps and7Ps of marketing mix.	2 hours	19-09-23 to 21-09-23	Chalk and Black board
	Online Marketing- Relationship between Technology, Globalisation.	3 hours	22-09-23 to 25-09-23	Chalk and Black board
	Social Responsibilityand online marketing.	2 hours	26-9-23 to 30-9-23	Chalk and Black board
Unit-II Product :(12 hours)	Meaning of a Product - Product Plan -– Diffusion (Adoption)of Innovations-	4 hours	3-10-23 to 7 -10-23	Chalk and Black board
	New Product idea - Stages in New Product Development- Causesfor Failure of a new	4 hours	8-10-23 to 12-10-23	Chalk and Black board
	Product life cycle and Marketing strategy.	4 hours	13-10-23 to 17-10-23	Chalk and Black board
	Price: Meaning – Pricing Strategy – Types of PricingStrategies.	4 hours	18-10-23 to 23-10-23	Chalk and Black board
	Promotion: Meaning and Role of Promotion – Types ofPromotion – Personal selling	4 hours	24-10-23 to 28-10-23	Chalk and Black board

	Advertising – Publicity and Sales promotion - Elementsof Promotional mix –Factors affecting Promotion Mix.	4hours	29-10-23 To 4-11-23	Chalk and Black board
Place in Marketingmix **14 hrs**	Channels of Distribution–Typesof Channels of Distribution-Middlemen and Distribution-	4 hours	5-11-2023 To 8-11-23	Chalk and Black board
	Selection of the type of Channel- Retailing–Nature andImportance–Non-store retailing-	3 hours	9-11-23 to 11--11-23	Chalk and Black board
	Wholesaling and Physical Distribution-Nature and Importance of Wholesaling and Physical Distribution	4hours	14-11-23 To 23-11-23	15-11-2023 To 18-11-2023 C1 Internal Test was conducted
	product.			
Consumer Behaviour10 hrs	Meaning -Features–Scope-Importance-Models of Consumer Behaviour	4 hours	24-11-2023 To 28-11-23	Chalk and Black board
	Meaning -Features–Scope-Importance--	3 hours	29-11-23 to 2--12-23	Chalk and Black board
	Models of Consumer Behaviour	3hours	4-12-23 to 7-12-23	Chalk and Black board
	Revision was donefor each unit and signatures weretaken for C1 and C2from students	4hrs	8-12-23 to 16-12-23	Chalk and Black board Assignment marks was displayed on the notice board

Department: Commerce
Title of the Paper : BASICS OF ACCOUNTING
[Course Code – 213132]
Faculty name: Keerthi raj kamal B A
Term: 11/09/2023 to 16/12/2023

Hrs/wk: 3 **Total Hrs: 45 Hours**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 **Introduction to Accounting** (08 hours)	Meaning- Need for accounting- Internal & External users of Accounting	2 hours	11-09-2023 to 14-09-23	COs , POs were discussed Chalk and Black board
	Accounting concepts & conventions	2 hours	15-09-23 to 19-09-23	Lecture, Discussion & problem solving
	Indian accounting standards (IND AS)	2 hours	20-09-23 to 22-09-23	Lecture, Discussion & problem solving
	International Financial Reporting Standards, Distinction between IND AS & IFRS	2 hours	23-09-23 to 26-09-23	Lecture, Discussion & problem solving
Unit 2 **Accounting Systems and Process**(11 hours)	Nature of accounting- systems of accounting	2 hours	27-09-23 to 30-09-23	Lecture, Discussion & problem solving
	Single entry system and double entry system	2hours	30-09-23 to 04-10-23	Lecture, Discussion & problem solving
	Process of accounting	2 hours	05-10-23 to 07-10-23	Lecture, Discussion & problem solving
	Business transactions - journal entries -ledger(simple problems)		09-10-23	Lecture, Discussion &

		4 hours	to 16-10-23	problem solving
Unit 3 Subsidiary Books (17 hours)	Sales Books- Sales returns book- purchases book- purchase returns book	4hour	17-10-23 To 21-10-23	Lecture, Discussion & problem solving
	- Bills recievable book- cash book- Petty cash book- journal proper-	4 hour	25-10-2023 To 31-10-23	Lecture, Discussion & problem solving
	Problems on preparation of sales book, sales returns book, purchases returns book, cash book (single column, double column, three column) and petty cash book (simple problems)	4 hours	02-11-23 To 13-11-23	Lecture, Discussion & problem solving
	C1 INTERNAL TEST		15.11.2023 to 18.11.2023	15-11-2023 To 18-11-2023 C1 Internal Test was conducted
Unit 4 Final accounts of sole trading concern. (12 hours)	Preparation of trial balance-	2 hours	20-11-23 to 27-11-23	Lecture, Discussion & problem solving **23-11-23 Marks sheet of C1 Internal Test was displayed on the notice board**
	preparation of trading and profit and loss account	4 hours	28-11-23 TO 8-12-23	Lecture, Discussion & problemsolving **Assignment marks Displayed on notice board**
	balance sheet (Simple problems)	4 hours	9.12.23 To	Lecture, Discussion & problem

			14.12.23	solving
	REVISION CLASS	2 hours	15.12.23 To 16.12.23	Lecture, Discussion & problem solving

Department: Commerce
Time period: 11/09/2023 to 16/12/2023
Title of the paper: Business Statistics (DSC-223330)Faculty name: Nikil B.R(A Section)
Hrs/Week: 4hrs **Total Hrs: 56**

Curriculum as prescribed by NEP	**Topics**	**No of Hours required**	**Date**	**Method of Deployment**
Module I Statistical Data and Descriptive statistics (10hrs)	Nature and Classification of data: Univariate, bivariateandmultivariatedata;	**2hrs**	**11.09.23 to 12.09.23**	**Introduction Class Course Outcomes of the Units Lecture, Discussion,PPT**
	Measures ofCentralTendency: Mathematicalaverage sincludingarithmetic mean,Propertiesandapplications.	**4hrs**	**13.09.23 to 16.09.23**	**Lecture, Discussion & problem solving**
	PositionalAverages-ModeandMedian(including graphic determination).	**4hrs**	**19.09.23 to 22.09.23**	**Lecture, Discussion & problem solving**
Module II Measuresof Variation: andSkewnes s (12hrs)	Measures of Variation: absoluteand relative .Range,	**3hrs**	**23.09.23 to 26.09.23**	**Lecture, Discussion & problem solving**
	Quartiledeviation,meandeviation,standarddeviation,andtheircoefficients,	**3hrs**	**27.09.23 to 30.09.23**	**Lecture, Discussion & problem solving**
	Propertiesof	**3hrs**	**3.10.23**	**Lecture,**

	standarddeviation/variance.		**to 5.10.23**	**Discussion & problem solving**
	Skewness:Meaning, MeasurementusingKarlPearsonandBowley'smeasures; concept of Kurtosis	**3hrs**	**6.10.23 to 9.10.23**	**Lecture, Discussion & problem solving**
Module III ProbabilityDistributions (14hrs)	TheoryofProbability. Approachestothecalculationofprobability;	**2hrs**	**10.10.23 to 11.10.23**	**Lecture, Discussion & problem solving**
	Calculationofevent Probabilities.Additionandmultiplication	**3hrs**	**12.10.23 to 16.10.23**	**Lecture, Discussion & problem solving**
	Lawsofprobability(Proofnotrequired);Conditionalprobabilityand Bayes'Theorem(Proof notrequired)-	**3hrs**	**17.10.23 to 19.10.23**	**Lecture, Discussion & problem solving**
	Expectationandvarianceofarandomvariable-Probabilitydistributions-Binomialdistribution: Probabilitydistributionfunction,Constants, Shape,Fittingofbinomialdistribution-Poissondistribution:Probabilityfunction,(includingPoissonapproximationtobinomialdistribution),Constants,	**3hrs**	**20.10.23 to 25.10.23**	**Lecture, Discussion & problem solving**
	FittingofPoissondistribution-Normaldistribution:Probabilitydistributionfunction,Propertiesofnormalcurve,Simpleproblems.	**3hrs**	**26.10.23 to 31.10.23**	**Lecture, Discussion & problem solving**

Module IV CorrelationandRegressionAnalysis	**CorrelationAnalysis :**MeaningofCorrelation:-typesofcorrelation-Positiveandnegativecorrelation-simple,partial,andmultiplecorrelation.linearandNon-linearcorrelationandScatterdiagram	**2hrs**	**2.11.23, to 3.11.23**	**Lecture, Discussion & problem solving**
	Pearson'sco-efficientofCorrelation;Correlationand Probableerror	**3hrs**	**4.11.23 to 7.11.23**	**Lecture, Discussion & problem solving**
	Spearman'sRank Correlationco-efficient.-problems.	**2hrs**	**8.11.23 to 9.11.23**	**Lecture, Discussion & problem solving**
	RegressionAnalysis: meaninganddefinition-regressionlines,Regressionequationsandestimation;Propertiesofregressioncoefficients;	**3hrs**	**10.11.23 to 13.11.23**	**Lecture, Discussion & problem solving**
	Internal Test		**15.11.23 to 18.11.23**	
	Relationshipbetween Correlation andRegressioncoefficients-problems.	**2hrs**	**20.11.23 to 21.11.23**	**Lecture, Discussion & problem solving**
Module VIndex Numbers	Meaningandusesofindexnumbers;Constructionofindexnumbers	**2hrs**	**22.11.23 to 23.11.23**	**Lecture, Discussion & problem solving , Test marks displayed onthe notice board**

	Fisher'sidealindexnumberwithTimeReversalandFactorReversalTests	**3hrs**	**24.11.23 to 27.11.23**	**Lecture, Discussion & problem solving**
	ConstructionofconsumerpriceindicesUsing AggregativeExpendituremethodandFamily Budgetmethod.	**3hrs**	**28.11.23 to 2.12.23**	**Lecture, Discussion & problem solving**
Revision	Module 1 & 2	**3hrs**	**4.12.23 to 6.12.23**	**Lecture, Discussion & problem solving Assignment marks displayed on the notice board**
Revision	Module 3 & 4	**3hrs**	**8.12.23 to 10.12.23**	**Lecture, Discussion & problem solving**
Revision	Module 5 & 6	**3hrs**	**13.12.23 To 16.12.23**	**Lecture, Discussion & problem solving**

Time period: 11/09/2023 to 16/12/2023
Title of the paper: Business Statistics (DSC-223330)
Faculty name: Keerthi raj kamal B A
Hrs/Week: 4hrs **Total Hrs: 56**

Curriculum as prescribed by NEP	**Topics**	**No of Hours required**	**Date**	**Method of Deployment**
Module I Statistical Data and	Nature and Classificationof data:Univariate,bivariateand multivariate data;	**2hrs**	**11.09.23 to 12.09.23**	CO's & PO's were discussed, Lecture, Discussion, PPT

Descriptive statistics (10hrs)	Measures of Central Tendency:Mathematical averages including arithmetic mean,Properties and applications.	**4hrs**	**13.09.23 to 16.09.23**	Lecture, Discussion & problem solving
	Positional Averages-Modeand Median(including graphic determination).	**4hrs**	**19.09.23 to 22.09.23**	Lecture, Discussion & problem solving
Module II Measures of Variation: and Skewness (12hrs)	Measures of Variation:absolute and relative.Range,	**3hrs**	**23.09.23 to 26.09.23**	Lecture, Discussion & problem solving
	Quartile deviation ,mean deviation, standard deviation,and their coefficients,	**3hrs**	**27.09.23 to 30.09.23**	Lecture, Discussion & problem solving
	Properties of standard deviation/variance.	**3hrs**	**3.10.23 to 5.10.23**	Lecture, Discussion & problem solving
	Skewness: Meaning ,Measurement using Karl Pearson and Bowley's measures; concept of Kurtosis	**3hrs**	**6.10.23 to 9.10.23**	Lecture, Discussion & problem solving
Module III Probability	Theory of Probability. Approaches to the calculation of probability;	**2hrs**	**10.10.23 to 11.10.23**	Lecture, Discussion & problem solving
	Calculation of event Probabilities. Addition and multiplication	**3hrs**	**12.10.23 to 16.10.23**	Lecture, Discussion & problem solving
	Laws of probability(Proof not required);Conditionalprobability and Bayes' Theorem(Proof not required)-	**3hrs**	**17.10.23 to 19.10.23**	Lecture, Discussion & problem solving

Distributions (14hrs)	Expectation and variance ofa random variable-Probability distributions-Binomial distribution: Probability distribution function, Constants, Shape, Fitting of binomial distribution-Poisson distribution: Probability function,(including Poisson approximation to binomial distribution),Constants,	**3hrs**	**20.10.23 to 25.10.23**	Lecture, Discussion & problem solving
	Fitting of Poisson distribution-Normal distribution: Probability distribution function, Properties of normal curve ,Simple problems.	**3hrs**	**26.10.23 to 31.10.23**	Lecture, Discussion & problem solving
Module IV	**Correlation Analysis:**	**2hrs**	**2.11.23,**	Lecture,
Correlation and Regression Analysis	Meaning of Correlation:-types of correlation-Positive and negative correlation-simple,partial, and multiplecorrelation. linear and Non-linear correlation and Scatter diagram		**to 3.11.23**	Discussion & problem solving
	Pearson's co-efficient of Correlation; Correlationand Probable error	**3hrs**	**4.11.23 to 7.11.23**	Lecture, Discussion & problem solving
	Spearman's Rank Correlation co-efficient.-problems.	**2hrs**	**8.11.23 to 9.11.23**	Lecture, Discussion & problem solving
	Regression Analysis: meaning and definition-regression lines, Regression equations and estimation; Properties of regression coefficients;	**3hrs**	**10.11.23 to 13.11.23**	Lecture, Discussion & problem solving
	Internal Test		**15.11.23 to 18.11.23**	

	Relationship between Correlation and Regression coefficients-problems.	**2hrs**	**20.11.23 to 21.11.23**	Lecture, Discussion & problem solving
Module V Index Numbers	Meaning and uses of index numbers;Construction of index numbers	**2hrs**	**22.11.23 to 23.11.23**	Lecture, Discussion & problem solving , **Test marks displayed on the notice board**
	Fisher's ideal index number with Time Reversal and	**3hrs**	**24.11.23 to**	Lecture, Discussion &
	Factor Reversal Tests		**27.11.23**	problem solving
	Construction of consumerpriceindicesUsing AggregativeExpenditurethodandFamilyBudgetmethod.	**3hrs**	**28.11.23 to 2.12.23**	Lecture, Discussion & problem solving
Revision	Module 1 & 2	**3hrs**	**4.12.23 to 6.12.23**	Lecture, Discussion & problem solving **Assignment marks displayed on the notice board**
Revision	Module 3 & 4	**3hrs**	**8.12.23 to 10.12.23**	Lecture, Discussion & problem solving
Revision	Module 5 & 6	**3hrs**	**13.12.23 To 16.12.23**	Lecture, Discussion & problem solving

Title of the Paper :Cost Accounting
[Course Code – 223318]
Term Period : 11/09/2023 to 16/12/2023
Faculty Name : Shambhavi P Bhounsle (A & B)Total Hrs: 56Hours 4(Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
ModuleNo. Introduction of Cost Accounting 12 Hours	Introduction-Meaning anddefinition-Objectives, Importanceand Uses of CostAccounting,Differencebetween CostAccountingandFinancialAccounting;VariousElementsofCostandClassificationofCost	**2 hours**	11.09.23 to 15.09.23	**CO's and PO's were discussed** Lecture, Discussion &Problem Solving
	Costobject,Costunit,Costdriver,costcentre;CostreductionandCostcontrol; MethodsandTechniquesof Costing(Meanings Only);Use of Cost Accounting; Limitations of Cost Accounting	**3 hours**	16.09.23 to 22.09.23	Lecture, Discussion &ProblemSolving
	CostSheet:MeaningandCostheadsina CostSheet,PresentationofCostInformationinCostSheet	**3 hours**	23.09.23 to 26.09.23	Lecture, Discussion &ProblemSolving
	Problems on Cost Sheet, Tenders andQuotations.	**4hours**	27.09.23 to 30.09.23	Lecture, Discussion &ProblemSolving
Module No.3:Material Cost 12 Hours	Materials:Meaning,Importanceand TypesofMaterials-DirectandIndirectMaterialMaterialsmaterialcontrol.-InventoryControl	**2 hours**	3.10.23 to 6.10.23	Lecture, Discussion &ProblemSolving

	Technique of inventory control,problems on level setting and EOQ. Procurement-Procedureforprocurementofmaterial sanddocumentationinvolvedinmater ialsaccounting-MaterialStorage:DutiesofStorekeep er,pricingofmaterialissues,	**3 hours**	7.10.23 to 11.10.23	Lecture, Discussion &ProblemSolving
	Preparation of Stores LedgerAccount-FIFO,LIFO	**3 hours**	12.10.23 to 17.10.23	Lecture, Discussion &ProblemSolving
	preparationofStoresLedgerAccount-FIFO,LIFO,SimpleAveragePrice a ndWeightedAveragePriceMethods -Problems.	**4 hours**	18.10.23 to 21.10.23	Lecture, Discussion &Problem Solving
Module No.3:Employee Cost: 10Hours	Introduction-Employee Cost-types of laborcost-LaborCostControl-timekeepingandtimebookingandPayrollProcedure-PreparationofPayroll:IdleTime Ca usesandTreatmentofNormalandA bnormalIdletime,	**4 hours**	24.10.23 to 31.10.23	Lecture, Discussion &ProblemSolving
	Over Time Causes and Treatment-LaborTurnover-Meaning,ReasonsandEffectsof Laborturnover.Methods of Wage Payment :Time rates system and piece rate system	**2 hours**	1.11.23 to 4.11.23	Lecture, Discussion &ProblemSolving
	Incentive schemes- Halsey plan,Rowan plan and Taylor differential piece rate system-problems.	**4 hours**	6.11.23 to 10.11.23	Lecture, Discussion &Problem Solving
Module No.4:Overheds Cost: 12Hours	Introduction-MeaningandClassificationofOver heads;AccountingandControlofM anufacturingOverheads:Estimatio	**3 hours**	11.11.23 to 13.11.23	Lecture, Discussion &ProblemSolving

	nandCollection,CostAllocation,Apportionment,Re-apportionmentandAbsorptionofM anufacturingOverheads			
	Internal test		**15.11.23 to 18.11.23**	
	ProblemsonPrimaryandSecondary overheadsdistributionusingReciprocalServiceMethods(RepeatedDistributionMethodandSimultaneousEquationMethod);AbsorptionofOverheads	**3 hours**	21.11.23 to 24.11.23	Lecture, Discussion &ProblemSolving **23-11-23 Test marks displayed onnotice board**
	Meaning and Methods ofAbsorption of Overheads;	**2 hours**	25.11.23 to 28.11.23	Lecture, Discussion &Problem Solving
	ProblemsonMachineHourRate	**4hours**	29.11.23 to 6.12.23	Lecture, Discussion &Problem Solving
ModuleNo.5:ReconciliationofCostandFinancialAccouns: 10Hours	Introduction-meaningofreconciliation,Reasonsfordifferencesin Profitsunder FinancialandCostAccounts	**3 hours**	7.12.23 to 9.12.23	Lecture, Discussion &Problem Solving
	ProcedureforReconciliation-AscertainmentofProfitsasper FinancialAccountsand Cost Accounts	**3 hours**	11.12.23 to 13.11.23	Lecture, Discussion &Problem Solving
	Reconciliation of Profits ofbothsetsofAccounts-PreparationofReconciliationStatement-Problems.	**4hours**	14.12.23 to 16.11.23	Lecture, Discussion &ProblemSolving Two special class **Assignment Marks Displayed**

Title of the Paper; Corporate Accounting
[Course Code: : 223329}
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Mr. Sunil N (A& B)

Total Hrs: 56 Hours

Curriculu m as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit -1 UnderwritingofShares: (8 hours)	MeaningofUnderwriting-SEBIregulationsregardingunderwriting; Underwritingcommission.Underwriter-functions-AdvantagesofUnderwriting,Typesofunderwriting-MarkedandUnmarkedApplications.	4 hours	11-09-2023 to 14-09-23	Chalk and Black board Discussed course outcomes
	DeterminationofLiabilityinrespectofunderwritingcontract-whenfullyunderwrittenandpartiallyunderwritten-withandwithoutfirm underwriting problem.	4 hours	15-09-23 to 20-09-23	Chalk and Black board
Unit-II Profit Prior to Incorporation:(8 hours)	Introduction-Meaning-calculationofsalesratio-timeratio-weightedratio-treatmentofcapitalandrevenueexpenditure-	4 hours	21-09-23 to 25 -09-23	Chalk and Black board
	Ascertainmentofpre-incorporationandpost-incorporationprofitsbypreparingstatementofProfitandLossand	4 hours	26-09-23 to 29-09-23	Chalk and Black board
	BalanceSheetaspersc heduleIIIofcompaniesAct,2013.			

Valuation ofIntangi ble Assets10 hrs	Introduction-ValuationofGoodwill-factorsinfluencinggoodwill, circumstancesofvaluationofgoodwill--	3 hours	30-10-2023 To 4-10-23	Chalk and Black board
	MethodsofValuationofGoodwill: AverageProfitMethod, CapitalizationofaverageProfitMethod, SuperProfitMethod, CapitalizationofSuperProfitMethod,and AnnuityMethod-	4 hours	5-10-23 to 9--10-23	Chalk and Black board
	andAnnuityMethod-Problems.BrandvaluationandIntellectualPropertyRights(IPR).	3 hours	14-10-23 To 17-10-23	Chalk and Black board
Valuation ofShares(9 hrs)	Introduction-Meaning-NeedforValuation-FactorsAffectingValuation-MethodsofValuation:	2 hours	18-10-2023 To 21-10-23	15-11-2023 To 18-11-2023 C1 Internal Test was conducted
	IntrinsicValueMethod,FairValueofshares	3 hours	22-10-23 to 25-10-23	Lecture method

Faculty name: Keerthi raj kamal B A
Title of the Paper: ADVERTISING SKILLS
[Course Code – 22OECOM301]
Time period: 11/09/2023 to 16/12/2023

Hrs/wk: 3 hrs **Total Hrs: 45 Hours**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 Introduction: (10 Hours)	Communication process: advertising as a tool of communication:.	3 hours	11-09-2023 to 15-09-23	CO's & PO's were discussed, Lecture, Discussion, PPT
	: Meanin, nature and importance of advertising	3 hours	17-09-23 to 20-09-23	Lecture, Discussion

	Types of advertising advertising objectives Audience	3 hours	22-09-23 to 25 -09-23	Lecture, Discussion
	analysis setting of advertising budget Determinants and major methods.	3 hours	27-09-23 to 30-09-23	Lecture, Discussion
Unit 2 Media Decisions (07 Hours)	Major media types- their characteristics,	3hour	1-10-23 To 5-10-23	Lecture, Discussion
	internet as an advertising media, merits and demerits,	3 hours	7-10-23 To 12-10-23	Lecture, Discussion
	Factors influencing media choice; media selection, media scheduling advertising through the internet	3hour	13-10-23 To 17-10-23	Lecture, discussion
Unit 3 Message Development (8 Hours)	media devices.Advertising appeals, advertising copy and elements	3 hours	19-10-23 To 24-10-23	Lecture, Discussion,
	preparing ads for different media	3 hours	26-10-23 to 30-10-23	Lecture, Discussion**,**
Unit 4 Measuring Advertising	Evaluating communication and sales effects	3 hours	31-10-23 TO 04-11-23	Lecture, Discussion**,**

Effectiveness (10 Hours	pre- and testing techniques	3 hours	6-11-23 TO 13-11-23	Lecture, Discussion**,**
	C1 INTERNAL TEST		15-11-23 TO 18-11-23	
Unit 5 Advertising Agency (07 hours)	a) Advertising Agency	3 hours	20-11-23 TO 26-11-23	Lecture, Discussion**,** **Test marks displayed on the notice board**
	: Role&types	3 hours	27-11-23 TO 31-12-23	Lecture, Discussion**,**
	and selection of Advertising agency	3 hours	2-12-23 TO 8-12-23	Lecture, Discussion**,** **Assignment marks displayed on the notice board**
	b) Social, ethical and legal aspects of advertising in India	3 hours	10-12-23 TO 16-12-23	Lecture, Discussion**,**

Title of the Paper :Financial Education and Investment Awareness

[Course Code –22FEIS94**]**

Term Period :19/09/2023 to 12/12/2023Faculty Name :Ms Rekha B

Total Hrs: 45Hours (3Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Module 1- Foundations for Finance:	**Introduction to Basic Concepts:** Understand the need for financial planning – basic concepts – life goalsand financial goals – format of a sample financial plan for a young adult	**1 hr**	**19-9-23**	**Introduction Class Course Outcomes of the Units** Lecture Case analysis
	Economics: Meaning – scope – key concepts influencing decision makingboth micro & macro **Banking in India:** Types of Bank Deposits, Deposit Insurance (PMJDY). Traditional and New Banking Models. Debit and Credit Cards. Digital Payment System – Internet Banking (NEFT, RTGS and IMPS), Mobile Banking, Mobile Wallet, AEPS, UPI.	**2 hrs**	20-9-23 26-9-23	Lecture & Practical's
	Orientation to Financial Statements: financial terms and concepts, model for reading financialstatements, basic ratios for evaluatingcompanies while investing – Time Value of Money – Concept of Compounding and Discounting	**1 hr**	**4-10-23**	Lecture & Practical's
Module 2 Investment	**Investment Goals:**Basic investment objectives – Investment goals – time	**4 hrs**	**10-10-23 to**	Lecture &Practicles

Goals	frame – assessing risk profile – concept of diversification – risk measurement tools **Investment and Saving Alternativesfor a Common Investor:** Insurance –Health, Life and Other General Insurance (Vehicle Insurance, Property Insurance, etc), Retirement and Pension Plans – National PensionSystem, Atal Pension Yojana, PM-SYM Yojana, PMLVMY PMKMDY etc., Stocks, Bonds, Mutual Funds. Investor Protection and Grievance Redressal		14-10-23	
	Stock Markets: Primary Market and Secondary Market, Stock Exchanges, Stock Exchange Operations – Tradingand Settlement, Demat Account, Depository and Depository Participants.	**2 hrs**	3-11-23, 7-11-23	Lecture & Practical' s
	Stock Selection: Fundamental Analysis – Economy Analysis, Industry Analysis and Company Analysis. Technical Analysis – Graphical Patterns, Candle-stick Patterns, Indicators and Oscillators. **Stock Return and Risk:** Analysing risk and returns trade offrelationship-investment risk.	**2 hrs**	**21-11-23, 27-11-23**	Lecture & Practical' s
Module: 3 Mutual FundsAnd Financial Planning Essentials	**Mutual Funds:** Features of Mutual Funds, Mutual Fund History in India,Major Fund Houses in India and Mutual Fund Schemes. Types of Mutual Fund Plans. Net Asset Value	**1 hr**	**2-12-23**	Lecture &Practicle s
	Criteria for selection of Mutual Funds: Returns, Performance Measures – Sharpe, Treynor, Alpha,Beta and r2	**1 hr**	**5-12-23**	Lecture & Practical' s
	Financial Planning: Sample formats – Integrating all the concepts learnt	**1 hr**	**12-12-23**	Presentations **Assisgnment**

	with a personal financial plan. **Giving and supporting:** Family support – charitable giving – crowdsourcing for needs.			**marks displayed andtook the signature of students**

Title of the Paper :Financial Education and Investment Awareness
[Course Code –22FEIS94]
Term Period :19/09/2023 to 12/12/2023
Faculty Name :Sri Siddappa R
Total Hrs: 45Hours (3Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Module 1-Foundations for Finance:	**Introduction to Basic Concepts:** Understand the need for financial planning – basic concepts – life goalsand financial goals – format of a sample financial plan for a young adult	**1 hr**	**19-9-23**	**IntroductionClass Course Outcomes ofthe Units** Lecture Case analysisw
	Economics: Meaning – scope – key concepts influencing decision makingboth micro & macro **Banking in India:** Types of Bank Deposits, Deposit Insurance (PMJDY). Traditional and New Banking Models. Debit and Credit Cards. Digital Payment System – Internet Banking (NEFT, RTGS andIMPS), Mobile Banking, Mobile Wallet, AEPS, UPI.	**2 hrs**	20-9-23 26-9-23	Lecture & Practical's
	Orientation to Financial Statements: financial terms and concepts, model for reading financialstatements, basic ratios for evaluatingcompanies while investing – Time Value of Money – Concept of Compounding and Discounting	**1 hr**	**4-10-23**	Lecture & Practical's
Module 2 Investment Goals	**Investment Goals:**Basic investment objectives – Investment goals – timeframe – assessing risk profile – concept of diversification – risk	**4 hrs**	**10-10-23 to** 14-10-23	Lecture &Practicles

	measurement tools **Investment and Saving Alternativesfor a Common Investor:** Insurance –Health, Life and Other General Insurance (Vehicle Insurance, Property Insurance, etc), Retirement and Pension Plans – National PensionSystem, Atal Pension Yojana, PM-SYM Yojana, PMLVMY PMKMDY etc., Stocks, Bonds, Mutual Funds. Investor Protection and Grievance Redressal			
	Stock Markets: Primary Market and Secondary Market, Stock Exchanges, Stock Exchange Operations – Tradingand Settlement, Demat Account, Depository and Depository Participants.	**2 hrs**	3-11-23, 7-11-23	Lecture & Practical's
	Stock Selection: Fundamental Analysis – Economy Analysis, Industry Analysis and Company Analysis. Technical Analysis – Graphical Patterns, Candle-stick Patterns, Indicators and Oscillators. **Stock Return and Risk:** Analysing risk and returns trade offrelationship-investment risk.	**2 hrs**	**21-11-23, 27-11-23**	Lecture & Practical's
Module: 3 Mutual FundsAnd Financial Planning Essentials	**Mutual Funds:** Features of Mutual Funds, Mutual Fund History in India,Major Fund Houses in India and Mutual Fund Schemes. Types of Mutual Fund Plans. Net Asset Value	**1 hr**	**2-12-23**	Lecture &Practicles
	Criteria for selection of Mutual Funds: Returns, Performance Measures – Sharpe, Treynor, Alpha, Beta and r2	**1 hr**	**5-12-23**	Lecture & Practical's
	Financial Planning: Sample formats – Integrating all the concepts learntwith a personal financial plan. **Giving and supporting:** Family support – charitable giving – crowdsourcing for needs.	**1 hr**	**12-12-23**	Presentations **Assignment marks displayed andtook the signature of students**

Title of the Paper :Financial Management
[Course Code – 243516]
Term Period :11/09/2023 to 16/12/2023
Faculty Name :Vasagi S
Total Hrs: 64Hours (4Hrs/Week) Section A&B
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Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Module 1: Introduction to Financial Management (15 Hrs)	Introduction –Meaning of Finance, Finance Function, Objectives of Finance function, Organization of Finance function	4 hours	11.09.23 to 13.09.23	**IntroductionClass Course Outcomes ofthe Units** Lecture, Discussion, PPT
	Meaning and definition of Financial Management, Goals of Financial Management	3 hours	14.09.23 to 16.09.23	Lecture, Discussion, PPT
	Scope of Financial Management, Functions of Financial Management, Role of Finance Manager in India.	3 hours	19.09.23 to 22.09.23	Lecture, Discussion, PPT
	Financial planning-Meaning, Need, Importance	3 hours	23.09.23 to 25.09.23	Lecture, Discussion, PPT
	Steps in financial Planning Principles of a sound financial plan and Factors affecting financial plan	2 hours	26.09.23 to 30.09.23	Lecture, Discussion, PPT
Module 2: Time Value of Money (10 hours)	Introduction – Meaning of time value of money-time preference of money -	2 hours	03.10.23 to 04.10.23	Lecture, Discussion, PPT
	Techniques of time value of money: Compounding Technique-Future value of Single flow, Multiple flow and Annuity	4 hours	05.10.23 to 10.10.23	Lecture, Discussion &Problem Solving
	Discounting Technique-Present value of Single flow, Multiple flow – and Annuity. Doubling Period- Rule 69 and 72.	4 hours	11.10.23 to 16.10.23	Lecture, Discussion &Problem Solving
Module No. 3:	Introduction-Meaning and Definition of Capital Structure, Factors determining the Capital Structure, sources of finance	4 hours	17.10.23 to 20.10.23	Lecture, Discussion, PPT
	Concept of Optimum Capital Structure, EBIT-EPS Analysis-	3 hours	21.10.23 to 26.10.23	Lecture, Discussion &Problem Solving

Financing Decision (14 hours)	Problems.	2 hours	27.10.23 to 31.10.23	Lecture, Discussion &Problem Solving **23-11-23 Test marks displayed on notice board**
	Leverages: Meaning and Definition, Types of Leverages	2 hours	02.10.23 to 03.10.23	Lecture, Discussion, PPT`
	Operating `Leverage, Financial Leverage and Combined Leverages. Problems	3 hours	04.10.23 to 07.10.23	Lecture, Discussion &Problem Solving
Module No. 4: Investment Decision (12 hours)	Introduction-Meaning and Definition of Capital	2 hours	08.11.23 to 09.11.23	Lecture, Discussion, PPT
	B Capital Budgeting Process. Features, Significance – Steps in Capital Budgeting Process	2 hours	11.11.23 to 13.11.23	Lecture, Discussion, PPT
	Internal test		Test - 15.11.23 to 18.11.23	
	Techniques of Capital budgeting: Traditional Methods – Pay Back Period, Net Present Value Internal Rate of Return and Profitability Index, Problems	2 hours	20.11.23 to 21.11.23	Lecture &Problem Solving
	Accounting Rate of Return – DCF Methods:	3 hours	22.11.23 to 24.11.23	Lecture &Problem Solving **23-11-23 Test marks displayed onnotice board**
	Net Present Value Internal Rate of Return and Profitability Index, Problems	3 hours	25.11.23 to 28.11.23	Lecture &Problem Solving
Module 5: Working Capital Management	Introduction- Meaning and Definition, types of working capital, Operating cycle, Determinants of working capital needs	4 hours	29.11.23 to 04.12.23	Lecture, Discussion, PPT
	Estimation of working capital requirements. Dangers of excess and inadequate working capital,	3 hours	05.12.23 to 08.12.23	Lecture, Discussion &Problem Solving

(12 hours)	Merits of adequate working capital, Sources ofworkingcapital.`	**3 hours**	25.11.23 to 28.11.23	Lecture, Discussion &Problem Solving
	Cash Management, Receivable Management, and Inventory Management (Concepts only).	2 hours	14.12.23 to 16.12.23	Lecture, Discussion, PPT**Assisgn ment marks displayed andtook the signature of students**

Title of the Paper :Income Tax Law and Practice-I
[Course Code: 243517]
Term Period :11/09/2023 to 16/12/2023
Faculty Name :Shambhavi P Bhounsle Total Hrs: 64Hours 4(Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Module No. 1: Basic Concepts of Income Tax 12hours	Introduction –Meaning of tax-, types of taxes, cannons of taxation. Brief history of Indian Income Tax, legal framework of taxation,	4 hours	11-09-23 to 14-09-23	**CO's and PO's were discussed** Lecture, Discussion &Problem Solving
	Important definitions, assessment, assessment year, previous year including exceptions, assesses, person, income, casual income, Gross total income,	2hours	15-09-23 to 18-09-23	Lecture, Discussion &Problem Solving
	Total income, Agricultural income, scheme of taxation.	3 hours	20-09-23 to 23-09-23	Lecture, Discussion &Problem Solving
	– Exempted incomes of an individual under section 10..	3 hours	25-09-23 to 28-09-23	Lecture, Discussion &Problem Solving
Module No. 2: Residentia l Status and Incidence of Tax 10 hours	Introduction – Residential status of an individual. Determination of residential status of an individual.	3 hours	29-09-23 to 4-10-23	Lecture, Discussion &Problem Solving
	Incidence of tax or Scope of Total income..	3hours	5-10-23 to 09-10-23	Lecture, Discussion &Problem Solving

	Problems on computation of Gross total Income of an individual	4hours	10-10-23 to 16-10-23	Lecture, Discussion &Problem Solving
Module No. 3: Income from Salary 18 hours	Introduction - Meaning of Salary - Basis of charge	3 hours	17-10-23 To 21-10-23	Lecture, Discussion &Problem Solving
	Definitions –Salary, Perquisites and profits in lieu of salary -	4hours	25-10-2023 To 28-10-23	Lecture, Discussion &Problem Solving
	Provident Fund –Transferred	3 hours	30-10-3	Lecture, Discussion
	balance. - Retirement Benefits –		To 3-11-23	&Problem Solving
	Gratuity, pension and Leave salary-	4hours	4-11-23 To 9-11-23	Lecture, Discussion &Problem Solving
	Deductions and Problems on Computation of Taxable Salary.	4 hours	10-11-23 To 14-11-23	Lecture, Discussion &Problem Solving
Module No. 4: Income from House Property 10 hours	**Internal test**		**15.11.23 to 18.11.23**	
	Introduction - Basis for charge - Deemed owners -House property incomes exempt from tax, composite rent and unrealized rent ,Annual Value –	4 hours	20-11-23 To 25-11-23	Lecture, Discussion &Problem Solving**23-11-23 Test marks displayed on noticeboard**
	Determination of Annual Value	2 hours	26-11-23 To 27-11-23	Lecture, Discussion &Problem Solving
	Deductions from Annual Value - Problems on Computation of Income from House Property.	4 hours	28-11-23 To 3-12-23	Lecture, Discussion &Problem Solving
Module No. 5: Capital Gains 10 hours	Introduction - Basis for charge - Capital Assets - Types of capital assets – Transfer -	3 hours	4-12-23 To 9-12-23	Lecture, Discussion &Problem Solving
	Short term capital gain and Long term capital gain above sections.	4 hours	10-12-23 To 15-12-23	Lecture, Discussion &Problem

				Solving
	Exemption under section 54, 54B, 54EC, 54D, 54F, and 54G	3 hours	15-12-23 To 16-12-23	Lecture, Discussion &Problem Solving**AssignmentMarks Displayed and took the signature from students**
	Problems covering the Computation of capital gains –	4hours	Special Class	Chalk and Black board

Department: Commerce
Title of the Paper :Income tax law and practice-I[
Course Code: 243517]Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Mr. Sunil N (B Section)

Total Hrs: 64 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Module No. 1: Basic Concepts of Income Tax 12 HOURS	Introduction –Meaning of tax-, types of taxes, cannons of taxation. Brief history of Indian Income Tax, legal framework of taxation,	4 hours	11-09-2023 to 14-09-23	Chalk and Black board Discussed course outcomes
	Important definitions, assessment, assessment year, previous year including exceptions, assesses, person, income, casual income, Gross total income, Total income, Agricultural income, scheme of taxation.	4 hours	16-09-23 to 19-09-23	Chalk and Black board
	– Exempted incomes of an individual under section 10..	4 hours	19-09-23 to 24-09-23	Chalk and Black board
Module No. 2: Residential Status and Incidence of Tax 10	Introduction – Residential status of an individual. Determination of residential status of an individual.	3 hours	25-09-23 to 28 -09-23	Chalk and Black board
	Incidence of tax or Scope of Total income..	4 hours	30-09-23 to 09-10-23	Chalk and Black board
	Problems on computation of Gross total Income of an individual	3 hours	10-10-23 to 13-10-23	Chalk and Black board
Module No. 3: Income from Salary 18 hours	Introduction - Meaning of Salary - Basis of charge Definitions–Salary, Perquisites and profits in lieu of salary -	3 hours	14-10-2023 To 17-10-	Chalk and Black board

			23	
	Provident Fund –Transferred balance. - Retirement Benefits –-	4 hours	17-10-23 to 21--10-23	Chalk and Black board
	Gratuity, pension and Leave salary-	4 hours	23-10-23 to 27-10-23	Chalk and Black board
	Deductions and Computation of Problems on Taxable Salary.	4 hours	28-10-23 To 3-11-23	Chalk and Black board

Title of the Paper :GST-Law & Practice (voc)
[Course Code – 243524]
Term Period :11/09/2023 to 16/12/2023
Faculty Name :Shambhavi P Bhounsle
Total Hrs: 42Hours 3(Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
ModuleNo. 1: Introduction to GST 8Hours	Introduction-Meaning and Definition of GST, Objectives, Features, Advantages and Disadvantages of GST,. Act,2017-	**3 hours**	11.09.23 to 15.09.23	**CO's and PO's were discussed** Lecture, Discussion &Problem Solving
	Taxes subsumed under GST, Structure of GST (Dual Model) - CGST, SGST and IGST	**2 hours**	16.09.23 to 22.09.23	Lecture, Discussion &Problem Solving
	GST Council, Composition, Powers and Functions. CGST Important definitions.	**3hours**	23.09.23 to 27.09.23	Lecture, Discussion &Problem Solving
ModuleNo. 2: GST Registration and Taxable Event 8Hours	Registration under GST provision and process. Amendment and cancellation of registration	**3 hours**	29.09.23 to 6.10.23	Lecture, Discussion &Problem Solving

	- composite supply, Mixed supply. Determination of time and place of supply of goods and services.	**2 hours**	7.10.23 to 12.10.23	Lecture, Discussion, PPT
	Levy and collection of tax. List of exempted goods and services- Problems.	**3 hours**	13.10.23 to 19.10.23	Lecture, Discussion &Problem Solving
ModuleNo. 3: Input Tax Credit 8Hours	Input Tax Credit Eligible and Ineligible Input Tax Credit; Apportionments of Credit and Blocked Credits; Tax Credit in respect of Capital Goods;	**2 hours**	20.10.23 to 25.10.23	Lecture, Discussion &Problem Solving
	Recovery of Excess Tax Credit; Availability of Tax Credit in special circumstances; Transfer of Input tax	**2 hours**	26.10.23 to 31.10.23	Lecture, Discussion &Problem Solving
	ReverseCharge Mechanism, tax invoice, Problems on input tax credit.	**2 hours**	2.11.23 to 7..11.23	Lecture, Discussion, PPT
Module No. 4 : GST Assessment 12Hours	Tax Invoice, Credit and Debit Notes, Returns, Audit in GST,	**2hours**	8.11.23 to 13.11.23	Lecture, Discussion &Problem Solving
	INTERNAL TEST		**15.11.23 to 18.11.23**	
	Assessment: Self- Assessment, Summary and Scrutiny. Special Provisions.	**6 hours**	20.11.23 to 23.11.23	Lecture, Discussion &Problem Solving**23-11-23 Tes tmarks displayed on notice board**
	Taxability of E-Commerce, Anti-Profiteering, Avoidance of dual control-issues in filing of returns, monthly collection targets, GST Council meetings.	**6hours**	24.11.23 to 6.12.23	Lecture, Discussion &Problem Solving
Module No. 5: Valuations of Goods and Services Under GST 9Hours	Introduction to Valuation under GST, Meaning and Types of Consideration: a) Consideration received through money b) Consideration not received in money c) Consideration received fully in money,	**2 hours**	7.12.23 to 9.12.23	Lecture, Discussion &Problem Solving
	valuation rules for supply of goods and services: 1) General Valuation Rules; 2) Special	**3hours**	11.12.23 to 13.12.23	Lecture, Discussion &Problem
	Valuation Rules; Other cases for valuation of supply, imported services, imported goods, valuation for discount.			Solving

	Transaction Value: Meaning and conditions for transaction value, inclusive transaction value, and exclusive discount excluded from transaction value. Problems on GST.	**4hours**	13.12.23 to 16.12.23	Lecture, Discussion &Problem Solving One special class was taken **Assignment Marks Displayed and took the signature from students**

Title of the Paper :GST-Law & Practice (voc)
[Course Code – 243524]Term Period :11/09/2023 to 16/12/2023
Faculty Name : Keerthi raj kamal B A
Total Hrs: 42Hours 2(Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
ModuleNo. 1: Introduction to GST 8Hours	Introduction-Meaning and Definition of GST, Objectives, Features, Advantages and Disadvantages of GST,. Act,2017-	**3 hours**	11.09.23 to 15.09.23	**CO's and PO's were discussed** Lecture, Discussion &Problem Solving
	Taxes subsumed under GST, Structure of GST (Dual Model) - CGST, SGST and IGST	**2 hours**	16.09.23 to 22.09.23	Lecture, Discussion &Problem Solving
	GST Council, Composition, Powers and Functions. CGST Important definitions.	**3hours**	23.09.23 to 27.09.23	Lecture, Discussion &Problem Solving
		3 hours		Lecture, Discussion &Problem Solving
		2 hours	7.10.23 to 12.10.23	Lecture, Discussion, PPT
		3 hours	13.10.23 to 19.10.23	Lecture, Discussion &Problem Solving

ModuleNo. 3: Input Tax Credit 8Hours	Input Tax Credit Eligible and Ineligible Input Tax Credit;	**2 hours**	29.09.23 to 6.10.23	Lecture, Discussion &Problem Solving
	Recovery of Excess Tax Credit; Availability of Tax Credit in special circumstances; Transfer of Input tax	**2 hours**	10.10.23 to 18.10.23	Lecture, Discussion &Problem Solving
	ReverseCharge Mechanism, tax invoice, Problems on input tax credit.	**2 hours**	20.10.23 to 27.10.23	Lecture, Discussion, PPT
Module No. 4 : GST Assessment 12Hours	Tax Invoice, Credit and Debit Notes, Returns, Audit in GST,	**2hours**	31.10.23 to 08.11.23	Lecture, Discussion &Problem Solving
	Apportionments of Credit and Blocked Credits; Tax Credit in respect of Capital Goods;	**2 hours**	9.11.23 To 14.11.23	Lecture, Discussion &Problem Solving
	INTERNAL TEST		**15.11.23 to 18.11.23**	
	Assessment: Self- Assessment, Summary and Scrutiny. Special Provisions.	**6 hours**	20.11.23 to 23.11.23	Lecture, Discussion &Problem Solving**23-11-23 Tes tmarks displayed on notice board**
	Taxability of E-Commerce, Anti-Profiteering, Avoidance of dual control-issues in filing of returns, monthly collection targets, GST Council meetings.	**6hours**	24.11.23 to 6.12.23	Lecture, Discussion &Problem Solving
Module No. 5: Valuations of Goods and Services Under GST 9Hours	Introduction to Valuation under GST, Meaning and Types of Consideration: a) Consideration received through money b) Consideration not received in money c) Consideration received fully in money,	**2 hours**	7.12.23 to 9.12.23	Lecture, Discussion &Problem Solving
	valuation rules for supply of goods and services: 1) General Valuation Rules; 2) Special Valuation Rules; Other cases for valuation of supply, imported services, imported goods, valuation for discount.	**3hours**	11.12.23 to 13.12.23	Lecture, Discussion &Problem Solving

	Transaction Value: Meaning and conditions for transaction value, inclusive transaction value, and exclusive discount excluded from transaction value. Problems on GST.	**4hours**	13.12.23 to 16.12.23	Lecture, Discussion &Problem Solving One special class was taken **Assignment**
				Marks Displayed and took the signature from students

Title of the Paper :GST-Law & Practice (voc)
[Course Code – 243524]
Term Period :11/09/2023 to 16/12/2023
Faculty Name :Shambhavi P Bhounsle
Total Hrs: 42Hours 1(Hrs/Week)

Module No. 2: GST Registration and Taxable Event 8Hours	Registration under GST provision and process. Amendment and cancellation of registration	**3 hours**	16.09.23 23.09.23 30.09.23 7.10.23 14.10.23	Lecture, Discussion &Problem Solving
	composite supply, Mixed supply. Determination of time and place of supply of goods and services.	**2 hours**	21.10.23 28.10.23 4.11.23 11.11.23 18.11.23	Lecture, Discussion, PPT
	Levy and collection of tax. List of exempted goods and services- Problems.	**3 hours**	25.11.23 2.12.23 12.12.23 9.12.23 16.12.23	Lecture, Discussion &Problem Solving

Title of the Paper :Financial Institutions And Markets
[Course Code – 243520]
Term Period :11/09/2023 to 16/12/2023
Faculty Name :Ms Rekha B
Total Hrs: 42 Hours
(3Hrs/Week)

Curriculum as prescribed by theInstitution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Module**No.1:Financial** System**inIndia a** (8 hours)	Introduction — Meaning — Financial concepts - Constituents of financial system	3 hours	11-09-2023 to 13-09-23	**Introduction class Course Outcomes of the Units** Class room teaching
	Structure offinancial system — Role of financial system- Functions of financial systemFunctions of financial system — Developmentoffinancialsyste minIndiatilldate	3 hours	19-09-23 to 21-09-23	Chalk and Black board
	-Financialsectorreforms Financial SystemandEconomicdevelopment— WeaknessofIndianfinancialsystem	2 hours	25-9-23 to 26-9-23	Chalk and Black board
Module No 2 : CapitalMarket&MoneyMarket: 8 hours	Introduction - Capital Market:Introduction- Meaning — Importance— Functions— Players inthe capital market	2 hours	27-9-23 to 3 -10-23	Chalk and Black board
	. — Instruments of capital Market — Components of capital Market — RecenttrendsinCapitalMarke t.	3 hours	4-10-23 to 9-10-23	Chalk and Black board
	MoneyMarket:Introduction-Meaning-Importance— Functions— Instrumentofmoneymarket RecenttrendsinMoney	3 hours	10-10-23 to 16-10-23	Chalk and Black board
ModuleNo.3:PrimaryMarket&Secondary Mar k et 10 hours	Introduction - Primary Market/New Issu eMarket: Introduction — Meaning — Methods offloating new issues: Public issue—Offer for sale —	3 hours	17-10-23 To 25-10-23	Chalk and Black board

	Right Issue -Private placement — Problemsof Indian primary market; Secondary Market: Introduction — Meaning — History — Methods inStockMarkets	3 hours	26-10-23 To 2-11-23	Chalk and Black board
	- Recognitionofstockexchanges— Functionofstockexchange sofBSE-NSE — OTCI — Listing ofsecurities — trading & settlementprocedure inthestock market	3 hours	3-11-23 to 7-11-23	Chalk and Black board
	ProblemsofIndianStock Market;SEBI:History— objectives-	1 hour	8-11-23	Chalk and Black board
Module No 4 Banking&Developm e ntFinancialInstitutio ns 10 hours	Introduction - Banking: Introduction — Meaning — Role and functions — Types of Banks;SFCs	3 hours	13-11-23 to 21-11-23	**Test marks were displayed onthe college Notice Board**Chalk and Black board
	Development Financial Institutions:Introduction — History — Management - Role & FunctionsofEXIMBank	3 hours	22-11-23 To 2-12-23	Chalk and Black board
	NABARDSIDBI— MUDRA— NHB— LIC&GIC-UTI— SFCs	4hours	4-12-23 To 7-12-23	Chalk and Black board
Module NO 5 Non Banking Financial Companies(NBFCs) and FOREX Market 6 hours	Introduction — Meaning- Role — Importance — Types of NBFCs — Insurance Companies - LoanCompanies -Invcstment Companies —	2 hours	8-12-23 to 9-12-23	Chalk and Black board
	Leasing & Hire Purchase -	2 hours	11-12-23	Chalk and
	Housing Finance — ChitFvinds - Mutual funds -VentureCapital Funds - Factors & Forfeiting- CreditRating -Depository and		to 12-12-23	Black board

	Custodial Seirices			
	Forex market- Concept- Meaning- Importance- Merits offorexmarket- Fluctuationsinforeignexchange*rates*-Causesand Effects	2 hours	13-12-23 to 14-12-23	**Assisgnment marks displayed and took the signature of students**Chalkand Black board

Department :Commerce
Title of the Paper :RETAIL MANAGEMENT (243521)
Term Period :11/09/2023 to 16/12/2023
Faculty Name :Ms Rekha B
Total Hrs: 42 Hours (3Hrs/Week) (1 Hour Sharing is 14 hours)

Module IV Retail Pricing 6 hrs	Introduction– MeaningofRetailPricing-	**2hrs**	**13-11-24 14-11-24**	**Test marks were displayed on the college Notice BoardLecture Case analysis Industry Examples**
	Internal test		**15-11-24 18-11-24**	
	Factorsinfluencingretailpricing	**2hrs**	**21-11-24 25-11-24**	**Lecture Case analysis Industry Examples skill development**
	Retailpricingstrategies.	**2hrs**	**1-12-24 2-12-24**	**Lecture Case analysis Industry Examples**
Module V EmergingtrendsinRetailIndustry 10 hrs	Artificial intelligence in retailing – Shopping with AR -	**2hrs**	**4-12-24 5-12-24**	**Lecture Case analysis Industry Examples**
	Hyperlocal in retailing - Productcustomization - Visual search – Omnichannel experiences -	**3hrs**	**6-12-24 7-11-24 11-12-24**	**Lecture Case analysis Industry Examples skill development**
	Pop-up shops -Same-daydelivery -Social shopping -Private label brands -	**2hrs**	**12-12-24 13-12-24**	**Lecture Case analysis Industry Examples**
	Ethical and value-based brands -GoogleShopping.	**3hrs**	**14-12-24 15-12-24 16 -12-24**	**Assisgnment marks displayed and took the signature of**

				studentsLecture Case analysis Industry Examples

Title of the Paper : HUMAN RESOURCE DEVELOPMENT
[Course Code – 243522
Time period: 11/09/2023 to 16/12/2023
Faculty name: Keerthi raj kamal B A
Hrs/wk: 3 **Total Hrs: 45 Hours**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Introduction to HRD (08 hours)	HRD- evolution of HRD- relationship with HRM- HRD functions- roles and competencies of HRD Professionals-	3 hours	11-09-2023 to 13-09-23	CO's & PO's were discussed, Lecture, Discussion, PPT
	Challenges to organization & HRD professionals Employee Behaviour- External and Internal influence.	3 hours	14-09-23 to 16-09-23	Lecture, Discussion,
	Motivation as Internal influence Learning and HRD- Learning strategies and styles	2 hours	19-09-23 to 21-09-23	Lecture, Discussion,
Framework of HRD (10 hours)	Framework of HRD- HRD processes- Assessing HRD needs	2 hours	22-09-23 to 25 -09-23	Lecture, Discussion,
	HRD model- Designing effective HRD program-	2hours	26-09-23 to 29-09-23	Lecture, Discussion,
	- HRD Interventions- Creating HRD Programs - Implementing HRD programs - Training Methods - Self Paced/Computer Based/ Company	2 hours	30-10-23 to 01-11-23	Lecture, Discussion,
	Sponsored Training - On-the-Job and Off-the-Job - Brain Storming - Case studies- role plays- simulations- T Groups- transaction analysis	4 hours	02-11-23 to 06-11-23	Lecture, Discussion,
Module No. 3**: Evaluating HRD Programs (**08 hours)	Introduction-Evaluating HRD programs - Models and Frame Work of Evaluation	2 hour	07-11-23 To 10-11-23	Lecture, Discussion,
	Assessing the Impact of HRD Programs - Human Resource	2 hour	11.11.23 To 12.11.23	Lecture, Discussion,
	Development Applications- Fundamental Concepts of Socialization - Realistic Job Review	2 hour	13.11.23 To 14.11.23	Lecture, Discussion,

	C1 INTERNALS TEST		15-11-23 TO 18-11-23	
	Career Management and Development.	2 hour	19-11-2023 To 20-11-23	Lecture, Discussion,
Module No. 4: Management Development: (09 hours)	Introduction - Management Development - Employee counselling and wellness services	3 hours	21-11-23 to 26-11-23	Lecture, Discussion, **Test marks displayed on the notice board**
	Counselling as an HRD Activity- Counselling Programs -Issues in Employee Counselling	3 hours	27-11-23 To 29-11-23	Lecture, Discussion,
	- Employee Wellness and Health Promotion Programs - Organizational Strategies Based on Human Resources.	3 hours	01-12-23 To 04-12-23	Lecture, Discussion,
Module No. 5: HR Performance (10 hours)	Introduction -Work Force Reduction, Realignment and Retention	2 hours	05-12-23 To 07-12-23	Lecture, Discussion, **Assignment marks displayed on the notice board**
	HR Performance and Bench Marking - Impact of Globalization on HRD	3 hours	08-12-23 To 11-12-23	Lecture, Discussion,
	- Diversity of Work Force - HRD programs for diverse employees	3 hours	12-12-23 To 14-12-23	Lecture, Discussion,
	- Expatriate & Repatriate support and development.	2 hours	15-12-23 To 16-12-23	Lecture, Discussion,

Title of the Paper :Financial Accounting -II
[Course Code – 2132298
Term Period :12-2-2024 to 25-5-24
Faculty Name : Vasagi S
Total Hrs: 64 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**

Unit 1: Branch Accounts (15 Hrs)	Introduction, Meaning, Objectives of Branch Accounts	2 hours	12.02.24 to 16.02.24	**Introduction Class Course Outcomes of the Units Lecture Case analysis**
	Types of Branch Accounts, Dependent Branches -Features -Goods sent to Branch at Cost Price and Invoice Price	3 hours	17.02.24 to 20.02.24	Lecture, Discussion, PPT
	Preparation of Branch Account and other relevant Ledger Accounts in the books of Head Office (Debtor System Only)	3 hours	22.02.24 to 24.02.24	Lecture, Discussion &Problem Solving
	Preparation of Branch Account and other relevant Ledger Accounts in the books of Head Office (Debtor System Only)Problems	3 hours	26.02.24 to 28.02.24	Lecture, Discussion &Problem Solving
	Preparation of Branch Account and other relevant Ledger Accounts in the books of Head Office (Debtor System Only)Problems	2 hours	29.02.24 to 26.02.24	Lecture, Discussion &Problem Solving
	Preparation of Branch Account and other relevant Ledger Accounts in the books of Head Office (Debtor System Only)Problems	2 hours	29.02.24 to 02.02.24	Lecture, Discussion &Problem Solving
Unit 2: Departmental Accounts (10 Hours)	Introduction, Meaning, Objectives of Departmental Accounts	2 hours	06.03.24 to 11.03.24	Lecture, Discussion, PPT
	Basis of apportionment of Incomes and Expenses	2 hours	12.03.24 to 14.03.24	Lecture, Discussion, PPT
	Preparation of Trading, Profit and Loss Account under Columnar Method; Common Balance Sheet (Sole Trading Concern). problems	2 hours	15.03.24 to 16.03.24	Lecture, Discussion &Problem Solving
	Preparation of Trading, Profit and Loss Account under Columnar Method; Common Balance Sheet (Sole Trading Concern)Problems	2 hours	19.03.24 to 20.03.24	Lecture, Discussion &Problem Solving

	Preparation of Trading, Profit and Loss Account under Columnar Method; Common Balance Sheet (Sole Trading Concern) Problems	2 hours	22.03.24 to 23.03.24	Lecture, Discussion &Problem Solving
	Preparation of Trading, Profit and Loss Account under Columnar Method; Common Balance Sheet (Sole Trading Concern) Problems	2 hours	25.03.24 to 26.03.24	Lecture, Discussion &Problem Solving
Unit 3: Consignment Accounts (14 Hours)	Introduction; Meaning – Consignor, Consignee, Consignment, Transaction-Goods sent at Cost Price, Goods Sent at Invoice Price	2 hours	27.03.24 to 01.04.24	Lecture, Discussion, PPT
	Commission – Types of Commission; Treatment of Losses –Abnormal Losses; Valuation of Stock on Consignment-Creation of Stock Reserve	2 hours	02.04.24 to 04.04.24	Lecture, Discussion, PPT
	Problems on Consignment at Cost Price and Invoice Price	2 hours	05.04.24 to 06.04.24	Lecture, Discussion &Problem Solving
	Problems on Consignment at Cost Price and Invoice Price	3 hours	07.04.24 to 09.04.24	Lecture, Discussion &Problem Solving
	Problems on Consignment at Cost Price and Invoice Price	2 hours	10.04.24 to 11.04.24	Lecture, Discussion &Problem Solving
	Problems on Consignment at Cost Price and Invoice Price	3 hours	12.04.24 to 15.04.24	Lecture, Discussion &Problem Solving
	INTERNAL TEST		**16.04.24 to 20.04.24**	
Unit 4: Fire Insurance Claims (10 Hours)	Meaning of fire insurance – need – Loss of stock by fire	3 hours	08.04.24 to 10.04.24	Lecture, Discussion, PPT
	Steps involved in Computation of Fire Claims; Average Clause; Treatment of Abnormal Line Goods	3hours	22.04.24 to 24.04.24	Lecture, Discussion, PPT
	Problem on Computation of Fire Insurance Claims including Average Clause and Abnormal Line of Goods	4 hours	25.04.24 to 28.04.24	Lecture, Discussion &Problem Solving **27.04-23 Test marks displayed on notice board**

Unit 5: Final Accounts of Non-Profit Organization (15 Hours)	Recognition of Revenue and Capital Items;	2 hours	29.04.24 to 30.04.24	Lecture, Discussion, PPT
	Problem on Preparation of Receipts and Payments Accounts, Income and Expenditure Account and Balance-Sheet	3hours	02.05.24 to 06.05.24	Lecture, Discussion &Problem Solving
	Problem on Preparation of Receipts and Payments Accounts, Income and Expenditure Account and Balance-Sheet	4 hours	09.05.24 to 11.05.24	Lecture, Discussion &Problem Solving
	Problem on Preparation of Receipts and Payments Accounts, Income and Expenditure Account and Balance-Sheet	2 hours	14.05.24 to 15.05.24	Lecture, Discussion &Problem Solving
	Problem on Preparation of Receipts and Payments Accounts, Income and Expenditure Account and Balance-Sheet	4 hours	21.05.24 to 25.05.24	**Assisgnment marks displayed and took the signature of students**

Department : Commerce
Title of the Paper : Company Law [Course Code – 213230]Term
Period :11/09/2023 to 16/12/2023
Faculty Name :Ms. Rekha B Total
Hrs: 64 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Module: 1 Introduction to Company 13 hrs	Meaning and Definition — Features ofCompanies Act of 2013 — Types of Companies	4 hours	12-02-24 To 15-02-24	**Introduction Class Course Outcomes of the Units Lecture Case analysis**
	. Private Company - Public Company -Company Limited by Shares — Company Limited by Guarantee	4 hours	19-02-24 to 22-02-24	Chalk and Black board
	Private Company - Public Company -Company Limited by Shares	4hours	26-02-24 to 29-02-24	Chalk and Black board
	— Company Limited by Guarantee .	1 hour	04-03-24	Chalk and Black board
Module 2 Formation of	Steps involved in formation of a company Position and Functions of Promoters. Meaning and contents of Prospectus	4 hours	05-03-24 to 11 -03-24	Chalk and Black board
	Memorandum of Association Articles ofAssociation— Alteration	4hours	12-03-24 to 18-03-24	Chalk and Black board

Companies : (15 hours)	of MOA and AOA			
	Certificate of Commencement of Business — Formation of Global Companies	4hours	19-03-24 to 25-03-24	Chalk and Black board
	Features — Legal formalities	3 hours	26-03-24 to 28-03-24	Chalk and Black board
Module 3 Company Administration15 hours	Managerial Personnel — Managing director appointment, powers, Whole time Director — Independent Director Auditor's appointment:, Rights, Duties, Liabilities and Removal. (	4 hours	01-04-24 to 04-04-24	Chalk and Black board
	duties and responsibilities Whole timeDirector — Independent Director Auditor's appointment:	4 hours	08-04-24 to 13-04-24	Chalk and Black boardChalk and Black board
	. Qualification, duties and responsibilities — Company Secretary: Qualifications,Appointment	4 hours	15-04-24 to 24-04-24	**Test marks were displayed on the college Notice Board**Chalk and Black board
	Rights, Duties, Liabilities and Removal.	3 hours	25-04-24 to 28-04-24	Chalk and Black board
Module 4 Company Meetings 12 hours	Meaning — Types of company meetings — Importance —	4hours	30-04-24 To 04-05-24	Chalk and Black board
	Requisites of a valid meeting — Notice — Quorum — Resolutions	4 hours	06-05-24 To 09-05-24	Chalk and Black board
	Voting - Proxy — Role of a CompanySecretary in convening the meetings.	4 hours	11-05-24 To 15-05-24	Chalk and Black board
Module 5 Liquidation	UNIT — V Liquidation of Companies:Meaning, Modes of Liquidation,	3 hours	16-05-24 to 18-05-24	Chalk and Black board
	Consequence of Liquidation, Appointment of Official Liquidator	3 hours	20-05-24 To 22-05-24	Chalk and Black board

of Companies 9 hours	Duties and Responsibilities of Liquidator	3 hours	23-05-24 to 25-03-24	**Presentations Assignment marks displayed andtook the signature of students**

Department: Commerce
Title of the Paper : FINANCIAL LITERACY
Course Code – 21OECOM201
Term Period :12.02.2024 to 25.05.2024
Faculty name: Keerthi raj kamal B A
Hrs/wk : 3 hrs **Total Hrs: 45 Hours**

Curriculum as prescribed by theInstitution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit 1 Introduction :(16 Hours)	Financial literacy- Meaning and importance- components of Financialliteracy	4 hours	12-02-2024 to 16-09-24	CO's & PO's were discussed, Lecture, Discussion, PPT
	- financial institutions; Meaning, Banking and non Banking financialInstitutions	4 hours	17-02-24 to 23-02-24	Lecture, Discussion
	, post offices- Investment; Meaning,Differences between Investment Vs Gambling	4 hours	24-02-24 to 29-02-24	Lecture, Discussion
	- Risk and return- Principles of investment- Investment avenues-	2 hours	01-03-24 to 06-03-24	Lecture, Discussion
	Financial planning and Budgets, Family Budget, Business Budget andNational Budget, Budget deficit and surplus	2 hours	07-03-24 to 12-03-24	Lecture, Discussion
Unit 2 Banking (12 hours)	Meaning and types of Banks, Various services offered by banks, types ofbank deposit accounts	4 hours	13-03-24 to 19 -03-24	Lecture, Discussion
	formalities to open various types ofbank accounts, KYC norms	2hours	20-03-24 to 26-03-24	Lecture, Discussion
	various types of loans: short term,medium term and long term loans	2hours	27-03-24 to 05-04-24	Lecture, Discussion
	cashless banking, e- banking, ATM Debit cards, Credit cards,	2 hours	06-04-24 to 10-04-24	Lecture, Discussion
	Banking complaints.	2 hours	12-04-24 to 15-04-24	Lecture, Discussion

	C1 INTERNAL TEST		16.04.2024 to 20.04.2024	
Unit 3 Financial Services from Post office (09 Hours)	Post office savings schemes- savingsaccount- recurring deposit- term deposit- Monthly income scheme-	4 hour	22-04-24 TO 27-04-24	Lecture, Discussion, **Test marks was displayed on the notice board**
	KissanVikaspatra-NSC-PPF_senior citizen Savings scheme- Sukanya SamrudhiYojana account- India postpayments Bank- Money transfer- Money order.	5 hours	29-04-24 TO 09-05-24	Lecture, Discussion
Unit 4 Insurance services (11 Hours)	Life Insurance- life insurancepolicies- term insurance and endowment policies- pension policies- health insurance scheme-	4 hour	11-05-2024 TO 18-05-24	Lecture, Discussion
	ULIP- property insurance- general insurance- types, postal life insuranceschemes- housing loans-	4 hours	20-05-24 to 23-05-24	Lecture, Discussion
	institutions providing housing loans, Pradhanmantri awas yojana; Rural andurban.	3 hours	23-05-24 TO 25-05-24	Lecture, Discussion **Assignment marks was displayed onthe notice board**

Department : Commerce
Title of the Paper :Law and Practice of Banking
Course Code – 213231
Term Period :12-2-2024 to 25-5-24
Faculty Name :Nikil B R)
Total Hrs: 64Hours (4Hrs/Week) Section A&B

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours require dto complete**	**Date**	**Method of Deployment**
Unit 1: Introductionto Banking (16 Hours)	Origin and Evolution of banks - Meaningand definition of banking -,	3 hours	12.02.24 to 16.02.24	**Introduction Class Course Outcomes of the Units Lecture**

				Case analysis
	Classification of Banks – Commercial Bank,	3 hours	17.02.24 to 20.02.24	Lecture, Discussion, PPT
	Investment/Industrial Bank- Co-operative Bank - Land Development Bank - Exchangebank	3 hours	21.02.24 to 23.02.24	Lecture, Discussion PPT
	Central Bank -Saving Bank. Bankingsystem – Branch Banking, Unit Banking,	3 hours	21.02.24 to 23.02.24	Lecture, Discussion PPT
	Group Banking, Chain Banking, MixedBanking	2 hours	24.02.24 to 26.02.24	Lecture, Discussion PPT
	Narrow Banking, Universal Banking and offshore Banking	2 hours	29.02.24 to 05.02.24	Lecture, Discussion & PPT
Unit 2: Reserve Bankof India **(12 Hours)**	Constitution – Nationalisation – Management of RBI	3 hours	06.03.24 to 11.03.24	Lecture, Discussion, PPT
	INTERNAL TEST		**16.04.24 to 20.04.24**	
Unit 4: **Banker and Customer** **(12 Hours)**	Banker - Customer – the relationship between a banker	3 hours	22.04.24 to 24.04.24	Lecture, Discussion, PPT
	general relationship and special relationship.	3hours	25.04.24 to 29.04.24	Lecture, Discussion, PPT **27.04-23 Test marks displayed on notice board**
	Customer Cheque: – statutory obligation to honour cheques- bankers lien-	3 hours	30.04.24 to 03.05.24	Lecture, Discussion PPT
	right to charge compound interest.	3 hours	04.05.24 to 08.05.24	Lecture, Discussion PPT
Unit 5:	Meaning - traditional banking v/s E-banking- Electronic delivery channels- facets of E –banking– Mobile Banking – Inter Bank Mobile Payment Service (IMPS) – Virtual Currency	2 hours	09.05.24 to 11.05.24	Lecture, Discussion, PPT

E –Banking (10 Hours)	- E-banking transactions – Truncatedcheque and Electronic Cheque	3hours	13.05.24 to 16.05.24	Lecture, Discussion PPT
	Security Measures – Real Time Gross Settlement (RTGS) – National Electronic Fund Transfer (NEFT	2 hours	23.05.24 to 25.05.24	**Assisgnment marks displayed and took the signature of students**

Department: Commerce
Title of the Paper; Advanced Corporate Accounting [Course Code: 223429)Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Mr. Sunil N
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
ModuleNo.1:Re demptionofPreferenceShares (10 hours)	Meaning-legalprovisions-treatmentregardingpremiumonredemption-creationofCapitalRedemptionReserveAccount.	4 hours	12-02-2024 to 16-02-24	Chalk and Black board Course outcomes discussed
	Freshissueofshares-Arrangingforcashbalance forthepurposeofre demption-minimumnumberofshares tobeissuedforredemption	2 hours	17-02-24 to 19-02-24	Chalk and Black board
	Issueofbonus shares-preparationofBalance sheet(ScheduleIIItoCompaniesAct 2013)afterredemption	3 hours	20-02-24 to 23-02-24	Chalk and Black board

ModuleNo.2:Mergers andAcquisition of Companies: (16 hours)	MeaningofAmalgamationandAcquisition-TypesofAmalgamation-AmalgamationinthenatureofMerger-AmalgamationinthenatureofPurchase	4 hours	24-02-24 to 28-02-24	Chalk and Black board
	MethodsofCalculationofPurchaseConsideration(IndAS103),NetassetMethod-NetPaymentMethod, AccountingforAmalgamation(Problemsonpoolingofinterestmethodandpurchasemethod)-.	4 hours	29-02-24 to 5-03-24	Chalk and Black board
	JournalEntriesandLedgerAccountsintheBooksofTransferorCompanyandJournalEntriesinthebooksofTransfereeCompany-	4 hours	6-03-24 to 11-03-24	Chalk and Black board
	PreparationofBalance SheetafterMerger. (ScheduleIIItoCompaniesAct2013).	4hours	12-03-24 to 15-03-24	Chalk and Black board
Module No.3:Internal Reconstructionof Companies: 10 Hours	MeaningofCapitalReduction;ObjectivesofCapitalReduction;ProvisionsforReductionofShareCapitalunderCompaniesAct, 2013.FormsofReduction.AccountingforCapitalReduction	4 hours	16-03-2024 To 20-03-24	Chalk and white board
	ProblemsonpassingJournalEntries,preparation ofCapitalReductionAc count).	3 hours	25-03-24 to 30-03-24	Chalk and white board

	Balancesheetafterreduction(ScheduleIII toCompaniesAct2013	3hours	1-04-2024 to 4-04-24	Chalk and white board
Module No.4: Liquidation ofCompanies: **12 Hours**	MeaningofLiquidation, Process,ModesofWindingup-CompulsoryWindingup,VoluntaryWindingup andwindingupsubjectto SupervisionbyCourt.	4 hours	5-04-2024 To 12-04-24	Chalk and white board
	Orderofpaymentsin theeventofLiquidation.Liquidator'sStatementofAccount.Liquidator'sremuneration-	4 hours	13-04-24 to 23--04-24	16-04-24 To 20-04-24 CI was held
	Problemsonpreparatio nofLiquidator'sStatementofAccount.	4 hours	24-04-24 to 28-04-24	Chalk and white board
ModuleNo.5:RecentDevelopmentsin AccountingandAccountingstandards: 8 Hours	HumanResourceAccounting-EnvironmentalAccountingDiscloserasperGlobalReportingInitiative(GRI)Reportingofvariables-SocialResponsibilityAccounting	3 hours	29-04-2024 To 1-05-24	Chalk and white board
	IndianAccountingStandards-Meaning-Objectives-SignificanceofAccountingstandardsinIndia	2 hours	2-05-24 to 4--05-24	Chalk and white board
	ProcessofsettingAccountingStandardsinIndia-ListofIndianaccountingstandards.(INDAS). ICA vs NFRA	3 hours	6-05-24 to	Chalk and white board

			9-05-24	
	Revision was done for each unit		10.5.2024 to 25.5.2024	Chalk and white board Assignment marks displayedon the notice board and signatures were taken for C1 and C2

Title of the Paper : Costing Methods and Techniques
[Course Code – 223318]
Term Period : 12/02/2024 to 25/5/2024
Faculty Name : Shambhavi P Bhounsle (A & B)
Total Hrs: 56Hours 4(Hrs/Week)

Curriculum asprescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Module No.1: Job and Contract Costing: 12 Hours	Meaning ,features of contract costing,applicationsofcontract costing,similarities and dissimilaritiesbetween jobcostingandcontractcosting,recording ofcontractcosts	**2 hours**	12.02.24 to 15.02.24	**CO's and PO's were discussed** Lecture, Discussion &Problem Solving
	meaningoftermsusedincontractcosting; tr eatmentofprofitonincompletecontracts-Problems	**4 hours**	16.02.24 to 23.02.24	Lecture, Discussion &Problem Solving
	JobCosting: Meaning,prerequisites,job c ostingprocedure,Features,objectives,applications	**4 hours**	24.02.24 to 1.03.2	Lecture, Discussion &Problem Solving

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	advantagesanddisadvantagesofJobcostin g,Jobcostsheet-simpleproblems.	**2 hours**	2.03.24 to	Lecture, Discussion &Problem
			5.03.24	Solving
Module No.2: Process and Service Costing: 12 Hours	Meaning,featuresandapplicationsofPro cessCosting;comparisonbetweenJobCo stingandProcessCosting,advantagesand disadvantagesofprocesscosting	**2 hours**	6.03.24 to 9.03.24	Lecture, Discussion &Problem Solving
	treatmentofprocesslossesandgainsincost accounts;preparationofprocessaccounts.	**3 hours**	11.03.24 to 14.03.24	Lecture, Discussion &Problem Solving
	Servicecosting: Introductiontoservicecosting;ApplicationofServicecosting;Servicecostingv/sproductcosting;Costunitsfor differentservicesectors;Servicecoststatement	**2 hours**	15.03.24 to 19.03.24	Lecture, Discussion &Problem Solving
	Determinationofcostsfordifferentservic e sectors-Transportservices,hospitalsandeducatio nalinstitutions-problemsonpreparationofservicecoststat ementsfor theseservicesectors.	**5 hours**	20.03.24 to 25.03.24	Lecture, Discussion &Problem Solving
ModuleNo.3 :Activity Based Costing: 10 Hours	Introduction-WeaknessOfConventionalCostingSys tem-ConceptOfABC-CharacteristicsOfABC-KaplanAndCooper'sApproach-CostDriversAndCostPools	**3hours**	26.03.24 to 30.03.24	Lecture, Discussion &Problem Solving

	AllocationOfOverheadsUnderABC-- StepsInTheImplementationOfABC - BenefitsFromAdaptationOfABCSyste	**4 hours**	1.04.24 to	Lecture, Discussion &Problem
	m		5.04.24	Solving
	DifficultiesFacedByTheIndustriesIn T heSuccessfulImplementationOfABC - Problems.	**3 hours**	6.04.24 to 10.04.24	Lecture, Discussion &Problem Solving
Module 4:Marginal Costing: 12 Hours	Meaningand Definitionofmarginalcost,marginalc osting,featuresofmarginalcosting-termsusedinmarginalcosting	**2 hours**	12.04.24 to 15.04.24	Lecture, Discussion &Problem Solving
	INTERNAL TEST		16.04.24 to 20.04.24	
	P/Vratio,BEP,MarginofSafety,Angle o fIncidence.BreakEvenAnalysisassum ptionsanduses.BreakEvenChart. (Theory).	**8hours**	22.04.24 to 4.05.2 4	Lecture, Discussion &Problem Solving **Test marks displayed on notice board**
	Problems on CV Panalysis	**2 hours**	6.05.24 to 8.05.2 4	Lecture, Discussion &Problem Solving
	BudgetaryControlIntroduction-Meaning&DefinitionofBudgetandBudgetaryControl-Objectives ofBudgetaryControl	**2 hours**	9.05.24 to 13.05.24	Lecture, Discussion &Problem Solving

Module 5: BudgetaryControlandStandardCosting: 10 Hours				
	essentialrequirementsofbudgetarycon t rol-advantagesanddisadvantages ofbudgetary control-TypesofbudgetsFunctionalBudgets-Cashbudget,salesbudget	**2 hours**	14.05.24 to 17.05.24	Lecture, Discussion &Problem Solving
	purchasebudgetandproductionbudget. Fi xedandFlexiblebudgets-ProblemsonFlexiblebudgetandCashbu d getonly.	**2 hours**	18.05.24 to 21.05.24	Lecture, Discussion &Problem Solving
	StandardCostingIntroduction-Usesandlimitations,varianceanalysis-Materialvariances,Labourvariances	**2 hours**	22.05.24 to 24.05.24	Lecture, Discussion &Problem Solving
	problemsonMaterialandLabourvariancesonly.	**2 hours**	25.05.24	Lecture, Discussion &Problem Solving Two specialclass **Assignment Marks Displayed and took the signature from students**

Title of the paper: Business Regulatory Framework
[COURSE CODE-223431]
Term : 12/02/2024 to 25/5/2024
Faculty name: Keerthi raj kamal B A
Hrs/Week: 4hrs **Total Hrs: 56**

Curriculum as prescribedby NEP	Topics	No of Hours required	Date	Method of Deployment
Module I **Indian Contract Act,1872 12hrs**	Introduction - Definition of Contract, Essentials of Valid Contract,	3	**12.2.24 to 14.2.24**	CO's & PO's were discussed, Lecture, Discussion, PPT
	Offer and acceptance, consideration,contractual capacity, free consent.	3	**5.2.24 to 17.2.24**	Lecture, Discussion
	Classification of Contract, Discharge of a contract	3	**19.2.24 to 21.2.24**	Lecture, Discussion
	Breach of Contract and Remedies toBreach of Contract	3	**22.2.24 To 24.2.24**	Lecture, Discussion
Module II **The Sale of Goods Act, 1930 10hrs**	Introduction - Definition of Contract of Sale, Essentials of Contract of Sale,	3	**26.2.24 to 29.2.24**	Lecture, Discussion
	Conditions and Warranties, Transferof ownership in goods including	3	**1.3.24**	Lecture, Discussion
	sale by a non- owner and exceptions-		**To 4.3.24**	
	Performance of contract of sale - Unpaid seller	2	**5.3.24 To 6.3.2**	Lecture, Discussion

			4	
	rights of an unpaid seller against thegoods and against the buyer	**2**	**7.3.24 to 9.3.24**	Lecture, Discussion
Module III **Competitionand Consumer Laws 12hrs**	**The Competition Act 2002 -** Objectives of Competition Act, Features of Competition Act,	**3**	**11.3.24 to 13.3.24**	Lecture, Discussion
	CAT, Offences and Penalties underthe Act, Competition Commission of India.	**3**	**14.3.24 to 16.3.24**	Lecture, Discussion
	Consumer Protection Act 2019 - Definitions of the terms - Consumer, Consumer Dispute, Defect,Deficiency, Unfair Trade Practices,and Services,	**3**	**18.3.24 to 20.3.24**	Lecture, Discussion
	Rights of Consumer under the Act, Consumer Redressal Agencies - District Forum, State Commission and National Commission.	**3**	**21.3.24 To 23.3.24**	Lecture, Discussion

Module IV **EconomicLaws**	**WTO patent rules** - Indian Patent Act, 1970 - Meaning and Scope of Intellectual Property Rights (IPR)	**3**	**25.3.24** **to** **30.3.24**	Lecture, Discussion
12hrs	Procedure to get Patent for Inventions and Non-Inventions.	**3**	**1.4.24** **to** **3.4.24**	Lecture, Discussion
	FEMA 1999 - Objectives of FEMA,Salient Features of FEMA,	**3**	**4.4.24** **To** **6.4.24**	Lecture, Discussion
	Definition of Important Terms - Authorized Dealer, Currency - Foreign Currency, Foreign Exchange, Foreign Security	**3**	**8.4.24** **To** **12.4.24**	Lecture, Discussion
Module V **Environmentand Cyber Laws 10hrs**	Environment Protection Act 1986 -Objectives of the Act, Definitions	**2**	**13.4.24** **To** **15.4.24**	Lecture, Discussion
	Internal test		**16.4.24** **to 20.4.24**	
	Important Terms Environment, Environment Pollutant, Environment Pollution, Hazardous Substance and Occupier, Types of Pollution, Powers of Central Government to protect Environment in India.	**4**	**22.4.24** **To** **27.4.24**	Lecture, Discussion
	Cyber Law: Definition, Introduction to Indian Cyber Law, Cyber space and Cyber security	**4**	**2.4.24** **To** **8.4.2**	Lecture, Discussion, Test marks were discussed on the notice board

			4	
Revision	Module 1 & 2	**3**	**9.5.24** **to**	Lecture, Discussion
			11.5.24	
	Module 2	**3**	**12.5.24** **To** **15.5.24**	Lecture, Discussion
	Module 3	**3**	**16.5.24** **To** **19.5.24**	Lecture, Discussion
	Module 4	**3**	**20.5.24** **To** **23.5.24**	Lecture, Discussion
	Module 5	**2**	**24.5.24** **To** **25.5.24**	Lecture, Discussion, Assignment marks were displayed on thenotice board

Department :Commerce
Title of the Paper Business Regulatory Framework
[Course Code – 213130]
Term Period :12/02/2024 to 25/5/2024
Faculty Name :MS Rekha B
Total Hrs: 56Hours (4Hrs/Week)(Sharing of 2 Hours of Work load 28)

Curriculumas prescribed by NEP	Topics	No of Hours required	Date	Method of Deployment
Module I **Indian Contract Act, 1872** **12hrs**	Introduction - Definition of Contract, Essentials of Valid Contract,	**2**	**12-2-24 &** **14-2-24**	**Introduction** **Class Course** **Outcomes of the Units Lecture**
	Offer and acceptance, consideration,contractual capacity, free consent.	**2**	**15-2-24&** **17-2-24**	**Lecture, Skill Development Activity**
	Classification of Contract, Discharge of a contract	**2**	**19-2-24&** **21-2-24**	**Lecture**
	Breach of Contract and Remedies toBreach of Contract	**2**	**22-2-24&** **24-2-24**	**Lecture**
Module II **The Sale of Goods Act, 1930** **10hrs**	Introduction - Definition of Contractof Sale, Essentials of Contract of Sale,	**2**	**26-2-24&** **29-2-24**	**Lecture**
	Conditions and Warranties, Transfer of ownership in goods including sale by a non- owner and exceptions-	**2**	**1-3-24&** **4-3-24**	**Lecture**
	Performance of contract of sale - Unpaid seller	**2**	**5-3-24&** **6-3-24**	**Lecture**

	rights of an unpaid seller against thegoods and against the buyer	**2**	**7-3-24& 9-3-24**	**Lecture, PPT, Example s Skill Development Activity**
Module III Competitio nand Consumer Laws 12hrs	**The Competition Act 2002 -** Objectives of Competition Act, Features of Competition Act,	**2**	**11-3-24& 13-3-24**	**Lecture,**
	CAT, Offences and Penalties underthe Act, Competition Commission of India.	**2**	**14-3-24& 16-3-24**	**Lecture,**
	Consumer Protection Act 2019 - Definitions of the terms - Consumer, Consumer Dispute, Defect, Deficiency, Unfair Trade Practices, and Services,	**2**	**18-3-24& 20-3-24**	**Lecture, PPT, Skill Developmen tActivity**
	Rights of Consumer under the Act, Consumer Redressal Agencies - District Forum, State Commission and National Commission.	**2**	**21-3-24& 23-3-24**	**Lecture,**

Title of the paper: Business Regulatory Framework
Term : 12/02/2024 to 25/5/2024
Faculty name: Keerthi raj kamal B A

Hrs/Week: 2hrs/week **SEC A** **Total Hrs: 56**

Curriculum as prescribed by NEP	**Topics**	**No of Hours require d**	**Date**	**Method of Deploymen t**
	Consumer Protection Act 2019 - Definitions of the terms - Consumer, Consumer Dispute, Defect,Deficiency, Unfair Trade Practices,and Services,	**3**	**12.2.24 to 19.3.2 4**	CO's & PO's were discussed Lecture, Discussion

	Rights of Consumer under the Act, Consumer Redressal Agencies - District Forum, State Commission and National Commission.	**3**	**21.3.24 To 23.3.24**	Lecture, Discussion
Module IV **Economic Laws 12hrs**	**WTO patent rules** - Indian Patent Act, 1970 - Meaning and Scope of Intellectual Property Rights (IPR)	**3**	**25.3.24 to 30.3.24**	Lecture, Discussion
	Procedure to get Patent for Inventions and Non-Inventions.	**3**	**1.4.24 to 3.4.24**	Lecture, Discussion
	FEMA 1999 - Objectives of FEMA,	**3**	**4.4.24**	Lecture,
	Salient Features of FEMA,		**To 6.4.24**	Discussion
	Definition of Important Terms - Authorized Dealer, Currency - Foreign Currency, Foreign Exchange, Foreign Security	**3**	**8.4.24 To 12.4.24**	Lecture, Discussion
Module V **Environment and Cyber Laws 10hrs**	Environment Protection Act 1986 -Objectives of the Act, Definitions	**2**	**13.4.24 To 15.4.24**	Lecture, Discussion
	Internal test		**16.4.24 to 20.4.24**	
	Important Terms Environment, Environment Pollutant ,Environment Pollution, Hazardous Substance and Occupier, Types of Pollution, Powers of Central Government to protect Environment in India.	**4**	**22.4.24 To 27.4.24**	Lecture, Discussion

	Cyber Law: Definition, Introduction to Indian Cyber Law, Cyber space and Cyber security	**4**	**2.4.24 To 8.4.24**	Lecture, Discussion, Testmarks were discussed on thenotice board
Revision	Module 1 & 2	**3**	**9.5.24 to 11.5.24**	Lecture, Discussion
	Module 2	**3**	**12.5.24 To 15.5.24**	Lecture, Discussion
	Module 3	**3**	**16.5.24 To 19.5.24**	Lecture, Discussion
	Module 4	**3**	**20.5.24 To 23.5.24**	Lecture, Discussion
	Module 5	**2**	**24.5.24 To 25.5.24**	Lecture, Discussion, Assignment marks were displayed on thenotice board

Title of the Paper :Financial Education and Investment Awareness
[CourseCode –22FEIS94**]**
Term Period :19/09/2023 to 12/12/2023
Faculty Name :Sri Siddappa R
Total Hrs: 45Hours (3Hrs/Week)

Curriculum asprescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Module 1- Foundations for Finance:	**Introduction to Basic Concepts:** Understand the need for financial planning – basic concepts – life goalsand financial goals – format of a sample financial plan for a young adult	**2 hr**	**12-02-24 to 15-02-24**	**Introduction Class Course Outcomes of the Units** Lecture Case analysis
	Economics: Meaning – scope – key concepts influencing decision makingboth micro & macro **Banking in India:** Types of Bank Deposits, Deposit Insurance (PMJDY). Traditional and New Banking Models. Debit and Credit Cards. Digital Payment System – Internet Banking (NEFT, RTGS andIMPS), Mobile Banking, Mobile Wallet, AEPS, UPI.	**6 hrs**	16-02-24 26-02-24	Lecture & Practical's
	Orientation to Financial Statements: financial terms and concepts, model for reading financialstatements, basic ratios for evaluatingcompanies while investing – Time Value of Money – Concept of Compounding and Discounting	**5 hr**	**29-02-24 to 11-03-24**	Lecture & Practical's
	Investment Goals: Basic investment objectives – Investment goals – time frame – assessing risk profile – concept of diversification – risk measurement tools			

Module 2 **Investment Goals**	**Investment and Saving Alternativesfor a Common Investor:** Insurance –Health, Life and Other General Insurance (Vehicle Insurance, Property Insurance, etc), Retirement and Pension Plans – National PensionSystem, Atal Pension Yojana, PM-SYM Yojana, PMLVMY PMKMDY etc., Stocks, Bonds, Mutual Funds. Investor Protection and Grievance Redressal	**10hrs**	**14-03-24 to** 08-04-24	Lecture &Practicles
	Stock Markets: Primary Market and Secondary Market, Stock Exchanges, Stock Exchange Operations – Tradingand Settlement, Demat Account, Depository and Depository Participants.	**5hrs**	12-04-24 to 22-04-24	Lecture & Practical's
	Stock Selection: Fundamental Analysis – Economy Analysis, Industry Analysis and Company	**5hrs**	**25-05-24 to** **03-05-24**	Lecture & Practical's
	Analysis. Technical Analysis – Graphical Patterns, Candle-stick Patterns, Indicators and Oscillators. **Stock Return and Risk:** Analysing risk and returns trade offrelationship-investment risk.			
Module: 3 **Mutual FundsAnd Financial Planning Essentials**	**Mutual Funds:** Features of Mutual Funds, Mutual Fund History in India, Major Fund Houses in India and Mutual Fund Schemes. Types of Mutual Fund Plans. Net Asset Value	**6 hr**	**06-05-24 to** **13-05-24**	Lecture &Practicles
	Criteria for selection of Mutual Funds: Returns, Performance Measures – Sharpe, Treynor, Alpha,Beta and r2	**2 hr**	**16-05-24 to** **17-05-24**	Lecture & Practical's
	Financial Planning: Sample formats – Integrating all the concepts learnt			Presentations **Assisgnment**

	with a personal financial plan. **Giving and supporting:** Family support – charitable giving – crowd sourcing for needs.	**4hr**	**20-05-24 to 25-05-24**	**marks displayed andtook the signature of students**

Department : commerce
Title of the Paper : : AdvancedFinancial Management
Course Code – 243616
Term Period :12.02.2024 to 25.05.2024
Faculty Name :Vasagi S
Total Hrs: 64 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Module 1: Cost of Capitaland Capital Structure Theories (14 hours)	Cost of Capital: Meaning and Definition – Significance of Cost of Capital – Types of Capital	2 hours	12.02.24 to 16.02.24	**IntroductionClass Course Outcomes ofthe Units Lecture &discussion**
	Computation of Cost of Capital – Specific Cost, Cost of Debt, Cost of Preference Share, Capital.(problems)	3 hours	17.02.24 to 20.02.24	Lecture, Discussion &Problem Solving
	Cost of Equity Share Capital, Weighted AverageCost of Capital Problems	3 hours	21.02.24 to 25.02.24	Lecture, Discussion &Problem Solving
	Theories of capital structures: The Net IncomeApproach, The Net Operating Income Approach, Traditional Approach and MM Hypothesis – Problems.	3 hours	27.02.24 to 01.03.24	Lecture, Discussion,PPT
	Traditional Approach and MM Hypothesis –Problems	3 hours	02.03.24 to 04.03.24	Lecture, Discussion &Problem Solving
Module 2: RiskAnalysis	Risk Analysis – Types of Risks – Risk and Uncertainty – Techniques of Measuring	4 hours	05.03.24 to	Lecture, Discussion,

in Capital	Risks		11.03.24	PPT
Budgeting(14 hours)	Risk adjusted Discount Rate Approach, Probability Approach,	3 hours	13.03.24 to 15.03.24	Lecture, Discussion &Problem Solving
	Certainty Equivalent Approach, Sensitivity Analysis	3 hours	16.03.24 to 18.03.24	Lecture, Discussion &Problem Solving
	Standard Deviation and Co-efficient of Variation – Decision Tree Analysis – Problems	4 hours	22.03.24 to 25.03.24	Lecture, Discussion &Problem Solving
Module 3: Dividend Theories (10 hours)	Introduction - Dividend Decisions: Meaning - Types of Dividends – Types of Dividends Polices, Significance of Stable Dividend Policy - Determinants of Dividend Policy;	3 hours	26.03.24 to 01.04.24	Lecture, Discussion, PPT
	Dividend Theories: Theories of Relevance –Walter's Model and.	3 hours	03.04.24 to 05.04.24	Lecture, Discussion &Problem Solving
	Gordon's Model and Theory of Irrelevance –	2hours	06.04.24 to 07.04.24	Lecture, Discussion &Problem Solving
	The Miller-Modigliani (MM) Hypothesis -Problems	2 hours	08.04.24 to 10.04.24	Lecture, Discussion &Problem Solving
Module. 4: Mergers and Acquisitions (14 hours)	Meaning - Reasons – Types of Combinations -Types of Merger – Motives and Benefits of Merger	4 hours	12.04.24 to 22.04.24 Test 16.4.24 to 20.4.24	Lecture, Discussion, PPT**(inclu- sive of test date)**
	Financial Evaluation of a Merger - Merger Negotiations –	3 hours	23.04.24 to 24.04.24	Lecture, Discussion ,PPT
	Leverage buyout, Management Buyout Meaning and Significance of P/E Ratio.	2 hours	25.04.24 to 29.04.24	Lecture, Discussion &Problem Solving **27.04.23 Test marks**

				displayed on notice board
	Problems on Exchange Ratios based on Assets Approach,	3 hours	02.05.24 to 04.05.24	Lecture, Discussion &Problem Solving
	Earnings Approach and Market Value Approach and Impact of Merger on EPS, Market Price and Market capitalization.	2 hours	06.05.24 to 08.05.24	Lecture, Discussion &Problem Solving
Module 5: Ethical and Governance Issues (8 hours)	Introduction to Ethical and Governance Issues: Fundamental Principles, Ethical Issues in Financial Management,	3 hours	08.05.24 to 14.05.24	Lecture, Discussion, PPT
	Agency Relationship, Transaction Cost Theory, Governance Structures and Policies, Social and Environmental Issues	3 hours	15.05.24 to 21.05.24	Lecture, Discussion, PPT
	Purpose and Content of an Integrated Report.	2 hours	22.05.24 to 25.05.24	Lecture, Discussion, PPT **Assisgnment marks displayed and took the signature of students**

Department : commerce
Title of the Paper : : Advanced Financial Management
[Course Code – 243616]
Term Period :12.02.2024 to 25.05.2024
Faculty Name : Keerthi raj kamal B A
Total Hrs: 64Hours (4Hrs/Week

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Module 1: Cost of Capital and Capital Structure Theories (14 hours)	Cost of Capital: Meaning and Definition – Significance of Cost of Capital – Types of Capital	2 hours	12.02.24 to 16.02.24	**Introduction Class Course Outcomes of the Units Lecture &discussion**
	Computation of Cost of Capital – Specific Cost, Cost of Debt, Cost of Preference Share, Capital.(problems)	3 hours	17.02.24 to 20.02.24	Lecture, Discussion &Problem Solving

	Cost of Equity Share Capital, Weighted AverageCost of Capital Problems	3 hours	21.02.24 to 25.02.24	Lecture, Discussion &Problem Solving
	Theories of capital structures: The Net IncomeApproach, The Net Operating Income Approach, Traditional Approach and MMHypothesis – Problems.	3 hours	27.02.24 to 01.03.24	Lecture, Discussion,PPT
	Traditional Approach and MM Hypothesis –Problems	3 hours	02.03.24 to 04.03.24	Lecture, Discussion &Problem Solving
Module 2: Risk Analysis in Capital Budgeting (14 hours)	Risk Analysis – Types of Risks – Risk and Uncertainty – Techniques of Measuring Risks	4 hours	05.03.24 to 11.03.24	Lecture, Discussion,PPT
	Risk adjusted Discount Rate Approach,Probability Approach,.	3 hours	13.03.24 to 15.03.24	Lecture, Discussion &Problem Solving
	Certainty Equivalent Approach, SensitivityAnalysis	3 hours	16.03.24 to 18.03.24	Lecture, Discussion &Problem Solving
	Standard Deviation and Co-efficient ofVariation – Decision Tree Analysis – Problems	4 hours	22.03.24 to 25.03.24	Lecture, Discussion &Problem Solving
Module 3: Dividend Theories (10 hours)	Introduction - Dividend Decisions: Meaning - Types of Dividends – Types of Dividends Polices, Significance of Stable Dividend Policy - Determinants of Dividend Policy;	3 hours	26.03.24 to 01.04.24	Lecture, Discussion,PPT
	Dividend Theories: Theories of Relevance –Walter's Model and.	3 hours	03.04.24 to 05.04.24	Lecture, Discussion &Problem Solving
	Gordon's Model and Theory of Irrelevance –	2hours	06.04.24 to 07.04.24	Lecture, Discussion &Problem Solving
	The Miller-Modigliani (MM) Hypothesis -Problems	2 hours	08.04.24 to 10.04.24	Lecture, Discussion &Problem Solving
Module. 4: Mergers and	Meaning - Reasons – Types of Combinations -Types of Merger – Motives and Benefits of Merger	4 hours	12.04.24 to 22.04.24 Test	Lecture, Discussion,PPT
	C1 INTERNALS TEST		16.4.24 to	

Acquisitions (14 hours)			20.4.24	
	Financial Evaluation of a Merger - Merger Negotiations –	3 hours	23.04.24 to 24.04.24	Lecture, Discussion, PPT
	Leverage buyout, Management Buyout Meaning and Significance of P/E Ratio.	2 hours	25.04.24 to 29.04.24	Lecture, Discussion &Problem Solving
				Test marks displayed on notice board
	Problems on Exchange Ratios based on Assets Approach,	3 hours	02.05.24 to 04.05.24	Lecture, Discussion &Problem Solving
	Earnings Approach and Market Value Approach and Impact of Merger on EPS, Market Price and Market capitalization.	2 hours	06.05.24 to 08.05.24	Lecture, Discussion &Problem Solving
Module 5: Ethical and Governance Issues (8 hours)	Introduction to Ethical and Governance Issues: Fundamental Principles, Ethical Issues in Financial Management,	3 hours	08.05.24 to 14.05.24	Lecture, Discussion, PPT
	Agency Relationship, Transaction Cost Theory, Governance Structures and Policies, Social and Environmental Issues	3 hours	15.05.24 to 21.05.24	Lecture, Discussion, PPT
	Purpose and Content of an Integrated Report.	2 hours	22.05.24 to 25.05.24	Lecture, Discussion, PPT **Assisgnment marks displayed and took the signature of students**

Department : commerce
Title of the Paper : : HRD-Cultural Diversity
Course Code – 243522
Term Period :12.02.2024 to 25.05.2024
Faculty Name :Nikil B R
Total Hrs: 42Hours (3Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**

Module No. 1: Introduction to Diversity (10 hours)	Introduction to cultural diversity in organizations, Evolution of Diversity Management, Over View of Diversity	2hours	12-02-24 to 18-02-24	**Introduction Class Course Outcomes of the Units Lecture**
	Advantages of Diversity, Identifying characteristics of diversity, Scope-	2 hours	19-02-24 to 23-02-24	Chalk and Blackboard
	Challenges and issues in diversity management, Understanding the nature of Diversity	2 hours	24 -02-24 to 28-02-24	Chalk and Blackboard
	Cultural Diversity – Global Organizations-Global Diversity.	3 Hours	29-02-24 To 05-03-24	Chalk and Blackboard
Module No. 2: Exploring Differences (08 hours)	Introduction -Exploring our and others differences, including sources of our identity.	2 hours	06-03-24 to 08 -03-24	Chalk and Blackboard
	Difference and power:	2 hours	11-03-24 to 12-03-24	Chalk and Blackboard
	Concepts of prejudice	2 hour	14-03-24 To 15-03-24	Chalk and Blackboard
	discrimination, dehumanization and oppression	2 hour	18-03-24 To 10-03-24	Chalk and Blackboard
Module No. 3: Visions of Diversity and Cross Cultural Management (10 hours)	Models and visions of diversity in society and organizations:	2 hour	04-03-24 To 06-03-24	Chalk and Black board
	Justice, fairness, and group and individual differences Hofstede's Cultural Dimensions, Trompenaars's Dimensions, Schwartz Value Survey,	3 Hour	07-03-24 To 12-03-24	Chalk and Black board
	Cross-Cultural Management: Meaning and Concepts, Frameworks in Cross-Cultural Management:	3 Hour	13-03-24 TO 16-03-24	Chalk and Black board
	Kluckhohn and Strobeck framework,GLOBE study.	2 hour	18-03-2024 To 28-03-24	Chalk and Black board
Module No. 4:	Skills and competencies for multicultural teams and workplaces,	2 hours	01-04-24 to 06-04-24	Chalk and Black board
	Organizational assessment	2 hours	09-04-24 to 13-04-24	Chalk and Black board

Skills and Competencies (08hours)	**C1 INTERNAL TEST**		16.04.2024 to 20.04.2024	Chalk and Black board
	change for diversity and inclusion, Diversity Strategies. .	2 hours	22-04-24 To 24-04-24	Chalk and Black board
	Creating Multicultural Organisations	2 hours	25-04-24 To 01-05-24	Chalk and Black board **27.04.23 Test marks displayed on notice board**
Module 5: Recent Trends in Diversity Management(09 hours)	Emerging workforce trends–Dual-careercouples–Cultural issues in international working on work-life balance	3 hours	05-05-24 To 08-05-24	Chalk and Black board
	–Managing multi-cultural teams: Issuesand challenges, Global demographic trends: Impact on diversity management, .	3 hours	11-05-24 To 16-05-24	Chalk and Black board
	Social psychological perspective on workforce diversity, Diversity Management in IT organizations Contemporary Issues in Workplace Diversity	3 hours	20-0-24 To 25-04-24	Chalk and Black board **Assignment marks displayedand took the signature of students**

Title of the Paper : : CUSTOMER RELATIONSHIP MANAGEMENT
Course Code – 243621
Term Period :12.02.2024 to 25.05.2024
Faculty Name :Nikil B R
Total Hrs: 42Hours (3Hrs/Week)Section A

Curriculum as prescribed by NEP	**Topics**	**No of Hours required to complete**	**Date**	**Method of Deployment**
Module I EvolutionofCustome rRelationship 8 hrs	Introduction -CRM-Definition,Emergence of CRM Practice	**2**	12.02.24 to 13.02.24	**Introduction Class Course Outcomes of the Units Lecture**
	Factors responsible forCRMgrowth, CRM process, framework of CRM, Benefits	**2**	14.02.24 to 19.02.24	**Lecture Case analysis**

	of CRM,			
	Types of CRM, ScopeofCRM,CustomerProfitabilit y,FeaturesTrendsinCRM	**2**	21.02.24 to 24.02.24	**Lecture Case analysis skill development**
	CRMandCost-BenefitAnalysis,CRMandRelationshipMarketing.	**2**	27.02.24 to 28.02.24	**Lecture Case analysis**
	Introduction - Customer Value, Customer Expectation, Customer Satisfaction, CustomerCentricity,	**2hrs**	2.03.24 to 5.03.24	**Lecture**
Module IICRM Concepts 10 hrs	CustomerAcquisition,CustomerRetention,CustomerLoyalty,Custom erLifetime Value. Customer Experience Management, Customer Profitability	**3hrs**	6.03.24 to 14.03.24	**Lecture Case analysis**
	EnterpriseMarketing Management,	**2hrs**	15.03.24 to 18.03.24	**Lecture Case analysis skill development**
	Customer Satisfaction Measurements, Web based CustomerSupport.	**3hrs**	19.03.24 to 25.03.24	**Lecture Case analysis**
Module III Planningfor CRM 8 hrs	Introduction -Steps in Planning-Building Customer Centricity, Setting CRM Objectives,	**2hrs**	26.03.24 to 30.03.24	**Lecture Case analysis Industry Examples**
	Defining Data Requirements, Planning	**2hrs**	1.04.24 to 2.04.24	**Lecture Case analysis Industry Examples**
	Desired Outputs, Relevant issues while planningtheOutputs,ElementsofC RMplan,	**2hrs**	3.04.24 to 8.04.24	**Lecture Case analysis Industry Examples skill development**
	CRMStrategy:TheStrategy D evelopmentProcess,CustomerStrategyGrid.	**2hrs**	10.04.24 to 15.04.24	**Lecture Case analysis Industry Examples**
	Internal Test		**16 to 20**	

Module IVCRMandMarketingStrategy 9 hrs	Introduction-CRMMarketingInitiatives	**2hrs**	22.04.24 to 23.04.24	**Lecture Case analysis Industry Examples**
	SalesForceAutomation,Campaign Management,CallCentres.	**2hrs**	24.04.24 to 29.04.24	**Lecture Case analysis 27.04.23 Testmarks displayed on notice board`**
	PracticeofCRM:CRMinConsumer Markets,	**2hrs**	2.05.24 to 4.05.24	**Lecture Case analysis Industry Examples**
	CRMin ServicesSector,CRMinMassMarkets,CRMinManufacturingSector.	**3hrs**	6.05.24 to 8.05.24	**Lecture Case analysis Industry Examples skill development**
Module V CRMPlanningand Implementation 10 hrs	Introduction-IssuesandProblemsinimplementin gCRM	**2hrs**	13.05.24 to 14.05.24	**Lecture Case analysis Industry Examples**
	InformationTechnologytools inCRM,ChallengesofCRMImplementation.	**3hrs**	15.05.24 to 17.05.24	**Lecture Case analysis**
	CRMImplementationRoadmap, RoadMap(RM)	**2hrs**	18.05.24 to 20.05.24	**Lecture**
	Performance:MeasuringCRMperf ormance,CRMMetrics.	**3hrs**	21.05.24 to 23.05.24	**Lecture Assisgnment marks displayedand took the signature of students**

Title of the Paper :CUSTOMER RELATIONSHIP MANAGEMENT (243621)
Term Period :12-2-24 to 22-5-24
Faculty Name :MS Rekha B
Total Hrs: 42Hours
(3Hrs/Week)

Curriculum as prescribed by NEP	**Topics**	**No of Hours required to complete**	**Date**	**Method of Deployment**
Module I Evolution of	Introduction -CRM- Definition, Emergence of CRM Practice	**2**	12.02.24 to 13.02.24	**Introduction** **Class Course Outcomes of the Units** **Lecture**

Customer Relationship 8 hrs				**Case analysis Lecture**
	Factors responsible forCRMgrowth, CRM process, framework of CRM, Benefits of CRM,	**2**	14.02.24 to 19.02.24	**Lecture Case analysis**
	Types of CRM, ScopeofCRM,CustomerProfitability,FeaturesTrendsinCRM	**2**	21.02.24 to 24.02.24	**Lecture Case analysis skill development**
	CRMandCost-BenefitAnalysis,CRMand RelationshipMarketing.	**2**	27.02.24 to 28.02.24	**Lecture Case analysis**
Module IICRMConcepts 10 hrs	Introduction - Customer Value, Customer Expectation, Customer Satisfaction, CustomerCentricity,	**2hrs**	2.03.24 to 5.03.24	**Lecture**
	CustomerAcquisition,Customer Retention,CustomerLoyalty,CustomerLifetime Value. Customer Experience Management, Customer Profitability	**3hrs**	6.03.24 to 14.03.24	**Lecture Case analysis**
	EnterpriseMarketing Management,	**2hrs**	15.03.24 to 18.03.24	**Lecture Case analysis skill development**
	Customer Satisfaction Measurements, Web based CustomerSupport.	**3hrs**	19.03.24 to 25.03.24	**Lecture Case analysis**
Module IIIPlanningforCRM8 hrs	Introduction -Steps in Planning-Building Customer Centricity, Setting CRM Objectives,	**2hrs**	26.03.24 to 30.03.24	**Lecture Case analysis Industry Examples**
	Defining Data Requirements, Planning	**2hrs**	1.04.24 to 2.04.24	**Lecture Case analysis Industry Examples**
	Desired Outputs, Relevant issues while planningtheOutputs,ElementsofCRMplan,	**2hrs**	3.04.24 to 8.04.24	**Lecture Case analysis Industry Examples skill development**
	CRMStrategy:TheStrategy DevelopmentProcess,CustomerStrategyGrid.	**2hrs**	10.04.24 to 15.04.24	**Lecture Case analysis Industry Examples**
	Internal Test		16 to 20 apr	**Test marks were displayed on the college Notice Board**
Module	Introduction-CRMMarketingInitiatives	**2hrs**	22.04.24 to 23.04.24	**Lecture Case analysis Industry Examples**
	SalesForceAutomation,CampaignManagement,CallCentres.	**2hrs**	24.04.24 to 29.04.24	**Lecture Case analysis**

IVCRMandMarketingStrategy 9 hrs	PracticeofCRM:CRMinConsumerMarkets,	**2hrs**	2.05.24 to 4.05.24	**Lecture Case analysis Industry Examples**
	CRMin ServicesSector,CRMinMassMarkets,CRMinManufacturingSector.	**3hrs**	6.05.24 to 8.05.24	**Lecture Case analysis Industry Examples skill development**
Module V CRMPlanningandImplementation 10 hrs	Introduction-IssuesandProblemsinimplementingCRM	**2hrs**	13.05.24 to 14.05.24	**Lecture Case analysis Industry Examples**
	InformationTechnologytoolsinCRM,ChallengesofCRMImplementation.	**3hrs**	15.05.24 to 17.05.24	**Lecture Case analysis**
	CRMImplementationRoadmap, RoadMap(RM)	**2hrs**	18.05.24 to 20.05.24	**Lecture**
	Performance:MeasuringCRMperformance,CRMMetrics.	**3hrs**	21.05.24 to 23.05.24	**Presentations Assignment marks displayed and took the signature of students Lecture**

Title of the Paper :Income Tax Law & Practice – II
[Course Code: 243617]
Term Period :Term Period: 12.02.2024 to 25.05.2024
Faculty Name :Shambhavi P Bhounsle
Total Hrs: 56Hours 4(Hrs/Week)

Curriculum as *prescribed by the* Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Module No. 1: Profits and Gains of Business and Profession 20 hrs	Introduction-Meaning and definition of Business, Profession and Vocation. - Expenses Expressly allowed -	4 hours	12.02.24 to 1.02.24	**CO's and PO's were discussed** Lecture, Discussion &Problem Solving
	Expenses Expressly Disallowed - Allowable losses - Expressly disallowed expenses and lossess	4 hours	19.02.24 to 24.02.24	Lecture, Discussion &Problem Solving
	Expenses allowed on payment basis. Problems on computation of income from business of a sole trading concern.	4 hours	26.02.24 to 2.03.24	Lecture, Discussion &Problem Solving
	Problems on computation of income from profession: Medical Practitioner -	4 hours	4.03.24 to 9.3.2	Lecture, Discussion

			4	&Problem Solving
	Problems on computation of income from profession:Advocate and CharteredAccountants..	4 hours	11.03.24 to 16.3.24	Lecture, Discussion &Problem Solving
Module No. 2: Tax Deduction at Sources & AdvanceTax Ruling	Introduction - Meaning of TDS - Provisions regarding TDS - TDS to be made from Salaries - Filing of Quarterly statement – Theory and Problems	3 hours	18.03.24 to 22.3.24	Lecture, Discussion &Problem Solving
Module No. 3: Income from other Sources 10 hrs	Advance Tax: Meaning of advance tax - Computation of advance tax - Instalment of advance tax and due dates	3hours	23.03.24 to 28.3.24	Lecture, Discussion &Problem Solving
Module No. 4: Set Off and Carry Forward of Losses & Assessment of individuals. 10	**Deductions** under Section 80C, 80CCC,80CCD, 80CCG, 80D, 80DD, 80DDB, 80E, 80G, 80GG, 80TTA and 80U as per old regime.(Individuals only).	4hours	30.03.24 to 5.4.24	Lecture, Discussion &Problem Solving
Module No. 5: Assessment Procedure and Income Tax Authorities: 10				

10 hrs				
	Introduction - Incomes taxable under	4hours	6.04.24	Lecture, Discussion

Title of the Paper; Income Tax Law & Practice - II[
Course Code: 243617]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Mr. Sunil N
Total Hrs :64 Hours

Curriculum as prescribed by theInstitution	**Topic s**	**No. of Hours required to complete**	**Date**	**Method of Deployment andRemarks**
Module No. 1: Profits and Gainsof Business and Profession 20	Introduction-Meaning and definition of Business, Professionand Vocation. -	4 hours	12-02-2024 to 16-02-24	Chalk and Blackboard Course outcomes discussed
	Expenses Expressly allowed - Expenses Expressly Disallowed -Allowable losses - Expressly disallowed expenses and lossess	4hours	19-02-24 to 22-02-24	Chalk and Black board
	Expenses allowed on payment basis. Problems on computation of income from business of a sole trading concern.	4 hours	19-02-24 to 22-02-24	Chalk and Black board
	Problems on computation of income from profession: Medical Practitioner – and advocate	4 hours	23-02-24 to 27-02-24	Chalk and Black board
	Problems on Chartered Accountants..-	2 hours	28-02-24 to 2 -03-24	Chalk and Black board

Module No. 2: TaxDeduction at Sources & Advance Tax Ruling 10	Introduction - Meaning of TDS - Provisions regarding TDS - TDS to be made from Salaries - Filing of Quarterly statement – Theory and Problems	3 hours	4-03-24 to 7-03-24	Chalk and Black board
	Advance Tax: Meaning of advancetax - Computation of advance tax - Instalment of advance tax and due dates	3hours	9-03-24 to 12-03-24	Chalk and Black board
	Deductions under Section 80C,80CCC, 80CCD, 80CCG, 80D, 80DD, 80DDB, 80E, 80G, 80GG, 80TTA and 80U as per oldregime. (Individuals only).	4hours	13-03-24 to 17-03-24	Chalk and Black board
Module No. 3: Income from otherSources 10	Introduction - Incomes taxable under Head income other sources – Securities - Types of Securities - Rules for Grossing up	4hours	18-03-2024 To 21-03-24	Chalk and black board
	Ex-interest and cum-interest securities. -	4 hours	22-03-24 to 26-03-24	Chalk and Black board
	Bond Washing Transactions	2hours	27-03-24 to 30-03-24	Chalk and Black board
Module No. 4: Set Off and CarryForward of Losses & Assessment of individuals. 10	Introduction – Provisions of Set off and Carry Forward of Losses(Theory only	4 hours	1-04-2024 To 4-04-24	Chalk and Black board
	Computation of Total Income andtax liability of an Individual-	3 hours	12-04-24 to 15-04-24	Chalk and Black board
	Question paper problem solving	3hours	22-04-24 to 25-04-24	CI was held from16-04-24 Tp 20-04-24
Module No. 5:Assessment Procedure andIncome Tax Authorities: 14	Introduction - Due date of filingreturns, Filing of returns by different assesses, E- filing of returns,	4 hours	26-04-24 To 30-04-24	Chalk and Black board

	Types of Assessment, Permanent Account Number - Meaning, Procedure for obtaining PAN and transactions were quoting of PAN is compulsory	4 hours	2-05-24 To 6-05-24	Chalk and Black board
	Procedure for obtaining PAN and transactions were quoting of PAN iscompulsory	4 hours	7-05-24 To 10-05-24	Chalk and Black board
	Income Tax Authorities their Powers and duties	2 hours	13-05-24 to 15-05-24	Chalk and Black board
	Revision of all chapters	4hrs	16-05-24 to 21-05-24	Chalk and Black board
	Revision of all chapters	3 hrs	22-05-24 To 25-05-24	Chalk and Black board Assignment marks displayed and signatures

Title of the Paper :ITR's[Course Code –243624
]Term Period :12/02/2024 to 25/5/2024
Faculty Name :Shambhavi P Bhounsle (A Section)
Total Hrs: 42Hours 3(Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Module No.1: Depreciation and Investment Allowance 7Hours	Introduction-Meaning of Depreciation, Important points regarding depreciation, Conditions for allowance of Depreciation, .	**2 hours**	12.02.24 to 15.02.24	**CO's and PO's were discussed** Lecture, Discussion, PPT
	Assets eligible for depreciation, importantterms for computation of depreciation allowance	**2 hours**	16.02.24 to 20.02.24	Lecture, Discussion &Problem Solving
	computation of depreciation allowance-.Problems	**3 hours**	21.02.24 to 26.02.24	Lecture, Discussion &Problem Solving
Module No.2: Assessment of Partnership firms	Definition of Partnership, Firm and Partners –Assessment of Firms (Section 184) –,	**2 hours**	27.02.24 to 1.03.24	Lecture, Discussion &Problem Solving

8Hours	Computation of Firm's Business Income – Treatment of Interest, Commission, Remuneration received by partners (Sec 40b).	**3 hours**	2.03.24 to 7.03.24	Lecture, Discussion &Problem Solving
	Presumptive taxation (44AD) Problems on Computation of total income and tax liability of firms (Use of available software package for computation of tax liability Related Forms and Challans)	**3 hours**	9.03.24 to 14.03.24	Lecture, Discussion &Problem Solving
Module No.3: Assessment of Companies. 10Hours	Introduction-Meaning and Definition of Company-Types of Companies under Income tax Act	**2hours**	15.03.24 to 21.03.24	Lecture, Discussion &Problem Solving
	Problems on computation of total income of companies- Including Minimum Alternate Tax (115JB)	**2 hours**	22.03.24 to 27.03.24	Lecture, Discussion, PPT
	-– Applicable Deductions u/s 80IA , 80IB, 80IC,80G -	**2 hours**	28.03.24 to 3.04.24	Lecture, Discussion &Problem Solving
	Problems on Computation of Tax Liability (Use of SoftwarePackage-Quick Books/ Electro com)	**2 hours**	4.04.24 to 8.04.24	Lecture, Discussion &Problem Solving
Module No. 4: Tax Under E-Environment 10 Hours	Filing of Income tax returns (ITR) – Typesincome tax return forms- benefit of filing ITR	**2 hours**	10.04.24 to 15.04.24	Lecture, Discussion &Problem Solving
	INTERNAL TEST		16.04.24 to 20.04.24	
	different sections of ITR returns- document required to filing ITR –form 26AS significance returns-	**3 hours**	22.04.24 to 26.04.24	Lecture, Discussion &Problem Solving **Test marks displayed on notice board**
	- Advance Tax Sections-Tax Deducted at Source (TDS)- online payment of tax- problems on Advance Tax and TDS.]	**3hours**	27.04.24 to 6.05.24	Lecture, Discussion &Problem Solving
	E-filing of return on Income Tax Portal ,Verification of ITR..	**3 hours**	7.05.24 to 11.05.24	Lecture, Discussion &Problem Solving
Module No. 5:	Introduction - Recent Amendments in Filingof Returns as per Finance Bill; Recent CaseLaws for guidance	**2 hours**	13.05.24 to 16.05.24	Lecture, Discussion &Problem Solving

Case laws and amendments 10 Hours	. Depute the students at least two weeks to any Audit Firm to learn practically the filing of Returns of various kinds of assesses. Like individuals, Firms and Companies.	**8hours**	17.05.24 to 25.05.24	Lecture, Discussion &Problem Solving **Assignment**
				Marks Displayed and took the signature from students

Title of the Paper :ITR's
Course Code –243624]
Term Period :12/02/2024 to 25/5/2024
Faculty Name : Keerthi raj kamal B
A Total Hrs: 42Hours 2(Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Module No.2: Assessment of Partnership firms 8Hours	Definition of Partnership, Firm and Partners –Assessment of Firms (Section 184) –,	**2 hours**	12.2.24 to 18.2.24	**CO's and PO's were discussed** Lecture, Discussion &Problem Solving
	Computation of Firm's Business Income – Treatment of Interest, Commission, Remuneration received by partners (Sec 40b).	**3 hours**	20.2.24 To 25.2.24	Lecture, Discussion &Problem Solving
	Presumptive taxation (44AD) Problems on Computation of total income and tax liability of firms (Use of available software package for computation of tax liability Related Forms and Challans)	**3 hours**	26.2.24 To 03.2.24	Lecture, Discussion &Problem Solving
Module No.3: Assessment of Companies. 10Hours	Introduction-Meaning and Definition of Company-	**2hours**	5.3.24 To 10.3.24	Lecture, Discussion &Problem Solving
	Problems on computation of total income of companies- Including Minimum Alternate Tax(115JB)	**2 hours**	11.3.24 To 14.3.24	Lecture, Discussion,PPT
	-– Applicable Deductions u/s 80IA , 80IB, 80IC,80G -	**2 hours**	16.3.24 To 20.3.24	Lecture, Discussion &Problem Solving

	Problems on Computation of Tax Liability	**2 hours**	22.3.24 To 28.3.24	Lecture, Discussion &Problem Solving
Module No. 4: Tax Under E-Environment 10 Hours	Filing of Income tax returns (ITR) – Typesincome tax return forms- benefit of filing ITR	**2 hours**	29.3.24 To 02.4.24	Lecture, Discussion &Problem Solving
	(Use of Software Package-Quick Books/ Electro com)	**2 hours**	03.4.24 To 8.4.24	Lecture, Discussion &Problem Solving
	Types of Companies under Income tax Act	**2 hours**	10.4.24 To 15.4.24	Lecture, Discussion &Problem Solving
	INTERNAL TEST		16.04.24 to 20.04.24	
	different sections of ITR returns- document required to filing ITR –form 26AS significance returns-	**3 hours**	22.04.24 to 26.04.24	Lecture, Discussion &Problem Solving **Test marks displayed on notice board**
	- Advance Tax Sections-Tax Deducted at Source (TDS)- online payment of tax- problems on Advance Tax and TDS.]	**3hours**	27.04.24 to 6.05.24	Lecture, Discussion &Problem Solving
	E-filing of return on Income Tax Portal ,Verification of ITR..	**3 hours**	7.05.24 to 11.05.24	Lecture, Discussion &Problem Solving
Module No. 5: Case laws and amendments 10 Hours	Introduction - Recent Amendments in Filingof Returns as per Finance Bill; Recent CaseLaws for guidance	**2 hours**	13.05.24 to 16.05.24	Lecture, Discussion &Problem Solving
	. Depute the students at least two weeks to any Audit Firm to learn practically the filing of Returns of various kinds of assesses. Like individuals, Firms and Companies.	**8hours**	17.05.24 to 25.05.24	Lecture, Discussion &Problem Solving**Assign ment Marks Displayed**

Title of the Paper :ITR's
[Course Code –243624]
Term Period :12/02/2024 to 25/5/2024
Faculty Name :Shambhavi P Bhounsle (BTotal Hrs: 42Hours 1(Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Module No.1: Depreciation and Investment Allowance 7Hours	Introduction-Meaning of Depreciation, Important points regarding depreciation, Conditions for allowance of Depreciation, .	**2 hours**	17.02.24 24.02.24 2.03.24 9.03.24 16.03.24 23.03.24	**CO's and PO's were discussed** Lecture, Discussion,PPT
	Assets eligible for depreciation, importantterms for computation of depreciation allowance	**2 hours**	30.03.24 6.04.24 13.04.24 20.04.24 27.04.24	Lecture, Discussion &Problem Solving
	computation of depreciation allowance-.Problems	**3 hours**	4.05.24 11 05.24 18.05.24 25.05.24	Lecture, Discussion &Problem Solving

Title of the Paper : Title of the Paper : InvestmentManagement
[CourseCode243620]
Term Period :12-2-24 to 22-5-24
Faculty Name :MS Rekha B
Total Hrs: 42Hours
(3Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
ModuleNo.1:Co	Introduction - Investment:Attributes,Economic vs. Financial Investment,Investmentandspeculation,	3 hours	12-02-24 to 14-02-24	**Introduction Class Course Outcomes of the Units Lecture Case analysis**

nceptofInvestment 6 Hours	Fundamentalanalysis-EICFrame Work,Global Economy,DomesticEconomy,Business C ycles	3 hours	26-2-24 to 28-02-24	Chalk and Black board
Module NO 2 Fundamental Analysis 10 hours	FinancialInstruments:MoneyMarketIns tr uments,CapitalMarketInstruments,D eri vatives	3 hours	19-02-24 to 21-02-24	Chalk and Black board
	IndustryAnalysisandCompanyAnalysis.Valuationofsecurities: ValuationofBondsanddebentures	3 hours	4-03-24 to 06-03-24	Chalk and Black board
	preferenceshares,equityshares-nogrowth rate,normalgrowthrateandsupernormalgrowth rate.	4 hours	11-03-24 to 18-03-24	Chalk and Black board
Module No 3 Risk&Return 10 hours	RiskandReturnConcepts:ConceptofRisk ,TypesofRisk	3 hour	19-03-24 to 25-03-24	Chalk and Black board
	Systematicrisk,Unsystematicrisk,Calculati onofRiskandreturns	3 hour	26-03-24 to 01-04-24	Chalk and Black board
	PortfolioRiskandReturn:Expectedreturnsofaportfolio,	4 hours	02-o4-24 to	Chalk and Black board
	CalculationofPortfolioRiskandReturn		08-04-24	
ModuleNo. 4 TechnicalAnalysis 8 Hours	Technical Analysis — Concept,Theories- Dow Theory, Eliot wavetheory. Charts-Types, Trend andTrendReversal Patterns.,FormsofMarketEfficiency, E mpiricaltestfordifferentformsofmarket efficiency	3 hours	10-4-24 To 13-04-24	Chalk and Black board
	Mathematical Indicators — Moving averages, ROC,RSI,andMarketIndicators-Market Efficiencyand BehavioralFinance:Randomwalkand EfficientMarketHypothesis	3 hours	15-4-24 to 23-4-24 (16th to 20th April Internal Assesmen t test)	**Test marks were displayed onthe college Notice Board**Chalk and Black board
	FormsofMarketEfficiency,Empirical t estfordifferentformsofmarket efficiency	2 hours	02-05-24 To 03-05-24	Chalk and Black board
	Portfolio Management: Meaning, Need, Objectives, process of Portfoliomanagement,)	2 Hours	06-05-24 To 07-05-24	Chalk and Black board

ModuleNo.5 PortfolioManage ment 8 Hours	Selection ofsecuritiesand Portfolioanalysis.Constructionof optimalportfoliousingSharpe'sSingl e IndexModel	4 Hours	13-05-24 To 20-05-24	Chalk and Black board
	PortfolioPerformanceevaluation(Th eoryonly)	2 Hours	21-05-24 To 22-05-24	**Presentation s Assisgnmen t marks displayed and took the signature of students**Cha lk and Black board

Title of the Paper :Management Accounting
[Course Code – 243618
Term Period :12.02.2024 to 25.05.2024
Faculty Name :Vasagi S
Total Hrs: 64Hours (4Hrs/Week) SectionB

Curricu lum as prescribed by the Institution	**Topic s**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Module 1: Management Accounting (12 hours)	Introduction – Concept – Meaning andDefinition - Significance - Scope	4 hours	12.02.24 to 16.02.2 4	**Introduction Class Course Outcomes of theUnits Lecture &discussion**
	Advantages Objectives andFunctions ,	3 hours	17.02.2 4 to 20.02.2 4	Lecture, Discussion, PPT
	Difference between Financial Accounting, Cost Accounting and ManagementAccounting and Limitations of Management Accounting	3 hours	21.02.2 4 to 23.02.2 4	Lecture, Discussion, PPT
	Management Accountant: Role and Functions of Management Accountant	2 hours	24.02.2 4 to 25.02.2 4	Lecture, Discussion, PPT
Module No. 2:	Introduction – Meaning and Nature			

Financial Statements Analysis and	of financial statements - Limitations of financial statements -Essentials of a good financial statement.	4 hours	26.02.24 to 27.02.24	Lecture, Discussion, PPT
(14 hours)	Analysis and interpretations- Meaning and definition of Financial of analysis, types of analysis, Techniques of Financial Analysis	3 hours	30.03.24 to 02.03.24	Lecture, Discussion, PPT
	Comparative Statements,	3hours	03.03.24 to 05.03.24	Lecture, Discussion, PPT
	Common Size Statements and Trend Analysis -Problems.	4 hours	06.03.24 to 09.03.24	Lecture, Discussion, PPT
Module No. 3: Ratio Analysis (14 hours**)**	Introduction - Meaning and Definition of Ratio Analysis, Uses & Limitations of Ratio Analysis	2 hours	25.03.24 to 27.03.24	Lecture, Discussion, PPT
	Classification of ratios: Liquidity ratios: Current ratio, Liquid ratio and Absolute liquid ratio	2 hours	28.03.24 to 01.04.24	Lecture, Discussion, PPT
	Solvency ratios: Debt equity ratio, Proprietary ratio and Capital gearing ratio - Earning per share and return on capital employed;	2 hours	03.04.24 to 06.04.24	Lecture, Discussion, PPT
	Profitability ratios: Gross profit ratio, Net profit ratio Operating ratio, and Operating profit ratio.	2 hours	08.04.24 to 15.04.24 **Test- 16.04.24 to 20.04.24**	Lecture, Discussion, PPT(inclusive of test dates)
	Turnover ratios: Inventory turnover ratio – Debtors turnover ratio Debt collection period - Creditors turnover ratio ,Debt payment period ,	3 hours	22.04.24 to 24.04.24	Lecture, Discussion &Problem Solving
	Assets turnover ratio, Earnings per share and Price Earning Ratio. Problems on Ratio Analysis, Preparation of financial statements with the help of Accounting Ratios.	3 hours	25.04.24 to 28.04.24	Lecture, Discussion &Problem Solving **27.04.23 Test marks displayed on notice board**
			07.05.24	

	Preparation of cash flow statement as per Ind AS 7 (indirect method only).Problems.	4 hours	To 11.05.24	Lecture, Discussion &Problem Solving
	Preparation of cash flow statement asper Ind AS 7 (indirect method only). Problems Interpretation	4 hours	12.05.24 To 15.05.24	Lecture, Discussion &Problem Solving
Module No. 5: Marginal Costing (8 hours)	Definition, basic concepts, assumptions	2 hours	17.05.24 to 18.02.24	Lecture, Discussion, PPT
	marginal cost statements, contributions break even analysis ,.	**3** hours	19.05.24 to 21.05.24	Lecture, Discussion &Problem Solving
	contributions, PV ratios, margin of safety and decision areas	**3 hours**	22.05.24 to 25.05.24	Lecture, Discussion &Problem Solving **Assisgnment marksdisplayed and took the signature of students**

Title of the Paper :Management Accounting
Course Code – 243618
Term Period :12.02.2024 to 25.05.2024
Faculty Name :SUNIL N
Total Hrs: 64Hours (4Hrs/Week) SectionA

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Module 1: Management Accounting (12 hours)	Introduction – Concept – Meaning and Definition - Significance - Scope	4 hours	12.02.24 to 16.02.24	Lecture, Discussion, PPT
	Advantages Objectives andFunctions ,	3 hours	17.02.24 to 20.02.24	Lecture, Discussion, PPT
	Difference between Financial Accounting, Cost Accounting and ManagementAccounting and Limitations of Management	3 hours	21.02.24 to 23.02.24	Lecture, Discussion, PPT

	Accounting			
	Management Accountant: Role andFunctions of Management Accountant	2 hours	24.02.24 to 25.02.24	Lecture, Discussion, PPT
Module No. 2: Financial Statements Analysis and Interpretation (14 hours)	Introduction – Meaning and Nature of financial statements - Limitations of financial statements -Essentials of agood financial statement.	4 hours	26.02.24 to 27.02.24	Lecture, Discussion, PPT
	Analysis and interpretations- Meaning and definition of Financial of analysis, types of analysis, Techniques of Financial Analysis	3 hours	30.03.24 to 02.03.24	Lecture, Discussion, PPT
	Comparative Statements,	3hours	03.03.24 to 05.03.24	Lecture, Discussion, PPT
	Common Size Statements and TrendAnalysis -Problems.	4 hours	06.03.24 to 09.03.24	Lecture, Discussion, PPT
Module No. 3: Ratio Analysis (14 hours**)**	Introduction - Meaning and Definition of Ratio Analysis, Uses & Limitationsof Ratio Analysis	2 hours	25.03.24 to 27.03.24	Lecture, Discussion, PPT
	Classification of ratios: Liquidity ratios: Current ratio, Liquid ratio andAbsolute liquid ratio	2 hours	28.03.24 to 01.04.24	Lecture, Discussion, PPT
	Solvency ratios: Debt equity ratio, Proprietary ratio and Capital gearingratio - Earning per share and return on capital employed;	2 hours	03.04.24 to 06.04.24	Lecture, Discussion, PPT
	Profitability ratios: Gross profit ratio, Net profit ratio Operating ratio, and Operating profit ratio.	2 hours	08.04.24 to 15.04.24 **Test- 16.04.24 to 20.04.24**	Lecture, Discussion, PPT(inclusive oftest dates)
	Turnover ratios: Inventory turnover ratio – Debtors turnover ratio Debt collection period - Creditors turnover ratio ,Debt payment period ,	3 hours	22.04.24 to 24.04.24	Lecture, Discussion &Problem Solving

	Assets turnover ratio, Earnings per share and Price Earning Ratio. Problems on Ratio Analysis, Preparation of financial statementswith the help of Accounting Ratios.	3 hours	25.04.24 to 28.04.24	Lecture, Discussion &Problem Solving **27.04.23 Test marks displayedon notice board**
	Preparation of cash flow statement asper Ind AS 7 (indirect method only). Problems.	4 hours	07.05.24 To 11.05.24	Lecture, Discussion &Problem Solving
	Preparation of cash flow statement asper Ind AS 7 (indirect method only). Problems	4 hours	12.05.24 To 15.05.24	Lecture, Discussion &Problem Solving
Module No. 5: Marginal Costing (8 hours)	Definition, basic concepts, assumptions	2 hours	17.05.24 to 18.02.24	Lecture, Discussion, PPT
	marginal cost statements, contributions break even analysis ,.	**3** hours	19.05.24 to 21.05.24	Lecture, Discussion &Problem Solving
	contributions, PV ratios, margin ofsafety and decision areas	**3 hours**	22.05.24 to 25.05.24	Lecture, Discussion &Problem Solving **Assisgnment marks displayed and took the signature of students**

Mahajana Education Society (R)
Education to Excel
SBRR Mahajana First Grade College (Autonomous)
Jayalakshmipuram, Mysuru – 570 012
Karnataka, INDIA Affiliated to University of Mysore
Re-Accredited by NAAC with 'A' Grade, College with Potential for Excellence

Lesson Plan – I Semester 2023-24
Department: COMPUTER SCIENCE & APPLICATIONS
Subject: Computer Fundamentals and Programming in C
[Course code: 212149]
Term period: 12/09/2022 to 15/12/2023

Hrs/Week: 4 hours/week **Total Hrs: 56 Hours**

Curriculum asPrescribed by Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
UNIT – 1 **Fundamentals of Computers:** Introduction to Computers - Computer Definition, Characteristics of a Computer, Applications of a Computer, Generations of Computers, Types of Computers, Basic Organization of a Digital Computer; Number Systems – Different Types, Conversion	**Fundamentals of Computers:** Introduction to Computers - Computer Definition, Characteristics of a Computer, Applications of a Computer.	2 Hours	12/09/2023 13/09/2023	LECTURE
	Generations of Computers, Types of Computers, Basic Organization of a Digital Computer.	2 Hours	14/09/2023 15/09/2023	LECTURE
	Number Systems – Different Types, Conversion From One Number System To Another.	3 Hours	19/09/2023 20/09/2023 21/09/2023	LECTURE
System To Another; Computer Codes – ASCII; Boolean Algebra – AND, OR and NOT with Truth Tables; Types of Software – System Software	Computer Codes – ASCII; Boolean Algebra – AND, OR and NOT with Truth Tables.	2 Hours	22/09/2023 26/09/2023	LECTURE
	Types of Software – System Software and		27/09/2023	

and Utility Software; Computer Languages - Machine Level, Assembly Level & High Level Languages; Translators – Assembler, Interpreter and Compiler; Steps in Problem Solving, Planning a Computer Program – Algorithm (Features, Writing an Algorithm, Performance) and Flowchart with Examples.	Utility Software; Computer Languages - Machine Level, Assembly Level & High-Level Languages; Translators – Assembler, Interpreter and Compiler. Steps in Problem Solving, planning a Computer Program – Algorithm (Features, Writing an Algorithm, Performance) and Flowchart with Examples.	3 Hours 2 Hours	29/09/2023 03/10/2023 04/10/2023 05/10/2023	LECTURE LECTURE
UNIT – 2 **Introduction to and Basic Concepts in C Programming:** Features of C; Structure of a C Program with Examples, Compilation process in C; C Character Set; C tokens - Keywords, From One Number	**Introduction to and Basic Concepts in C Programming:** Features of C; Structure of a C Program with Examples, Compilation process in C; C Character Set; C tokens - Keywords, Identifiers, Constants and Variables; Data types; Declaration & Initialization of Variables.	5 Hours	06/10/2023 10/10/2023 11/10/2023 12/10/2023	LECTURE
Identifiers, Constants and Variables; Data types; Declaration & Initialization of Variables. **Input and Output Statements:** Formatted I/O Functions - printf() and scanf(),	**Input and Output Statements:** Formatted I/O Functions - printf() and scanf(), Control Strings and Escape Sequences, Output Specifications with printf(); Unformatted I/O Functions - getchar(), putchar(), gets() and puts().	3 Hours	13/10/2023 17/10/2023	LECTURE

Control Strings and Escape Sequences, Output Specifications with printf(); Unformatted I/O Functions - getchar(), putchar(), gets() and puts(). **C Operators & Expressions:** Arithmetic Operators; Relational Operators; Logical Operators; Assignment Operators; Increment & Decrement Operators; Bitwise Operators; Conditional Operator; Special Operators; Operator Precedence and Associativity; Type Conversion.	**C Operators & Expressions:** Arithmetic Operators; Relational Operators; Logical Operators; Assignment Operators; Increment & Decrement Operators; Bitwise Operators; Conditional Operator; Special Operators; Operator Precedence and Associativity; Type Conversion.	6 Hours	18/10/2023 19/10/2023 20/10/2023 25/10/2023 26/10/2023 27/10/2023	LECTURE
UNIT - 3 **Control Structures:** Decision Making Statements - simple if, if else, nested if else, else if ladder, switch; break & continue statements; Looping Statements - Entry and Exit Controlled Statements: while, do-while, for and nested loops.	**Control Structures:** Decision Making Statements - simple if, if else, nested if else, else if ladder, switch; break & continue statements; Looping Statements - Entry and Exit Controlled Statements: while, do-while, for and nested loops.	6 Hours	31/10/2023 02/11/2023 03/11/2023 07/11/2023 08/11/2023 09/11/2023	LECTURE
	Arrays: One-Dimensional Array - Declaration, Initialization, Memory	4 Hours	10/11/2023 15/11/2023 16/11/2023	LECTURE

Arrays: One-Dimensional Array - Declaration, Initialization, Memory Representation and Row & Column Major Addressing; Two-Dimensional Array- Declaration, Initialization andMemory Representation. **Strings:** Declaring &Initializing String Variables; String Handling Functions strlen, strcmp, strcpy,strca,strncpy , strncmp & strncat; Character handling functions - toascii, toupper, tolower, isalpha, isnumeric.	Representation and Row & Column Major Addressing; Two-Dimensional Array - Declaration, Initialization and Memory Representation. **Strings:** Declaring & Initializing String Variables; String Handling Functions - strlen, strcmp, strcpy, strcat, strncpy, strncmp and strncat; Character handling functions - toascii, toupper, tolower, isalpha, isnumeric.	4 Hours	17/11/2023 21/11/2023 22/11/2023	LECTURE
UNIT - 4 **Pointers in C:** Understanding Pointers - Declaring and Initializing Pointers, Accessing Address and Value of Variables Using Pointers; Pointers and Arrays; Pointer Arithmetic; Advantages and Disadvantages of Using Pointers. **User Defined Functions:** Need; Format; Components - Return Type, Name, Parameter List, Function Body, Return	**Pointers in C:** Understanding Pointers - Declaring and Initializing Pointers, Accessing Address and Value of Variables Using Pointers; Pointers and Arrays; Pointer Arithmetic; Advantages and Disadvantages of Using Pointers. **User Defined Functions:** Need; Format; Components - Return Type, Name, Parameter List, Function Body, Return Statement and Function Call; Categories - With and Without Parameters and Return Type; Recursion;	4 Hours 6 Hours	23/11/2023 24/11/2023 28/11/2023 29/11/2023 01/12/2023 05/12/2023 06/12/2023 07/12/2023 08/12/2023	LECTURE LECTURE

Statement and Function Call; Categories - With and Without Parameters and Return Type; Recursion; Difference between Iterative and Recursive Functions. **User Defined Data Types:** Structures - Definition, Advantages, Declaring Structure Variables, Accessing and Initializing Structure Members, Array and	Difference between Iterative and Recursive Functions. **User Defined Data Types:** Structures - Definition, Advantages, Declaring Structure Variables, Accessing and Initializing Structure Members, Array and Structures. Unions - Definition; Difference Between Structures and Unions.	4 Hours	12/12/2023 13/12/2023 14/12/2023 15/12/2023	LECTURE
Structures. Unions - Definition; Difference Between Structuresand Unions.	Revision			

Department: Computer Science & Applications
Subject: C Programming Lab [Course code: 212149]
Term Period: 18/09/2022 to 11/12/2023
Hrs/Week: 4 hours/week
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Practice Lab	To print a message, area of a rectangle, swapping of 2 numbers etc.	4hrs	18/09/2023	Practical
Part A Write a C Program to: 1.Read and print different Data types. 2.Demonstrate Assignment, Arithmetic and Increment &Decrement Operator.	1.Read and print different Data types. 2.Demonstrate Assignment, Arithmetic and Increment & Decrement Operator.	4hrs	25/09/2023	Practical
3.Demonstrate if-elsestatement. 4. Demonstrate else-if ladder.	3.Demonstrate if-else statement. 4. Demonstrate else-if ladder.	4hrs	05/10/2023	Practical
5. Demonstrate switch statement. 6. Demonstrate do-while loop.	5.Demonstrate switch statement. 6.Demonstrate do-while loop.	4hrs	09/10/2023	Practical
7. Demonstrate while loop. 8. Demonstrate for loop.	7. Demonstrate while loop. 8. Demonstrate for loop.	4hrs	16/10/2023	Practical
9. Implement Single Dimensional Array. 10. Implement Two Dimensional Array.	9.Implement Single Dimensional Array. 10.Implement Two Dimensional Array.	4hrs	26/10/2023	Practical
	Revision	4hrs	30/10/2023	Practical
	C1(part A)	4hrs	06/11/2023	Practical
Part B Write a C Program to: 1.Find the length of a string without using built in function. 2. Demonstrate various string built-in funticons.	1.Find the length of a string without using built in function. 2. Demonstrate various string built-in funticons.	4hrs	13/11/2023	Practical

3.Demonstrate the use of pointers. 4.Implement a function without parameters and return type.	3.Demonstrate the use of pointers. 4.Implement a function without parameters and return type.	4hrs	20/11/2023	Practical
5. Implement a function with parameters and without return type. 6. Implement a function without parameters and with return type	5. Implement a function with parameters and without return type. 6. Implement a function without parameters and with return type	4hrs	27/11/2023	Practical
7.Implement afunction with parameters and return type. 8. Demonstrate the difference between Call by Value and Call by Reference.	7.Implement a function with parameters and return type. 8. Demonstrate the difference between Call by Value and Call by Reference.	4hrs	30/11/2023	Practical
9. Demonstrate recursion. 10. Demonstrate the difference between Structure and Union.	9. Demonstrate recursion. 10. Demonstrate the difference between Structure and Union.	4hrs	04/12/2023	Practical
Structure and Union.				
	Revision	4hrs	07/12/2023	Practical
	C2(part B)	4hrs	11/12/2023	Practical

Lesson Plan - B.Com/BBA/B.Sc I Semester 2023-24
Department: Computer Science
Subject: DIGITAL FLUENCY
[Course code: 21DFLF94]

Term Period: SEPTEMBER 11th to DECEMBER 23rd

Hrs/week: 1 Hr **Total Hrs: 15 Hrs**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Introduction to the Course, Course Overview and Test & Examination Pattern		01	**12/09/2023 To 16/09/2023**	Class Room Teaching

Module-1: Emerging Technologies Overview of Emerging Technologies: ➢ Artificial Intelligence, Machine Learning, Deep Learning. ➢ Database Management for Data Science, Big Data Analytics. ➢ Internet of Things (IoT) and Industrial Internet of Things (IIoT) ➢ Cloud Computing and its Service Models ➢ Cyber Security and Types of Cyber Attack **Module-2:** Applications of Emerging Technologies Applications of Emerging Technologies: ➢ Artificial Intelligence ➢ Big Data Analytics ➢ Internet of Things ➢ Cloud Computing ➢ Cyber Security	• Artificial Intelligence, Machine Learning, Deep Learning • Applications of Artificial Intelligence Exercises Related to AI	02	**19/09/2023 To 30/09/2023**	Class Room Teaching
	• Database Management for Data Science, Big Data Analytics • Applications of Big Data Analytics Exercises Related to Big Data	02	**03/10/2023 To 14/10/2023**	
	• Internet of Things (IoT) and Industrial Internet of Things (IIoT) • Applications of Internet of Things Exercises Related to IoT	02	**17/10/2023 To 27/10/2023**	
	• Cloud Computing and its Service Models • Applications of Cloud Computing Exercises Related to Cloud Computing	02	**31/10/2023 To 11/11/2023**	
	• Cyber Security and Types of Cyber Attack • Applications of Cyber Security Exercises Related to Cyber Security	02	**14/11/2023 To 25/11/2023**	
Module-3 : Building Essential Skills Beyond Technology Importance of the following: ➢ Effective Communication Skills ➢ Creative Problem Solving & Critical Thinking ➢ Collaboration and Teamwork Skills ➢ Innovation & Design Thinking Use of Tools in Enhancing Skills	• Effective Communication Skills • Creative Problem Solving & Critical Thinking • Collaboration and Teamwork Skills • Innovation & Design Thinking • Use of Tools in Enhancing Skills	04	**28/11/2023 To 23/12/2023**	Activity Based – Class Room Teaching

Lesson Plan - B.Com/BBA/B.Sc I Semester 2023-24
Department: Computer Science
Subject: DIGITAL FLUENCY Lab
[Course code: 21DFLF94]
Term Period: SEPTEMBER 11th to DECEMBER 23rd

Hrs/week: 2 Hrs **Total Hrs: 30 Hrs**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Registration	Future Skills Course Registration Process	02	**12/09/2023 & 15/09/2023**	ICT, Mobile Phones & Laboratory
Campus to Corporate	Overview PDF, Module - 1 (To be Completed within 1 Week/Next Lab)	02	**19/09/2023 & 22/09/2023**	
Campus to Corporate	Module – 2 (To be Completed within 1 Week/Next Lab)	02	**26/09/2023 & 29/09/2023**	
AI – Practical/Lab Assignments	Practical exercises related to AI (Module 1 & Module 2)	04	**03/10/2023 TO 13/10/2023**	
Big Data – Practical/Lab Assignments	Practical exercises related to Big Data (Module 1 & Module 2)	04	**17/10/2023 TO 27/10/2023**	
IoT – Practical/Lab Assignments	Practical exercises related to IoT (Module 1 & Module 2)	02	**31/10/2023 & 03/11/2023**	
Cloud Computing – Practical/Lab Assignments	Practical exercises related to Cloud Computing (Module 1 & Module 2)	02	**07/11/2023 & 10/11/2023**	
Cyber Security – Practical/Lab Assignments	Practical exercises related to Cyber Security (Module 1 & Module 2)	04	**17/11/2023 TO 24/11/2023**	
Campus to Corporate	Module – 3 (To be Completed within 1 Week/Next Lab)	02	**28/11/2023 & 01/12/2023**	
Revision Labs		04	**05/12/2023 TO 15/12/2023**	
Final Test		02	**19/12/2023 & 23/12/2023**	ICT, Mobile Phones & Laboratory

Lesson Plan BA, BBA& BCom- I Semester 2023-24

Department: Computer Science and Applications
Subject: Office Automation [OE] (21OECMS101)
Term period: 11/09/2022 to 17/12/2023
Hrs/week: 3 Hour
Total Hrs: 42 Hours

Prescribed Curriculum	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit1:Introduction, Block diagram of a computer, Input and output devices, memory and storage devices, Types of software, Introduction to operating system – functions, types of operating system and examples. Introduction to word processing – creating and saving a document, formatting a document – Line spacing, paragraph, Fonts, inserting symbols, header and footer, shape, Tables, Find and replace, Mail merge, saving a document in	Introduction, Block diagram of a computer, Input and output devices, memory and storage devices, Types of software, Introduction to operating system – functions, types of operating system and examples.	3 Hours 2 Hours 4 Hours	11/09/2023 13/09/2023 16/09/2023 20/09/2023 23/09/2023 25/09/2023 27/09/2023 30/09/2023	LECTURE and ICT
different formats.	Introduction to word processing – creating and saving a document formatting a document – Line spacing, paragraph, Fonts, inserting symbols, header and footer, shape, Tables, Find and replace Mail merge, saving a document in different formats.	1 Hour 2 Hours 2Hours	04/10/2023 07/10/2023 09/10/2023 11/10/2023	
	Introduction to	2 Hour	14/10/2023	

Unit 2 Introduction to spreadsheet - entering different types of data like text, Numbers, date, functions and formulae - different categories of functions, chart - creating and formatting chart, filter, working with single and multiple work books, cell referencing, printing and previewing a document.	spreadsheet entering different types of data like text, Numbers, date, functions and formulae - different categories of functions chart - creating and formatting chart filter, working with single and multiple work books cell referencing, printing and previewing a document	4 Hours 2 Hours 3 Hours 3 Hours	16/10/2023 18/10/2023 21/10/2023 25/10/2023 30/10/2023 04/11/2023 06/11/2023 08/11/2023 11/11/2023	LECTURE andICT
Unit 3 Introduction to presentation tools - creating and viewing a presentation, applying design template, formatting options, inserting different objects in a presentation, customize a presentation, adding audio to a presentation, slide animation, preview slide transitions slideshow options, adding effect to a presentation.	Introduction to presentation tools creating and viewing a presentation, applying design template, formatting options inserting different objects in a presentation, customize a presentation, adding audio to a presentation slide animation, preview slide transitions slideshow	2 Hours 4 Hours 4 Hours	13/11/2023 15/11/2023 18/11/2023 20/11/2023 22/11/2023 25/11/2023 27/11/2023 29/11/2023 02/12/2023 04/12/2023 06/12/2023 09/12/2023 11/12/2023	LECTURE and ICT

	options, adding effect to a presentation.	4 Hours		
Revision Classes	UNIT - 1 UNIT - 2 UNIT - 3	2 Hours	13/01/2023 17/12/2023	LECTURE and ICT

Department: Computer Science
Subject: Object Oriented Programming in Java (DSC-3)
(Course Code: 222349)
Term Period: 12/09/2022 to 15/12/2023
Faculty Name: Archana A
Hrs/week:4Hours **TotalHrs:56 Hours**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Introduction to OOP and Java (15 hours)	Introduction to OOP and Java: Basic OOPs Concepts Basics of Java Programming – Introduction,	2 hours	11/09/2023 12/09/2023	Chalk and Black Board
	History,Applications,Editions, Features; Datatypes;	2 hours	14/09/2023 16/09/2023	Chalk and Black Board
	Variables Operators; Control Structures.	2 hours	18/09/2023 21/09/2023	Chalk and Black Board
	Objects and Classes: Basics of Objects and Classes; Java Methods;	2 hours	23/09/2023 25/09/2023	Chalk and Black Board
	Visibility Modifiers; Constructors; 'this' Reference; Finalizer;	2 hours	26/09/2023 29/09/2023	Chalk and Black Board
	Inbuilt Classes like String, Character, Math String Buffer, File, Arrays.	2 hours	30/09/2023 3/10/2023	Chalk and Black Board
	Skill Based/Participative/Experiential.	2 hours	4/10/2023 7/10/2023	Chalk and Black Board

	Learning–Activity to Understand OOP Concepts	1 hours	9/10/2023	Activity
Inheritance, Polymorphism and Packages: Inheritance (13 hours)	**Inheritance:**Inheritance-Introduction, Types	2 hours	11/10/2023 14/10/2023	Chalk and Black Board
	Super class and Sub Class, Casting Objects.	2 hours	16/10/2023 17/10/2023	Chalk and Black Board
	Object Class; Abstract Class; Interface; Dynamic Binding.	2 hours	19/10/2023 21/10/2023	Chalk and Black Board
	Instance of Operator; Polymorphism**:**	2 hours	25/10/2023 26/10/2023	Power point Presentation
	Polymorphism – Introduction, Overloading, Overriding;	2 hours	27/10/2023 30/10/2023	Chalk and Black Board
	Packages: Package in Java– Introduction, 'util' Package.	2 hours	31/10/2023	Chalk and Black Board
	SkillBased/Participative/Experiential Learning – Quiz.	2 hours	2/11/2023	Activity
Event and GUI Programming (14 hours)	Event: Event Handling in Java –Classification of Events, Delegation Event Model	2 hours	3/11/2023 4/11/2023	Power point Presentation
	Event Classes, Listener Interface. GUI Programming: GUI - Basics, Panels, Frames.	2 hours	6/11/2023 7/11/2023	Power point Presentation
	Layout Managers: Flow Layout, Border Layout, Grid Layout,	2 hours	9/11/2023 11/11/2023	Chalk and Black Board
	Components: Buttons, Check Boxes, Radio Buttons, Labels.	2 hours	13/11/2023 14/11/2023	Chalk and Black Board
	Text Fields, Text Areas, Combo Boxes, Lists, Scroll Bars.	2 hours	16/11/2023 17/11/2023	Chalk and Black Board
	Sliders, Windows, Menus, Dialog Box.	2 hours	18/11/2023 20/11/2023	Power Point Presentation
	Applet and its Life Cycle. Design an Applet based solutions for a real-time problem.	2 hours	21/11/2023 22/11/2023	Chalk and Black Board And Activity
I/O Programming,	I/O Programming: I/O Streams – Byte, Character;	2 hours	23/11/2023 25/11/2023	Chalk and Black Board
	Multithreading: Random Access Files; Multithreading - Life Cycle of a Thread,	2 hours	27/11/2023 28/11/2023	Chalk and Black Board
	Thread Class and Methods, Runnable Interface.	2 hours	29/11/2023 30/11/2023	Chalk and Black Board
	Thread	2 hours	2/12/2023	Chalk and Black

Multithreading and Exception Handling: (13 hours)	Synchronization;Generic Programming;		4/12/2023	Board
	ExceptionHandling: ExceptionHandling-Introduction,	2 hours	5/12/2023 7/12/2023	Chalk and Black Board
	Exception Handling with 'try catch finally'.	2 hours	8/12/2023 9/12/2023	Chalk and Black Board
	Skill Based/ Participative/ Experiential Learning – Group Assignment.	2 hours	11/12/2023 12/12/2023	Activity

Department: Computer Science
Subject: Object Oriented Programming in Java (DSC-3)
(Course Code:222349)
Term Period: 12/09/2022 to 15/12/2023
Faculty Name: Archana A
Total Hrs: 56 Hours (4 Hour Hrs/week)

Curriculum as Prescribed by the Institution	Topics	No. of Hours Required to Complete	Date	Method of Deployment
PART- A	• Basic Introduction and IDE Familiarization	4 hrs	21/09/2023	**ICT & Laboratory**
	• Demonstrate if statement. • Implement user input operation.	4 hrs	29/09/2023	
	• Demonstrate switch statement. • Demonstrate looping statement.	4 hrs	05/10/2023	
	• Demonstrate the use of constructors. • Demonstrate the use of interface.	4 hrs	12/10/2023	
	• Implement method overloading. • Implement the concept of overriding.	4 hrs	19/10/2023	
	• Implement inheritance. • Illustrate some options of 'util' package.	4 hrs	26/10/2023	

	REVISION	4 hrs	02/11/2023	
	PART A – LAB TEST	4 hrs	09/11/2023 12/11/2023 Display of C1 Lab Internal Marks Sheet on the Notice Board	
PART-B	• Catch an Array related Exception. • Demonstrate Multithreading.	4 hrs	14/11/2023	**ICT & Laboratory**
	• Handle exception using "try catch finally" method. • Display movement of an object according to the arrow key pressed.	4 hrs	16/11/2023	
	• Demonstrate some mouse handling events. • Demonstrate the use of a frame with button operation.	4 hrs	23/11/2023	
	• Display information about yourself. • Draw grid lines.	4 hrs	30/11/2023	
	• Illustrate the use of textbox, check box and radio buttons. • Draw several shapes on the window.	4 hrs	07/12/2023	
	REVISION	4 hrs	11/12/2023	
	PART B – LAB TEST	4 hrs	14/12/2023 15/12/2023 Display of C2 Lab Internal Marks	

Lesson Plan - IIISemester BA/BCA 2023-24
Department: COMPUTER SCIENCE
Subject: ARTIFICIAL INTELLIGENCE
[Course code: 22AINS94]

Hrs/week: 1 Hrs **Total Hrs:13 Hrs**

Curriculum as prescribed bythe Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introduction to the Course		1 Hour	**11/09/2023**	Class Room Teaching
Course Overview and Test & Examination Pattern		1 Hour	**18/09/2023**	Class Room Teaching
Course – 1 - Azure AI Fundamentals (AI-900) **AI-900 pathway consists of 5 courses and 2 reading material:** i. Introduction to AI on Azure ii. Use visual tools to create machine learning models with Azure Machine Learning iii. Explore computer vision in Microsoft Azure iv. Explore natural language processing v. Explore conversational AI vi. Tune Model Hyperparameters - Azure Machine Learning (Reading) vii. Neural Network Regression:Module Reference - Azure Machine Learning (Reading)	i. Introduction to AI onAzure	1 Hour	**25/09/2023**	Class Room Teaching
	ii. Use visual tools to create machin elearning models withAzure Machin eLearning	1 Hour	**09/10/2023**	
	iii. Explore computervision in Microsoft Azure	1 Hour	**16/10/2023**	
	iv. Explore naturallanguage processing v. Explore conversational AI	1 Hour	**30/10/2023**	

	vi. Tune Model Hyperparameters - Azure Machine Learning (Reading) vii. Neural Network Regression: ModuleReference - Azure Machine Learning (Reading	1 Hour	**6/11/2023**	
Course – 2 - Data AnalystAssociate (DA-100) DA-100 pathway consists of 5 courses and 2 reading material: 1. Get started with Microsoftdata analytics 2. Prepare data for analysis 3. Model data in Power BI 4. Visualize data in Power BI 5. Data analysis in Power BI 6. Manage workspaces anddatasets in Power BI 7. Key Influencers Visualizations Tutorial - PowerBI 8. Smart Narratives Tutorial -Power BI | Microsoft Docs	1. Get started withMicrosoft data analytics	1 Hour	**08/11/2023**	Class Room Teaching and ICT
	2. Prepare data foranalysis	1 Hour	**20/11/2023**	
	3. Model data inPower BI	1 Hour	**22/11/2023**	
	4. Visualize data inPower BI	1 Hour	**29/11/2023**	
	5. Data analysis inPower BI	1 Hour	**04/12/2023**	
	6. Manage workspacesand datasets in Power BI	2 Hour	**06/12/2023 & 11/12/2023**	
	7. Key Influencers Visualizations Tutorial - Power BI	1 Hour	**13/12/2023**	
	8. Smart Narratives Tutorial - Power BI | Microsoft Docs	1 Hour	**18/12/2023**	

Lesson Plan - III Semester BA/BCA 2022-23
Department: COMPUTER SCIENCE
Subject: ARTIFICIAL INTELLIGENCE LAB
[Course code: 22AINS94]
Hrs/week: 2 Hrs Total Hrs: 26 Hrs

Curriculum as prescribed by theInstitution	Topics	No. of Hours required to complete	Date	Method of Deployment
Practical 1. Describe Artificial Intelligence workloads and considerations 2. Describe fundamental principles of machine learning on Azure 3. Describe features ofcomputer vision workloads on Azure 4. Describe features ofNatural Language Processing (NLP) workloads on Azure	1. Describe Artificial Intelligenceworkloads and considerations	2 Hours	**13/09/2023**	**ICT & Laboratory**
	2. Describe fundamental principles ofmachine learning on Azure	3 Hours	**20/09/2023**	
	3. Describe features of computervision workloads on Azure	4 Hours	**27/09/2023 & 04/10/2023**	
	4. Describe features of NaturalLanguage Processing (NLP) workloads on Azure	4 Hours	**11/10/2023 & 18/10/2023**	
Practical 1. Prepare the data 2. Model the data 3. Visualize the data 4. Analyse the data 5. Deploy and maintain deliverables	1. Prepare the data	4 Hours	**25/10/2023 & 08/11/2023**	**ICT & Laboratory**
	2. Model the data	2 Hours	**15/11/2023**	
	3. Visualize the data	4 Hours	**22/11/2023 & 29/11/2023**	
	4. Analyse the data	2 Hours	**6/12/2023**	
	. Deploy and maintain deliverables	2 Hours	**13/12/2023**	

Dpartment: Computer Science
Subject: DSC- 7 Computer Networks
[Course code:232550]
Term Period: 11 /09/23 to 15/12/24

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit 1: Introduction to computer Networks	Definition, Goals, Structure ,Broadcast and point-to point networks, network topology and its various types, types of networks, network software.	**07**	**11/09/23** **12/09/23** **15/09/23**	Classroom teaching
	Design Issues for the Layers; Connection-oriented vs. Connectionless service; Applications of Computer Network; Protocols and Standards; The OSI Reference Model; The TCP/IP Protocol Suite; Comparison between OSI and TCP/IP Reference Model.		**18/09/23** **22/09/23** **25/09/23** **29/09/23**	Classroom teaching
Unit 2 : Physical layer	**Physical Layer:** Functions of Physical Layer; Analog and Digital Signals; Transmission Impairment; Data Rate Limits and Performance;	**01**	**1/10/23**	Classroom teaching
	Data Transmission Media - Guided Transmission Media, Magnetic Media, Twisted Pairs, Coaxial Cable, Power Lines, Fiber Optics, Wireless Transmission, Electromagnetic Spectrum, Radio Transmission, Microwave Transmission, Infrared Transmission, Light Transmission; Digital Modulation and Multiplexing; Public Switched Telephone Networks; Switching - Circuit Switching, Message Switching	**06**	**6/10/23** **9/13/23** **16/10/23** **19/10/23** **20/10/23** **27/10/23**	Classroom teaching

Unit 3 : Data link layer	andPacket Switching. Functions of Data Link Layer; Data Link Control - Framing, Flow and Error Control, Error Detection and Correction, High Level Data Link Control (HDLC) & Point to Point Protocol (PPP); Channel Allocation Problem; Multiple Access - Random Access (ALOHA, CSMA, CSMA/CD, CSMA/CA), Controlled Access (Reservation, Polling, Token	**07**	**3/11/23** **4/11/23** **6/11/23** **10/11/23** **13/11/23** **17/12/23**	Classroom teaching Classroom teaching
Unit 4: Transport layer	Passing), Channelization (FDMA, TDMA, CDMA). Wired LAN - Ethernet Standards and FDDI; Wireless LAN - IEEE 802.1 Ix and Bluetooth Standards. . Functions of Transport Layer; Elements of Transport Protocols - Addressing, Establishing and Releasing Connection; Flow Control & Buffering; Error Control; Multiplexing & De-multiplexing; Crash Recovery.	**03**	**18/11/23** **20/11/23** **24/11/23** **25/11/23** **27/11/23** **1/11/23**	Classroom teaching Classroom teaching

	User Datagram **Protocol (UDP):** User Datagram; UDP Operations; Uses of UDP and RPC; Principles of Reliable Data Transfer - Building a Reliable Data Transfer Protocol, Pipelined Reliable Data Transfer Protocol, Go Back N (GBN), Selective Repeat (SR).		**4/12/23** **8/12/23** **9/12/23**	Classroom teaching
	Application Layer: Functions of Application Layer; Application Layer Protocols - DNS, DHCP, WWW, HTTP, HTTPs, TELNET, FTP, SMTP,POP, IMAP.		**11/12/23**	Classroom teaching

Dpartment: Computer Science
Subject: DSC- 7 Computer Networks lab
[Course code:232550]
Term Period: 11 /09/23 to 15/12/24

Curriculum as prescribed by theInstitution	**Topic s**	**No. of Hours require dto complet e**	**Date**	**Method of Deployment**
Part A	1. Prepare hardware and software components for basic computer system networking. 2. Study of different types of network cables and practically implementing cross wire cable. 3. Identifying the network devices. 4. Create a basic network and share file and folder.	**24 (4hr/day)**	**26/09/23** **3/11/23** **10/11/23** **17/11/23** **24/11/23** **31/11/23**	**Lab**

Part B	5. Study of basic network commands and network configuration commands. 6. Configure the IP address of the computer. Implement Connecting two nodes using network simulator . 7. Implement A network to connect three nodes considering one node as a central node using network simulator. 8. Implement bus toplology using network simulator. 9. Implement star toplology using network simulator 10. Implement ring toplology using network simulator Demonstrate the use of wireless LAN using Networl simulator.		**26/09/23** **3/11/23** **10/11/23** **17/11/23** **24/11/23** **31/11/23**	**Lab**

Department: Computer Science
Subject: DSC (5) - Programming in Python (Theory)
Time Period: 11th September to 15th December

Hrs/week: 4 Hour **Total Hrs: 56 Hours**

Prescribed Curriculum	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Unit-I **Introduction to Features and Applications of Python:** Python Versions; Installation of Python; Python Command Line Mode and Python IDEs. **Python Basics:** Identifiers; Keywords; Data Types; Statements and Expressions; Variables; Python Operators; Precedence and Association; Indentation; Comments; Built-in Functions	**Introduction to Features and Applications of Python:** Python Versions; Installation of Python Python Command Line Mode and Python IDEs. **Python Basics:** Identifiers; Keywords; Data Types; Statements and Expressions; Variables	2 1 3	11/9/2023 13/9/2023 14/9/2023 15/9/2023 20/9/2023 21/9/2023	**Lecture and ICT**

- Console Input and Console Output; Format Specifiers; Escape Sequences; Type Conversions; Python Libraries; Importing Libraries with Examples; Simple Python Program.	Python Operators; Precedence and Association; Indentation; Comments; Built-in Functions - Console Input and Console Output; Format Specifiers	2 1	22/9/2023 25/9/2023 27/9/2023	
Python Control Flow: Types of Control Flow; Control Flow Statements - if, if-else, elif, while Loop, break, continue, for Loop Statements; range() and exit() Functions.	Escape Sequences; Type Conversions; Python Libraries Importing Libraries with Examples; Simple Python Program. **Python Control Flow:** Types of Control Flow; Control Flow Statements - if, if-else, elif, while Loop, break, continue, for Loop Statements; range() and exit() Functions.	2 4	29/9/2023 04/10/2023 05/10/2023 06/10/2023 09/10/2023 11/10/2023	**Lecture and ICT**
Unit-II **Strings:** Creating and Storing Strings; str() Function; Accessing String Characters; Operations - Concatenation, Comparison, Slicing and Joining, Traversing; Python String Methods. **Python Sets:** Lists - Creating Lists, Operations, Built-in Functions, Nested Lists; Dictionaries -Creating Dictionaries, Operations, DictionaryMethods; Tuples –	**Strings:** Creating and Storing Strings; str() Function; Accessing String Characters Operations - Concatenation, Comparison, Slicing and Joining, Traversing; Python String Methods. **Python Sets:** Lists - Creating Lists ,Operations, Built-in Functions, Nested	2 3 1 3	12/10/2023 13/10/2023 16/10/2023 18/10/2023 19/10/2023 20/10/2023 25/10/2023 26/10/2023 27/10/2023 30/10/2023 02/11/2023 03/11/2023	**Lecture and ICT**

Creating, Operations, Built-in Methods.	Lists; Dictionaries - Creating Dictionaries, Operations, Dictionary Methods; Tuples – Creating, Operations, Built-in Methods.	3 2	06/11/2023 08/11/2023	
Unit-III **Python Functions:** Definition; Types; Syntax – Defining and Calling Function; Parameters/Arguments – Types, Passing; return Statement; Recursive Functions; Scope and Lifetime of Variables in Functions. **Exception Handling:** Definition – Error, Exception; Types of Errors; Exception Handling using try, except and finally. **File Handling:** File Types; Operations on Files– Create, Open, Read, Write, Close Files; File Names and Paths; Format Operator. **Object Oriented Programming:** Classes - Creating; Objects - Creating, as Arguments, as Return Values; OOPs Concepts – Definition & Examples of Inheritance & Polymorphism.	**Python Functions:** Definition; Types; Syntax – Defining and Calling Function Parameters/Arguments – Types, Passing; return Statement; Recursive Functions Scope and Lifetime of Variables in Functions. **Exception Handling:** Definition – Error, Exception; Types of Errors; Exception Handling using try, except and finally. **File Handling:** File Types; Operations on Files– Create, Open, Read, Write, Close Files File Names and Paths; Format Operator. **Object Oriented Programming:** Classes - Creating; Objects - Creating, as Arguments, asReturn Values;	1 2 1 2 1 1 2 3	09/11/2023 10/11/2023 13/11/2023 15/11/2023 16/11/2023 17/11/2023 20/11/2023 22/11/2023 23/11/2023 24/11/2023 25/12/2023 27/10/2023	**Lecture and ICT**

	OOPs Concepts – Definition & Examples of Inheritance & Polymorphism.			
Unit-IV **GU Interface:** Tkinter Module; Window and Widgets; Layout Management - pack, grid and place. **Python SQLite:** SQLite3 Module; SQLite Methods - connect, cursor, execute, close; Connect to Database; Create Table; Operations on Tables- Insert, Select, Update, Delete and Drop Records. **Data Analysis:** NumPy – Introduction; Array Creation using NumPy; Operations on Arrays; Pandas – Introduction; Series and DataFrames; Creating DataFrames from Excel Sheet and .csv File; Operations on DataFrames. **Data Visualization:** Introduction; Matplotlib Library; Different Types of Charts using Pyplot – Line Chart, Bar Chart, Pie Chart and Histogram.	**GU Interface:** Tkinter Module; Window and Widgets; Layout Management - pack, grid and place.	3	28/11/2023 29/11/2023	
	Python SQLite: SQLite3 Module; SQLite Methods - connect, cursor, execute, close	2	01/12/2023 02/12/2023	
	Connect to Database; Create Table; Operations on Tables- Insert, Select, Update, Delete and Drop Records.	2	04/12/2023 06/12/2023	**Lecture and ICT**
	Data Analysis: NumPy – Introduction; Array Creation using NumPy; Operations on Arrays	2	07/12/2023 08/12/2023	
	Pandas – Introduction; Series and DataFrames; Creating DataFrames from Excel Sheet and .csv File; Operations on DataFrames.	3	09/12/2023 11/12/2023 13/12/2023	
	Data Visualization: Introduction; Matplotlib Library; Different Types of Charts using Pyplot – Line Chart, Bar	2	14/12/2023 15/12/2023	

	Chart, Pie Chart and Histogram.			

Department: Computer Science
Subject: DSC (5) – Python Programming Lab
Time Period: 11th September to 15th December

Hrs/week: 4 Hour **Total Hrs: 56 Hours**

Curriculum as Prescribed by the Institution	Topics	No. of Hours Required to Complete	Date	Method of Deployment
Basic Introduction and IDE Familiarization		04	16/09/2023	**ICT & Laboratory**
PART A: FUNDAMENTALS OF PYTHON Write a Python Program to: 1. Implement User I/O Operation. 2. Demonstrate All Arithmetic Operators. 3. Demonstrate various if statements. 4. Demonstrate while loop. 5. Demonstrate for loop with and without range. 6. Demonstrate Identity & Membership Operators. 7. Implement at least 12 Built-in String Methods. 8. Demonstrate the Use of Lists using Built-in Methods. 9. Demonstrate the Use of Dictionaries using Built-in Methods. 10. Demonstrate the Use of Tuples using Built-in Methods.	1. Implement User I/O Operation. 2. Demonstrate All Arithmetic Operators.	04	23/09/2023	**ICT & Laboratory**
	3. Demonstrate various if statements. 4. Demonstrate while loop.	04	30/09/2023	
	5. Demonstrate for loop with and without range. 6. Demonstrate Identity & Membership Operators	04	07/10/2023	
	7. Implement at least 12 Built-in String Methods. 8. Demonstrate the Use of Lists using Built-in Methods.	04	12/10/2023	
	9. Demonstrate the Use of Dictionaries using Built-in Methods. 10. Demonstrate the Use of Tuples using Built-in Methods.	04	21/10/2023	
PART A – REVISION		04	26/10/2023	**ICT & Laboratory**
PART A – LAB TEST		04	31/10/2023	**Laboratory**
PART B: ADVANCED PYTHON PROGRAMMING Write a Python Program to: 1. Demonstrate a User-Defined Function.	1. Demonstrate a User-Defined Function. 2. Demonstrate Exception Handling. 3. Read & Write on to a File.	04	04/11/2023	

2. Demonstrate Exception Handling. 3. Read & Write on to a File. 4. Demonstrate Object Oriented Programming Concepts. 5. Create a GUI using Tkinter Module. 6. Create SQLite Database and Perform Operations on Tables. 7. Create an Array using NumPy and Perform Array Operations. 8. Create DataFrame from a Spreadsheet using Pandas and Perform DataFrame Operations. 9. Create a Line and Bar Graph using Matplotlib. 10. Create a Pie Chart and Plot a Histogram using Matplotlib.	4. Demonstrate Object Oriented Programming Concepts. 5. Create a GUI using Tkinter Module.	04	11/11/2023	**ICT & Laboratory**
	6. Create SQLite Database and Perform Operations on Tables.	04	18/11/2023	
	7. Create an Array using NumPy and Perform Array Operations. 8. Create DataFrame from a Spreadsheet using Pandas and Perform DataFrame Operations.	04	25/11/2023	
	9. Create a Line and Bar Graph using Matplotlib. 10. Create a Pie Chart and Plot a Histogram using Matplotlib.	04	02/12/2023	
PART B – REVISION		04	09/12/2023	**ICT & Laboratory**
PART B – LAB TEST		04	14/12/2023	**Laboratory**

Lesson Plan: V Semester BA/BCA/B.Sc/B.Com 2023-24
Department: Computer Science
Subject: CYBER SECURITY
Hrs./week:03 hrs. **Total Hrs.: 42 hours**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of deployment**
Unit-1 **Introduction:** Defining cyberspace and overview of Computer and Web-Technology, Architecture of Cyberspace, Communication and web technology, Internet, World wide web, Advent of	**Unit-1** **Introduction:** Defining cyberspace and overview of Computer and Web-Technology, Architecture of Cyberspace.	5 hrs	27/10/2022 28/10/2022 29/10/2022 31/10/2022 02/11/2022	Lecture /PPT

Internet.	Communication and web technology, Internet, World wide web, Advent of Internet.	3 hrs	03/11/2022 04/11/2022 05/11/2022	
Internet Infrastructure for Data Transfer and Governance, Internet Society, Regulation of CyberSpace, Concept of Cyber Security, Issues and	Internet Infrastructure for Data Transfer and Governance, Internet Society, Regulation of CyberSpace, Concept of Cyber Security, Issues and Challenges of Cyber	6 hrs	07/11/2022 08/11/2022 09/11/2022 10/11/2022 12/11/2022	Lecture /PPT
Challenges of Cyber Security.	Security. Challenges of Cyber Security.		14/11/2022	
	Total	14hrs		
Unit-2 **Cyber Crime and Cyber Law:** Classification of Cyber Crimes, Common Cyber Crimes- Cyber Crime targeting Computers and mobiles, Cybercrime against women Children, Financial Frauds, Social Engineering Attacks, Malware and Ransomware Attacks.	**Unit-2** **Cyber Crime and Cyber Law:** Classification of Cyber Crimes, Common Cyber Crimes- Cyber Crime targeting Computers and mobiles, Cybercrime against women Children, Financial Frauds, Social Engineering Attacks, Malware and Ransomware Attacks.	7 hrs	15/11/2022 16/11/2022 17/11/2022 18/11/2022 19/11/2022 21/11/2022 22/11/2022	Lecture /PPT
Zero Day and Zero Click Attacks, Cyber criminals Modus-operands, Reporting of Cyber Crimes, Remedial and Mitigation Measures, Legal Perspective of Cyber Crime, IT Act 2000 and its Amendments, Cyber Crime and offences, Organization dealing with Cyber Crime and Cyber Security in India.	Zero Day and Zero Click Attacks, Cyber criminals Modus-operands, Reporting of Cyber Crimes, Remedial and Mitigation Measures, Legal Perspective of Cyber Crime, IT Act 2000 and its Amendments, Cyber Crime and offences, Organization dealing with Cyber Crime and Cyber Security in India	7 hrs	23/11/2022 24/11/2022 25/11/2022 26/11/2022 28/11/2022 29/11/2022 30/11/2022	
	Total	14 hrs		

Unit-3 **Social Media Overview and Security:**	**Unit-3** **Social Media Overview and Security:**	14 hrs	1/12/2023 2/12/2023 3/12/2023 4/12/2023	Lecture
Introduction to Social Networks, Types of Social Media, Social Media Platforms, Social Media Monitoring, Hashtag, Viral Content, Social Media Marketing, Social Media Privacy, Challenges, Opportunities and Pitfalls in Online Social Network, Security Issues related to Social Media, Flagging and Reporting of Inappropriate Content, Laws Regarding Posting of Inappropriate Content, Best Practices for the Use of Social Media.	Introduction to Social Networks, Types of Social Media, Social Media Platforms, Social Media Monitoring, Hashtag, Viral Content, Social Media Marketing, Social Media Privacy, Challenges, Opportunities and Pitfalls in Online Social Network, Security Issues related to Social Media, Flagging and Reporting of Inappropriate Content, Laws Regarding Posting of Inappropriate Content, Best Practices for the Use of Social Media.		5/12/2023 6/12/2023 7/12/2023 8/12/2023 9/12/2023 10/12/2023 11/12/2023 12/12/2023 13/12/2023 14/12/2023	
	Total	14 hrs		
	Total workload	42 hrs		

Department: Computer Science
Title Of The Paper: Data Structure using C [Course Code: 212249]

Term Period: 13/02/2024 to 25/05/2024

Faulty Name: Sahanashree G

Total Hours: 56hrs

Curriculum as prescribed bythe Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deploymentand Remarks**
	Introduction To Data	2 hours	13/02/24	Chalk and Black board

	Structures: Definition; Types - Primitive & Non-Primitive, Linear and Non-Linear		14/02/24	
Unit 1 **(14 hours)**	Operations on Data Structures, Abstract Data Type (ADT). **Arrays:** Various Types and their Memory Representation	3 hours	16/02/24 17/02/24 20/02/24	Chalk and Black board
	1D Array Operations - Traversing Linear Arrays. Sorting – Bubble Sort	2 hours	21/02/24 23/02/24	Chalk and Black board
	Selection Sort, Insertion Sort	2 hours	24/02/24 27/02/24	Chalk and Black board
	Merge Sort, Quick sort	2 hours	28/02/24 01/03/24	Chalk and Black board
	Searching – Sequential Search, Binary Search, Sparse Matrices – Definition, Advantage.	3 hours	02/03/24 05/03/24 06/03/24	Chalk and Black board
	Stacks: Basic Concepts – Definition,Representation, Operations, Infix and Postfix Notations	2 hours	09/03/24 12/03/24	Chalk and Black board.
Unit 2 **(14 hours)**	Applications of Stack - Conversion from Infix to Postfix	2 hours	13/03/24 15/03/24	Chalk and Black board
	Evaluation of Postfix Expression.	2 hours	16/03/24 19/03/24	Chalk and Black board
	Queues: Basic Concepts – Definition, Representation, Types of Queues – Simple Queue	2 hours	20/03/24 22/03/24	Chalk and Black board

	Circular Queue, Double Ended Queue, Priority Queue	4 hours	23/03/24 26/03/24 27/03/24 30/03/24	Chalk and Black board
	Operations on Simple Queue.	2 hours	02/04/24 03/04/24	Chalk and Black board
	Data Structure using C	1 hour	17/04/24	16/04/24 To 20/ 04/ 24 C1 Internal Test was Conducted.
Unit 3 **(14 hours)**	**Dynamic Memory Allocation:** Memory Allocation and De-Allocation Functions – malloc(), calloc()	3 hours	05/04/24 06/04/24 10/04/24	Chalk and Black board.
	realloc() and free(), Garbage Collection.	2 hours	12/04/24 13/04/24	Chalk and Black board
	Linked List: Basic Concepts – Definition, Types of Linked Lists - Singly Linked List	3 hours	23/04/24 24/04/24 25/05/24	Chalk and Black board 23/04/24 Marks sheet of Cl Internal test was displayed onthe notice board.
	Doubly Linked List, Circular Linked List	4 hours	26/04/24 27/04/24 30/04/24 01/05/24	Chalk and Black board
	Representation of Linked List in Memory, Operations on Singly Linked Lists – Insertion,Deletion.	2 hours	02/05/24 03/05/24	Chalk and Black board
	Trees: Definition; Tree Terminologies – edge, node,root node, parent node,ancestors of a node, siblings,terminal & non-terminal nodes, degree of a node, level, path, depth, height.	4 hours	04/05/24 07/05/24 08/05/24 10/05/24	Chalk and Black board

Unit 4 **(14 hours)**	**Binary Tree:** Type of Binary Trees - Strict Binary Tree, Complete Binary Tree,Binary Search Tree; Arrayand Linked List Representation of Binary Tree	3 hours	10/05/24 11/05/24 14/05/24	Chalk and Black board
	Traversal of Binary Tree - Preorder, Inorder and Postorder Traversal	4 hours	15/05/24 17/05/24 18/05/24 21/05/24	Chalk and Black board
	Reconstruction of a Binary Tree when Inorder and Postorder/Preorder ar egiven.	3 hours	22/05/24 24/05/24 25/05/24	Chalk and Black board

Department: Computer Science
Tiltle Of The Paper: Data Structures Lab
[Course Code: 212249]
Term Period: 19/02/2024 to 15/05/2024
Faulty Name: Sahanashree G

Hrs/week:4 hours/Week **Total Hrs: 52 hours**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of deployment andRemarks**
PART-A	**Basic Introduction**	4 Hrs/Week	19/02/24	ICT and Practical
	1. Demonstrate an Array Data Structure 2. Search an element usingLinear Search Technique	4 Hrs/Week	26/02/24	ICT and Practical
	3. Search an element usingBinary Search Technique 4. Sort the given list usingBubble Sort Technique	4 Hrs/Week	04/03/24	ICT and Practical
	5. Sort the given list usingSelection Sort Technique 6. Sort the given list usingInsertion Sort Technique	4 Hrs/Week	11/03/24	ICT and Practical

	7. Sort the given list usingMerge Sort Technique 8. Sort the given list usingQuick Sort Technique	4 Hrs/Week	18/03/24	ICT and Practical
	Data Structures Lab	4 Hrs/Week	25/03/24	C1 Practical Internal Test(PART A) 26/03/24 Marks sheetof C1 practical internal test was displayed on the notice board.
PART-B	1. Demonstrate Stack Operation 2. Implement Tower ofHanoi.	4 Hrs/Week	01/04/24	ICT and Practical
	3. Convert an Infix Expression to PostfixExpression. 4. Demonstrate Operationsof a Simple Queue	4 Hrs/Week	08/04/24	ICT and Practical
	5. Demonstrate Operationsof a Circular Queue. 6. Demonstrate the use of a Dynamic Array.	4 Hrs/Week	15/04/24	ICT and Practical
	7. Demonstrate Operationsof a Linear Linked List.	4 Hrs/Week	22/04/24	ICT and Practical
	8. Display Traversal of aTree.	4 Hrs/Week	29/04/24	ICT and Practical
	Data Structures Lab	4 Hrs/Week	06/05/24	C2 Practical Internal Test(PART B) 07/05/24 Marks sheetof C2 practical internal test was displayed on the notice board.
	Revision Lab	4 Hrs/Week	13/05/24	ICT and Practical

Department: Computer Science
Subject: DIGITAL FLUENCY
[Course code: 21DFLF94]
Term Period: February 12th to May 27th

Hrs/week: 1 Hr **Total Hrs: 15 Hrs**

Curriculum as prescribed by theInstitution	Topics	No. of Hours required to complete	Date	Method of Deployment
Introduction to the Course, Course Overview and Test &Examination Pattern		01	**12/02/2024 & 13/02/2024**	Class Room Teaching
Module-1: Emerging Technologies Overview of Emerging Technologies: ➢ Artificial Intelligence, Machine Learning, Deep Learning. ➢ Database Management for Data Science, Big Data Analytics. ➢ Internet of Things (IoT) and Industrial Internet of Things (IIoT) ➢ Cloud Computing and its ServiceModels ➢ Cyber Security and Types of Cyber Attack **Module-2:** Applications of EmergingTechnologies Applications of Emerging Technologies: ➢ Artificial Intelligence ➢ Big Data Analytics ➢ Internet of Things ➢ Cloud Computing ➢ Cyber Security	• Artificial Intelligence, Machine Learning, Deep Learning • Applications ofArtificial Intelligence Exercises Related to AI	02	**19/02/2024 To 27/02/2024**	Class Room Teaching
	• Database Management for Data Science, Big Data Analytics • Applications of Big Data Analytics Exercises Related to BigData	02	**04/03/2024 To 12/03/2024**	
	• Internet of Things (IoT) and Industrial Internet of Things (IIoT) • Applications ofInternet of Things Exercises Related to IoT	02	**18/03/2024 To 26/03/2024**	
	• Cloud Computing andits Service Models • Applications of CloudComputing Exercises Related to CloudComputing	02	**01/04/2024 To 16/04/2024**	

	• Cyber Security andTypes of Cyber Attack • Applications of CyberSecurity Exercises Related to CyberSecurity	02	**15/04/2024 To 30/04/2024**	
Module-3 : Building Essential SkillsBeyond Technology Importance of the following: ➢ Effective Communication Skills ➢ Creative Problem Solving &Critical Thinking ➢ Collaboration and TeamworkSkills ➢ Innovation & Design ThinkingUse of Tools in Enhancing Skills	• Effective Communication Skills • Creative Problem Solving & Critical Thinking • Collaboration and Teamwork Skills • Innovation & Design Thinking • Use of Tools in Enhancing Skills	04	**29/04/2024 To 21/05/2024**	Activity Based – Class Room Teaching

Department: Computer Science
Subject: DIGITAL FLUENCY Lab
[Course code: 21DFLF94]
Term Period: February 12th to May 27th

Hrs/week: 2 Hrs **Total Hrs: 30 Hrs**

Curriculum as prescribedby the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Registration	Future Skills Course Registration Process	02	**17/02/2024 & 19/02/2024**	ICT, Mobile Phones & Laboratory
Campus to Corporate	Overview PDF, Module - 1(To be Completed within 1Week/Next Lab)	02	**24/02/2024 & 26/02/2024**	
Campus to Corporate	Module – 2 (To be Completed within 1 Week/Next Lab)	02	**02/03/2024 & 04/03/2024**	
AI – Practical/Lab Assignments	Practical exercises related toAI (Module 1 & Module 2)	04	**09/03/2024 TO 18/03/2024**	

Big Data – Practical/Lab Assignments	Practical exercises related toBig Data (Module 1 & Module 2)	04	**23/03/2024 TO 01/04/2024**	
IoT – Practical/Lab Assignments	Practical exercises related toIoT (Module 1 & Module 2)	02	**06/04/2024 & 08/04/2024**	
Cloud Computing – Practical/Lab Assignments	Practical exercises related toCloud Computing (Module 1& Module 2)	02	**13/04/2024 & 15/04/2024**	
Cyber Security – Practical/Lab Assignments	Practical exercises related toCyber Security (Module 1 &Module 2)	04	**20/04/2024 TO 29/04/2024**	
Campus to Corporate	Module – 3 (To be Completed within 1 Week/Next Lab)	02	**04/05/2024 & 06/05/2024**	
Revision Labs		04	**11/05/2024 TO 20/05/2024**	
Final Test		02	**25/05/2024 & 27/05/2024**	ICT, Mobile Phones & Laboratory

Department: Computer Science
Subject: Web Designing (Open Elective - 2)
[Course Code - 21OECMS201]
Term Period: 12.02.2024 To 25.05.2024
Faculty Name: Nandini K S and Nagashree S

Hrs/week: 3 hours **Total Hrs: 42 hours**

Prescribed Curriculum	**Topics**	**No. of Hours required to complete**	**Date**	**Method of deployment**
UNIT – 1 Fundamentals: Internet, WWW, Web Browsers and Web Servers, URLs, MIME, HTTP,	Fundamentals: Internet, WWW, Web Browsers and Web Servers, URLs, MIME, HTTP, Security	3 Hrs	12/02/2024 14/02/2024 17/02/2024	

Security, the Web Programmers Toolbox. Web Development Introduction, Introduction to HTML and XHTML, Basic syntax, Standard Structure of the Program, Basic Formatting Tags, Color Coding, HTML/XHTML-Grouping Using Div Span, HTML-Lists,	the Web Programmers Toolbox. Web Development Introduction, Introduction to HTML and XHTML	3 Hrs	19/02/2024 21/02/2024 24/02/2024	**Lecture and ICT**
	Basic syntax, Standard Structure of the Program, Basic Formatting Tags, Color Coding	3 Hrs	26/02/2024 28/02/2024 02/03/2024	
HTML Image Mapping, Hyperlink, HTML-Table, Forms, Frames.	HTML/XHTML-Grouping Using Div Span, HTML-Lists, HTML Image Mapping, Hyperlink HTML-Table, Forms, Frames.	5 Hrs	04/03/2024 06/03/2024 09/03/2024 11/03/2024 13/03/2024	
UNIT – 2 Introduction to CSS, Levels of style sheets, Style specification formats, Selector forms, Property value forms, Font properties, List properties, Color, Alignment of text, The Box model, Background images, <Span> and <Div> tags.	Introduction to CSS, Levels of style sheets, Style specification formats	2 Hrs	16/03/2024 18/03/2024	**Lecture and ICT**
	Selector forms, Property value forms, Font properties, List properties, Color, Alignment of text	3 Hrs	20/03/2024 23/03/2024 25/03/2024	
The Basics of JavaScript: Overview of JavaScript, Object orientation and JavaScript, Syntactic	The Box model, Background images, <Span> and <Div> tags.	2 Hrs	27/03/2024 30/03/2024	

characteristics, Primitives, operations, and expressions, Screen output and keyboard input, Control statements, Arrays, Functions in JavaScript.	The Basics of JavaScript: Overview of JavaScript, Object orientation and JavaScript, Syntactic characteristics	2 Hrs	01/04/2024 03/04/2024	
	Primitives, operations, and expressions, Screen output and keyboard	4 Hrs	06/04/2024 08/04/2024 10/04/2024	
	input, Control statements, Arrays, Functions in JavaScript		13/04/2024	
UNIT – 1 and UNIT – 2	(till and) Tags	1 Hrs	16/04/2024	**16/04/2024 To 20/04/2024** **C1 Internal Test Will be Conducted**
UNIT-3 The JavaScript Execution Environment, Button elements, Text box and Password elements, Dynamic documents with JavaScript: Introduction, Positioning Elements, Moving Elements, Element visibility, Changing Colors and Fonts, Dynamic content, Locating the Mouse cursor, reacting to a	The JavaScript Execution Environment, Button elements, Text box and Password elements	3 Hrs	22/04/2024 24/04/2024 27/04/2024	**Lecture and ICT**
	Dynamic documents with JavaScript: Introduction, Positioning Elements, Moving Elements, Element visibility	5 Hrs	29/04/2024 04/05/2024 06/05/2024 08/05/2024 11/05/2024	

Mouse click, Slow movement of elements, Dragging and Dropping elements.	Changing Colors and Fonts, Dynamic content, Locating the Mouse cursor	3 Hrs	13/05/2024 15/05/2024 18/05/2024	
	reacting to a Mouse click, Slow movement of elements, Dragging and Dropping elements	3 Hrs	20/05/2024 22/05/2024 25/05/2024	

Department: Computer Science
Subject:Database Management System[Coursecode:222449]
TermPeriod:12/02/2024 to 25/05/2024
Faculty Name:Archana A
Hrs/week:4Hours **TotalHrs:56 Hours**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
	Introduction to Database SystemApplications.CharacteristicsandPurposeofDatabaseApproach,	**2hours**	12/2/2024 13/2/2024	Chalk and Black Board
UNIT-1 (14 Hours)	PeopleassociatedwithDatabaseSystem,DataModels	**2hours**	15/2/2024 17/2/2024	Chalk and Black Board
	Database Schema, DatabaseArchitecture, DataIndependence	**2hours**	**19/2/2024** 20/2/2024	Chalk and Black Board
	InterfacesandClassificationof DBMS.BasicConcepts:Entity,EntityTypes,EntitySets	**2hours**	22/2/2024 24/2/2024	Chalk and Black Board
	Attributes, Types of Attributes, Key Attribute and Domain of		26/2/2024 27/2/2024 29/2/2024	Chalk and Black

	anAttribute.Relationshipsbetwee ntheEntities. ntsandNullValues	**3hours**		Board
	Relational Algebra: BasicRelationalAlgebraOperations.	**2hours**	16/3/2024 18/3/2024	Chalk and Black Board
	SetTheoreticalOperationsonR elations,JOINOperations,	**3hours**	19/3/2024 21/3/2024 23/3/2024	Chalk and Black Board
	AggregateFunctionsandGroupi ng,NestedSubQueries-Views.	**4hours**	25/3/2024 26/3/2024 28/3/2024 29/03/2024	Chalk and Black Board Special classwas taken to complete the unit.
	Relationship Types, Roles andStructuralConstraints,Degreea ndCardinality Ratio of aRelationship, Weak Entity Types,E-RDiagram.	**3hours**	2/3/2024 4/3/2024 5/3/2024	Chalk and Black Board
UNI T 2 (14 Hours) .	BasicConcepts,CharacteristicsofR elations, Relational ModelConstraints:DomainConstrains	**2hours**	7/3/2024 9/3/2024	Chalk and Black Board
	KeyConstraints,Primary&Foreign KeyConstraints,IntegrityConstrai ntsandNullValues	**3hours**	11/3/2024 12/3/2024 14/3/2024	Chalk and Black Board
	Relational Algebra: BasicRelationalAlgebraOperations.	**2hours**	16/3/2024 18/3/2024	Chalk and Black Board
	SetTheoreticalOperationsonR elations,JOINOperations,	**3hours**	19/3/2024 21/3/2024 23/3/2024	Chalk and Black Board
	AggregateFunctionsandGroupi		25/3/2024 26/3/2024	Chalk and Black Board

	ng,NestedSubQueries-Views.	**4hours**	28/3/2024 29/03/2024	Special classwas taken to complete the unit.
UNIT3 (14 Hours)	Anomaliesin RelationalDatabaseDesign,Decomposition.	**2hours**	30/3/2024 1/4/2024	Chalk and Black Board
	Functional Dependencies-Axioms, Minima and Maxima Covers,	**3hours**	2/4/2024 4/4/2024 6/4/2024	Chalk and Black Board
	Normalization, First NormalForm, Second Normal Form	**3hours**	8/4/2024 13/4/2024 15/4/2024	Chalk and Black Board
	Database Management System	**1 Hour**	16/04/2024 To 20/04/2024	C1 Internals test was conducted
	Third Normal Form, Boyce-Codd Normal Form.	**2hours**	**22/4/2024** **23/4/2024**	Chalk and Black Board
UNIT4 (14 Hours)	Introduction, TransactionProcessing,SingleUser&MultiuserSystems,	**3hours**	**2/5/2024** **4/5/2024** **6/5/2024**	Chalk and Black Board
	Transactions: Read & WriteOperations,NeedofConcurrencyControl	**3hours**	**7/5/2024** **9/5/2024** **11/5/2024**	Chalk and Black Board
	The Lost Update Problem, Dirty Read Problem, Types ofFailures	**4hours**	**13/5/2024** **14/5/2024** **16/5/2024** **18/5/2024**	Chalk and Black Board
	Transaction States,	**4hours**	**20/5/2024** **21/5/2024**	Chalk and Black Board

	DesirableProperties(ACIDproperties)ofTransactions.		**23/5/2024 25/05/2024**	

Department: Computer Science
Subject: Database Management System
[Coursecode:222449]
TermPeriod:12/02/2024 to 25/05/2024
Faculty Name: Archana A

Hrs/week:4hours **TotalHrs:56hours**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Activity1	Database:Student(DDL(DataDefinitionLanguages),DML(DataManipulation Language)Statements)	**4hours**	22/2/2024	ICT and Practical
Activity2	Database: Employee(Select Clause and Arithmetic Operators)	**8hours**	29/2/2024 7/3/2024	ICT and Practical
Activity3	Database: Library(LogicalOperatorsandRelational Operators)	**8hours**	8/03/2024 14/3/2024	ICT and Practical
Activity4	Database: Lab(Date Functions)	**8 hours**	21/3/2024 23/03/2024	ICT and Practical One special Lab was taken.
	Database Management System Lab	**4 Hours**	28/3/2024	C1 Practical Internal Test(activity1 to activity4 5/04/24 Marks sheet of C1 practical internal test was displayed on the notice board.
Activity5	Database: Numeric and Character Functions	**4hours**	4/4/024	ICT and Practical

Activity6	Database: Subject(SetTheoryOperations)	**8hours**	18/4/2024 25/5/2024	ICT and Practical
Activity7	Database:RailwayReservationSystem(View)	**8hours**	02/05/2024 03/5/2024	ICT and Practical One special Lab was taken.
Activity8	Database:BankSystem(GroupByandHavingClause)	**8hours**	09/5/2024 16/5/2024	ICT and Practical
	Database Management System Lab	**4 Hours**	23/5/2024	C2 Practical Internal Test(activit5 to activity8 25/05/24 Marks sheet of C2 practical internal test was displayed on the notice board.

Department: Computer Application

Tiltle Of The Paper: Artificial intelligence

(Course code : 22AINS94)

Term Period: 12/02/2024 to 25/05/2024

Faulty Name: Roshan CL, Madhurageetha, Sumanth M, Pavithrakumar L

Hrs/week: 1 Hrs **Total Hrs:13 Hrs**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introduction to the Course		1 Hour	**15/02/2024**	Class Room Teaching
Course Overview and Test & Examination Pattern		1 Hour	**22/02/2024**	Class Room Teaching
Course – 1 - Azure AI Fundamentals (AI-900) **AI-900 pathway consists of 5 courses and 2 reading material:** i. Introduction to AI on Azure ii. Use visual tools to create	i. Introduction to AI on Azure	1 Hour	**29/02/2024**	

machine learning models with Azure Machine Learning iii. Explore computer vision in Microsoft Azure iv. Explore natural language processing v. Explore conversational AI vi. Tune Model Hyperparameters - Azure Machine Learning (Reading) vii. Neural Network Regression: Module Reference - Azure Machine Learning (Reading)	ii. Use visual tools to create machine learning models with Azure Machine Learning	1 Hour	**07/03/2024**	Class Room Teaching
	iii. Explore computer vision in Microsoft Azure	1 Hour	**14/03/2024**	
	iv. Explore natural language processing v. Explore conversational AI	1 Hour	**21/03/2024**	
	vi. Tune Model Hyperparameters - Azure Machine Learning (Reading) vii. Neural Network Regression: Module Reference - Azure Machine Learning (Reading	1 Hour	**28/03/2024**	
Course – 2 - Data Analyst Associate (DA-100) DA-100 pathway consists of 5 courses and 2 reading material: 1. Get started with Microsoft data analytics 2. Prepare data for analysis 3. Model data in Power BI 4. Visualize data in Power BI 5. Data analysis in Power BI 6. Manage workspaces and datasets in Power BI 7. Key Influencers Visualizations Tutorial - Power BI 8. Smart Narratives Tutorial - Power BI | Microsoft Docs	1. Get started with Microsoft data analytics	1 Hour	**04/04/2024**	Class Room Teaching and ICT
	2. Prepare data for analysis	1 Hour	**11/04/2024**	
	3. Model data in Power BI	1 Hour	**18/04/2024**	
	4. Visualize data in Power BI	1 Hour	**25/04/2024**	
	5. Data analysis in Power BI	1 Hour	**02/05/2024**	
	6. Manage workspaces and datasets in Power BI	2 Hour	**09/05/2024 & 16/05/2024**	
	7. Key Influencers Visualizations Tutorial - Power BI	1 Hour	**23/05/2024**	

	8. Smart Narratives Tutorial - Power BI | Microsoft Docs	1 Hour	**30/05/2024**	

Department: COMPUTER APPLICATION
Subject: ARTIFICIAL INTELLIGENCE LAB
[Course code: 22AINS94]

Hrs/week: 2 Hrs **Total Hrs: 26 Hrs**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Practical 1. Describe Artificial Intelligence workloads and considerations 2. Describe fundamental principles of machine learning on Azure 3. Describe features of computer vision workloads on Azure 4. Describe features of Natural Language Processing (NLP) workloads on Azure	1. Describe Artificial Intelligence workloads and considerations	2 Hours	**12/02/2024**	**ICT & Laboratory**
	2. Describe fundamental principles of machine learning on Azure	3 Hours	**13/02/2024**	
	3. Describe features of computer vision workloads on Azure	4 Hours	**20/02/2024 & 05/03/2024**	
	4. Describe features of Natural Language Processing (NLP) workloads on Azure	4 Hours	**12/03/2024 & 19/03/2024**	
Practical 1. Prepare the data 2. Model the data 3. Visualize the data 4. Analyse the data 5. Deploy and maintain deliverables	1. Prepare the data	4 Hours	**26/03/2024 & 02/04/2024**	**ICT & Laboratory**
	2. Model the data	2 Hours	**16/04/2024**	
	3. Visualize the data	4 Hours	**23/04/2024 & 3 30/04/2024**	
	4. Analyse the data	2 Hours	**07/05/2024**	
	Deploy and maintain deliverables	2 Hours	**14/05/2024**	

Department : COMPUTER SCIENCE & APPLICATIONS
Title of the Paper : Statistical Computing and R Programming
[Course code: 232650]
Term Period : 12/02/2024 to 20/05/2024
Faculty Name : Mrs. Sunitha.N Hrs/Week: 4 hours/week - DSC(8)
Total Hrs: 56 Hours (Theory)
Lab: 56 Hours (Practical)

Curriculum as Prescribed by Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Basic R Programming Concepts:				
Unit -1: 14 Hrs	Introduction of the language	1	12/2/24	Lecture/ ppt
	Identifiers & Constants	1	14/2/24	Lecture/Blackboard
	Data types	1	16/2/24	Lecture/ ppt
	Objects/Data Structures in R – Vectors, List, Matrices, Arrays, Data Frames; R Operators	2	17/2/24 19/2/24	Lecture/Blackboard
	Control Statements – Conditional & Looping	2	21/2/24 23/2/24	Lecture/Blackboard
	Functions in R Programming -Types of	2	24/2/24 26/2/24	Lecture/Blackboard
	Functions			
	Manipulation Functions – Vectors, Matrix, Strings	2	28/2/24 01/3/24	Lecture/Blackboard
	Exceptions	1	02/3/24	Lecture/ ppt
	Scope of R Variables, Installing & Loading Packages in R	1	04/3/24	Lecture/ ppt
	Reading & Writing Files	1	06/3/24	Lecture/ ppt
Statistics & Probability:				

UNIT – 2 : 15 Hrs	Basic Data Pre-Processing Techniques	1	08/3/24	Lecture/ ppt
	Statistics Basic – Mean, Median, Mode, Standard Deviation, Variance	2	09/3/24 11/3/24	Lecture/Blackboard
	Probability Basics - Common Probability Distributions	2	13/3/24 15/3/24	Lecture/Blackboard
	Common Probability Mass Functions - Bernoulli, - Binomial, - Poisson Distributions	4	16/3/24 18/3/24 20/3/24 22/3/24	Lecture/Blackboard
	Common Probability Density Functions - Uniform, - Normal, - Student's T-	4	23/3/24 25/3/24 27/3/24	Lecture/Blackboard
	Distribution			
	Basic Data Visualization:- Line Chart, Pie Chart, Histogram & Density Plots, Dot Plots, Box Plots, Scatter Plots	2	30/3/24 01/4/24	Lecture/ ppt
Statistical Testing and Modelling:				
	Sampling Distributions	1	03/4/24	Lecture/Blackboard
	Hypothesis Testing	2	05/4/24 06/4/24	Lecture/Blackboard

UNIT – 3 : 11 Hrs	**Components of Hypothesis Test,**	**1**	**08/4/24**	**Lecture/ ppt**
	Testing Means,	**2**	**10/4/24 12/4/24**	**Lecture/Blackboard**
	Testing Proportions,	**2**	**13/4/24 15/4/24**	**Lecture/Blackboard**
	Testing Categorical Variables,	**1**	**17/4/24**	**Lecture/Blackboard**
	Errors and Power,	**1**	**19/4/24**	**Lecture/Blackboard**
	Analysis of Variance	**1**	**20/4/24**	**Lecture/Blackboard**
Regression & Advanced Plotting:				
	Data for Modelling – Test & Training Splits, Creating Sample Groups, Data Reduction;	**2**	**22/4/24 24/4/24**	**Lecture/Blackboard**
UNIT – 4: 14 Hrs				
	Regression - Simple Linear Regression	**2**	**26/4/24 27/4/24**	**Lecture/Blackboard**
	Multiple Linear Regression	**2**	**29/4/24 03/5/24**	**Lecture/Blackboard**
	Linear Model Selection and Diagnostics;	**1**	**04/5/24**	**Lecture/Blackboard**
	Advanced Graphics - Plot Customization, Plotting Regions and Margins, Point and Click Coordinate	**2**	**06/5/24 08/5/24**	**Lecture/ ppt**

	Interaction, Customizing Traditional R Plots, Specialized Text and Label Notation,	**2**	**10/5/24 13/5/24**	**Lecture/ ppt**
	Defining Colors and Plotting In Higher Dimensions,	**1**	**15/5/24 17/5/24**	**Lecture/ ppt**
	Representing and Using Colors, 3D Scatter Plots	**2**	**18/5/24 20/5/24**	**Lecture/ ppt**
	Revision	**2**		

Department: Computer Science & Applications
Subject: Statistical Computing and R Programming
[Course code: 232650]-DSC(8)
Term Period: 12/02/2024 to 20/05/2024
Hrs/Week: 4 hours/week **Total Hrs: 56 Hours(Practical)**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
	Write a R Program to:			
Part A	1.Demonstrate Variables, Constants & Datatypes. 2. Demonstrate R Objects.	4hrs	28/02/2024	Practical
	3. Demonstrate R Functions. 4. Demonstrate various Operators.	4hrs	06/03/2024	Practical
	5. Implement a Searching Technique.	4hrs	13/03/2024	

	6. Implement a Sorting Technique.			Practical
	7. Demonstrate In-Built Math and String Functions. 8. Demonstrate In-Built Statistical and Probability Functions.	4hrs	20/03/2024	Practical
	Revision	4hrs	27/03/2024	
	C1(part A) Test	4hrs	03/04/2024	Practical
PART B	Write an R Program to	4hrs	03/04/2024	
	1. Perform Linear Algebra Operations on Vectors and Matrices. 2. Demonstrate the Installing and Use of Packages.	4hrs	10/04/2024	Practical
	3. Load, Manipulate and Analyze Data. 4. Demonstrate various Data Pre-Processing Techniques.	4hrs	17/04/2024	Practical
	5. Visually Represent Objects by Creating Graphs. (Line Chart, Pie Chart, Histogram & Density Plots,Dot Plots, Box Plots, Scatter Plots). 6. Implement Simple & Multiple Linear Regression.	4hrs	24/04/2024	Practical
	7.Demonstrate Advanced Graphics.	4hrs	01/05/2024	
	Revision	4hrs	08/05/2024	Practical

	C2(part B) Test	4hrs	15/05/2024	Practical Practical Practical

Department: Computer Science

Subject :Web Technology
DSC- & [Course code: 232649]
Term Period: 12/02/24 to 25 /05/24
Total Hrs:53 hrs

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Unit-1	Web Browsers, Web protocols and web servers	**4hrs**	12/02/24 16/02/24	chalk and blackboard

15hrs	web design principlesand web site structure, client- servertechnologies client -side tools andtechnologies, server-side scripting URL, MIME, Searchengine, web server- Apache, IIS, Proxy server, HTTPProtocol.	**4hrs**	17/02/24 22/02/24	chalk and blackboard
	Difference b/w HTML & DHTML, HTML basic tags, formatting tags in HTML, HTML page layout and navigation concept, semantic elements in HTML List, type of list tags, Tables and form tags in HTMLImages, frame, Map tag, Embedding Audio and Video Clips on a Webpage.	**4hrs**	23/02/24 28/02/24	Chalk & Black Board
	XML syntax, Tree, Elements,Attributes, Namespace, Parsers DOM, DTD, Scheme	**4hrs**	29/02/24 04/03/24	Chalk & Black Board
	CSS List, CSS Sectors, CSS Tables, CSS background cursor,CSS text fonts, CSSlist, box modelling, display positioning, floats, CSS Gradients, Shadows,2D & 3D transform, transition, CSS Animation	**4hrs**	06/03/24 11/03/24	Chalk & Black Board

	Data types & Variables, JavaScript Operators, ConditionalStatements,Looping statements,	**4hrs**	13/03/24 16/03/24	Chalk & Black Board
	functions, Number, Strings, Array, Objects, windows &frame objects, Event handling, Exceptional handling, Form object and DOM, JSON, Browser object model	**4hrs**	18/03/24 22/03/24	Chalk & Black Board
Unit - 3 12hr**s**	Common GatewayInterface (CGI), Lifecycle of servlets, Deploying Servlet, The servlet API, Reading servlet parameters,	**4hrs**	22/03/24 28/03/24	Chalk & Black Board
	Reading initializingparameters, Handling HTTP Request & Responses, UsingCookies & Sessions,	**4hrs**	30/3/24 04/04/24	Chalk & Black board
	Connecting to aDatabase usingJDBC	**4hrs**	05/04/24 10/04/24	Chalk & Black Board
Unit - **4** **13hrs**	Authentication Techniques, Design Flaws in Authentication,	**4hrs**	11/04/24 15/04/24	Chalk & Black Board
	Web Technologies	**1hrs**	16/04/24 20/04/24	**C1 Internal Test Conducted**

	Implementation Flaws in Authentication, Securing Authentication, Path Traversal Attacks	**4hrs**	22/04/24 27/04/24	Chalk & Board
	Injecting into interpreted context, SQL Injection, NoSQL Injection, Path Injection, LDAP Injection, XML Injection, HTTP Injection, Mail Service Injection, Types of XSS, XSS real world, finding and exploiting's Vulnerabilities, Preventing XSS Attacks.	**4hrs** **2hrs**	29/04/24 30/04/24 03/05/24 04/05/24	Chalk & Black Board 2 Special Classes were taken

Practical Component PART- A and PART -B

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Part -A	1. Design web pages for yourcollege containing college,name,Logo,Department list using href and list tags. 2. Create a class Timetableusing Table tag	**4hr**	20/02/24	**ICT & Practical**
	3.Write a HTML Code to Design Student Registrations form for yourcollege Admission	**4hrs**	27/02/24 05/03/24	**ICT & Practical**

	4.Design Web pages which include Multi-Media Data. (Images,Audio,Vedio, GIF'setc)	**4hr**	12/03/24	**ICT & Practical**
	5.Create a Web Pageusing Frame.	**4hr**	19/03/24	**ICT & Practical**
	6.Write HTML Code to develop a webpage having two Frames that divide the row into equal columns. Fill each framewith a different background Color.	**4hr**	26/03/24	**ICT & Practical**
	7.Write CSS Code to Formatyour ID card using Inline CSS.	**4hr**	02/4/24	**C1 Practical Internal TestICT & Practic al**
PART B	1. Perform Basic Arithmetic Operations. 2. Demonstrate Control Statements.	**4hr**	16/04/24	**ICT & Practical**
	3. Implement JavaScriptObject Concept. 4. Create and Insert Data intoan array.	**4hr**	23/04/24	**ICT & Practical**
	5. Validate an Email Addressusing Servlet, write a program to Print date and time. 6. Accept number from HTMLfile and display	**4hr**	30/04/24	**ICT & Practical**

	7.Demonstrate the life-cycleof a servlet Application. .	**4hr**	02/05/24	**C2 Practical Internal TestICT & Practical**
	8.Create a dynamic webpage with DB connectivity	**4hr**	9/05/24	**ICT & Practical**

Mahajana Education Society (R)
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INDIA Affiliated to University of Mysore
Re-Accredited by NAAC with 'A' Grade, College with Potential for Excellence

Lesson Plan - 2022-23 (I Semester)

Department Of Computer Application
Subject: Programming in C
Hrs/week :3 hours
Total Hrs:42hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of deployment**
Unit – 1 **Introduction to C Programming:** Overview of C; History and Features of C; Structure of a C Program with Examples; Creating and Executing a C Program; Compilation process in C. **C Programming Basic Concepts:** C Character Set; C tokens - keywords, identifiers, constants, and variables; Data types; Declaration & initialization	Introduction to Programming Language **Introduction to C Programming:** Overview of C, History of C Features of C Structure of a C Program with Examples Creating and Executing a C Program; Compilation process in C. **C Programming Basic**	1 hour 1 hour 1 hour 1 hour	11-09-2023 12-09-2023 13-09-2023 16-09-2023	Lecture Lecture Lecture Lecture

of variables; Symbolic constants. **Input and output with C:** Formatted I/O functions - printf and scanf, control stings and escape sequences, output specifications with printf functions; Unformatted I/O functions to read and display single character and a string - getchar, putchar, gets and puts functions. **C Operators & Expressions:** Arithmetic operators; Relational operators; Logical operators; Assignment operators; Increment & Decrement operators; Bitwise operators; Conditional operator; Special operators; Operator Precedence and Associatively; Evaluation of arithmetic expressions; Type conversion.	**Concepts:** C Character Set; C tokens - keywords, Identifiers constants, and variables; Declaration of variables Initialization of variables, Data types, Data Modifiers and Symbolic Constants **Input and output with C:** Formatted I/O functions Formatted Input functions - printf control stings and escape sequences Formatted Output functions- scanf Unformatted input and Unformatted output functions. **C Operators & Expressions:** Arithmetic operators; Relational operators; Logical operators; Assignment operators; Increment & Decrement operators; Bitwise operators;	1 hour 1 hour 1 hour 1 hour 1 hour 1 hour	19-09-2023 22-09-2023 23-09-2023 26-09-2023 27-09-2023 30-09-2023 3-10-2023	Lecture Lecture Lecture Lecture Lecture Lecture Lecture

	Conditional operator; Special operators; Operator Precedence and Associatively; Evaluation of arithmetic expressions; Type Conversion.	1 hour 1 hour 1 hour	4-10-2023 7-10-2023 10-10-2023	Lecture Lecture Lecture
Unit – 2 **Control Structures:** Decision making Statements - Simple if, if_else, nested if_else, else_if ladder, Switch Case, goto, break & continue statements; Looping Statements - Entry controlled and exit controlled statements, while, do-while, for loops, Nested loops. **Arrays:** One Dimensional arrays - Declaration, Initialization and Memory representation; Two Dimensional arrays -	**Control Structures:** Decision making Statements - Simple if, if_else nested if_else, else_if ladder Switch Case, goto statements break & continue statements; Looping Statements - Entry controlled and exit controlled statements,	1 hour 1 hour 1 hour 1 hour 1 hour	11-10-2023 13-10-2023 17-10-2023 20-10-2023 21-10-2023 25-10-2023	Lecture Lecture Lecture Lecture Lecture Lecture

Declaration, Initialization and Memory representation. **Strings:** Declaring & Initializing string variables; String handling functions - strlen, strcmp, strcpy and strcat; Character handling functions - toascii, toupper, tolower, isalpha, isnumeric etc.	while, do-while, for loops, Nested loops. **Arrays:** One Dimensional arrays – Declaration Initialization and Memory representation; Two Dimensional arrays - Declaration, Initialization and Memory representation. **Strings:** Declaring Initializing string variables; String handling functions - strlen, strcmp, strcpy and strcat; Character handling functions - toascii, toupper, tolower, isalpha, isnumeric etc.	1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour	27-10-2023 3-11-2023 4-11-2023 7-11-2023 08-11-2023 10-11-2023 11-11-2023 21-11-2023	Lecture Lecture Lecture Lecture Lecture Lecture Lecture
Unit – 3 **Pointers in C:** Understanding pointers - Declaring and initializing pointers, accessing address and value of variables using	**Pointers in C:** Understanding pointers – Declaring initializing pointers, accessing address	1 hour	22-11-2023	Lecture

pointers; Pointers and Arrays; Pointer Arithmetic; Advantages and disadvantages of using pointers; **User Defined Functions:** Need for user defined functions; Format of C user defined functions; Components of user defined functions - return type, name, parameter list, function body, return statement and function call; Categories of user defined functions - With and without parameters and return type. **User defined data types:** Structures - Structure Definition, Advantages of Structure, declaring structure variables, accessing structure members, Structure members initialization, comparing structure variables, Array of Structures; Unions - Union definition; difference between Structures and Unions.	accessing value of variables using pointers; Pointers and Arrays; Pointer Arithmetic; Advantages and disadvantages of using pointers; **User Defined Functions:** Need for user defined functions; Format of C user defined functions; Components of user defined functions - return type name, parameter list, function body, return statement and function call; Categories of user defined functions - With and without parameters and return type. **User defined data types:** Structures - Structure Definition,	1 hour 1 hour 1 hour 1 hour 1 hour 1 hour 1 hour	25-11-2023 28-11-2023 29-11-2023 1-12-2023 02-12-2023 04-12-2023 05-12-2023	Lecture Lecture Lecture Lecture Lecture Lecture Lecture

	Advantages of Structure, declaring structure variables	1 hour	6-12-2023	Leture
	declaring structure variables, accessing structure members		7-12-2023	
	Structure members initialization, comparing structure variables.	1 hour	8-12-2023	Lecture
	Array of Structures; Unions - Union definition; difference between Structures and Unions.	1 hour	9-12-2023	Lecture
	Remedial class	1 hour	11-12-2023 to 12-12-2023	Revision
	Practical exam commencement		13-12-2023	

Department- Computer Application
Subject- Programming in C (LAB)
Hrs/week : 4 hours
Total Hrs : 52 hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
PART-A	1. Program to read radius of a circle and to find area and circumference 2. Program to read three numbers and find the biggest of three	4 Hrs/Week	19/09/2023	Practical
	3. Program to demonstrate library functions in math.h 4. Program to check for prime	4 Hrs/Week	26/09/2023	Practical
	5. Program to generate n primes 6. Program to read a number, find the sum of the digits, reverse the number and check	4 Hrs/Week	03/10/2023	Practical

	it for palindrome check it for palindrome			
	7. Program to read numbers from keyboard continuously till the user presses 999 and to find the sum of only positive numbers 8. Program to read percentage of marks and to display appropriate message (Demonstration of else-if ladder)	4 Hrs/Week	10/10/2023	Practical
	9. Program to find the roots of quadratic equation (demonstration of switch Case statement) 10. Program to read marks scored by n students and find the average of marks (Demonstration of single dimensional array)	4 Hrs/Week	17/10/2023	Practical
	11. Program to remove Duplicate Element in a single dimensional Array	4 Hrs/Week	25/10/2023	Practical
	12. Program to perform addition and subtraction of Matrices	4 Hrs/Week	31/10/2023	Practical

PART-B 1. Program to find the length of a string without using built in function 2. Program to demonstrate string functions. 3. Program to demonstrate pointers in C 4. Program to check a number for prime by defining isprime( ) function 5. Program to read, display and to find the trace of a square matrix 6. Program to read, display and add two m x n matrices using functions 7. Program to read, display and multiply two m x n matrices using functions 8. Program to read a string and to find the number of alphabets, digits, vowels, consonants, spaces and special characters. 9. Program to Reverse a String using Pointer 10. Program to Swap Two Numbers using Pointers 11. Program to demonstrate student structure to read & display records of n students. 12. Program to demonstrate the difference between structure & union	1. Program to find the length of a string without using built in function 2. Program to demonstrate string functions. 3. Program to demonstrate pointers in C 4. Program to check a number for prime by defining isprime( ) function 5. Program to read, display and to find the trace of a square matrix 6. Program to read, display and add two m x n matrices using functions 7. Program to read, display and multiply two m x n matrices using functions 8. Program to read a string and to find the number of alphabets, digits, vowels, consonants, spaces and special characters.	4 Hrs/Week 4 Hrs/Week 4 Hrs/Week 4 Hrs/Week	7/11/2023 14/11/2023 21/11/2023 23/11/2023	Practical Practical Practical Practical

	9. Program to Reverse a String using Pointer 10. Program to Swap Two Numbers using Pointers	4 Hrs/Week	30/11/2023	Practical
	11. Program to demonstrate student structure to read & display records of n students. 12. Program to demonstrate the difference between structure & union	4 Hrs/Week	05/12/2023	Practical

Department:Computer Application
Subject: Fundamental of Computers
Hrs/week 3 Hours
Total Hrs: 42

Curriculum as prescribedby the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Methodof deployment**
Unit 1: Fundamentals of Computers: Introduction to Computers - Computer Definition, Characteristics of Computers, Evolution and History of Computers, Types of Computers, Basic Organization of a Digital Computer; Number Systems – different types, conversion	Introduction Introduction tocomputer andcomputer definition Characteristicsof Computers, Evolution and History of Computer	1 Hour 1 Hour 1 Hour	12-09-2023 14-09-2023 15-09-2023	Lecture Lecture Lecture

from one number system to another; Computer Codes – BCD, Gray Code, ASCII and	Types of Computer s,Basic	1 Hour	19-09-2023	Lecture
Unicode; Boolean Algebra – Boolean Operators with Truth Tables; Types of Software –System Software and Utility Software; Computer Languages - Machine Level, Assembly Level & High Level Languages, Translator Programs – Assembler, Interpreter and Compiler; Planning a Computer Program - Algorithm, Flowchart and Pseudo code with Examples. Characteristics of computers, Classification of Digital Computer Systems: Microcomputers, Minicomputers, Mainframes, Super computers.	Organization of a Digital Computer Number Systems different types, conversion from one number system to another Computer Codes – BCD,Gray Code, ASCII and Unicode; Boolean Operators withTruth Tables Types of Software – System Software and Utility Software; Computer Languages Machine Level, Assembly Level & High Level Languages Translator	1 Hour 1 Hour 1 Hour 1Hour 1 Hour 1 Hour	20-09-2023 22-09-2023 26-09-2023 29-09-2023 03-10-2023 05-10-2023	Lecture Lecture Lecture Lecture Lecture Lecture

	Programs	1 Hour	06-10-2023	
	Assembler, Interpreter and Compiler Planning a Computer Program Algorithm, Flowchart and Pseudo code with Examples. Characteristics of computers, Classification of Digital Computer Systems: Microcomputers, Minicomputers, Mainframes, Super computers.	1 Hour 1 Hour 1 Hour	10-10-2023 12-10-2023 13-10-2023	Lecture Lecture Lecture
Unit 2: Anatomy of Computer: Introduction, Functions & Components of a Computer, Central Processing Unit, Microprocessor, Storage units, Input and output Devices. How CPU and memory works. Program execution with illustrative examples. Introduction to	Anatomy of Computer: Introduction, Functions & Components ofa Computer, Central Processing Unit, Microprocessor, Storage units,	1 Hour 1 Hour 1 Hour 1 Hour	17-10-2023 19-10-2023 20-10-2023 26-10-2023	Lecture Lecture Lecture Lecture
microcontrollers. **Operating System Fundamentals:**	Input and output Devices.	1 Hour	27-10-2023	Lecture

Operating Systems: Introduction, Functions of an operating System, Classification of Operating Systems, System programs, Application programs, Utilities, The Unix Operating System, Basic Unix commands, Microkernel Based Operating System, Booting.	How CPU and memory works.	1 Hour	31-10-2023	Lecture
	Program execution with illustrative examples.	1 Hour	02-11-2023	Lecture
	Introduction to microcontrollers	1 Hour	03-11-2023	Lecture
	Operating System Fundamentals:	1 Hour	07-11-2023	Lecture
	Operating Systems: Introduction	1 Hour	09-11-2023	Lecture
	Functions of an operating System,	1 Hour	10-11-2023	Lecture
	Classification of Operating Systems	1 Hour	15-11-2023	Lecture
	System programs, Application programs, Utilities	1 Hour	16-11-2023	Lecture
	The Unix Operating System,	1 Hour	17-11-2023	Lecture

	Basic Unix commands, MicrokernelBased Operating System, Booting.	1 Hour 1 Hour	21-11-2023 23-11-2023	Lecture Lecture
Unit-3 Introduction to Database Management Systems: Database, DBMS, Why Database -File system vs. DBMS, Database applications, Database users, Introduction to SQL, Data types, Classification of SQL-DDL with constraints, DML, DCL, TCL Internet Basics: Introduction, Features of Internet, Internet application, Services of Internet, Logical and physical addresses, Internet Service Providers, Domain Name System. Web Basics: Introduction to web, web browsers, http/https, URL, HTML5, CSS	Introduction to Database Management Systems: Database DBMS, Why Database File system vs. DBMS Database applications Database users Introduction to SQL, Data types, Classificationof SQL-DDL with constraints,	1 Hour 1 Hour 1 Hour 1 Hour 1 Hour 1 Hour	24-11-2023 28-11-2023 29-11-2023 01-12-2023 05-12-2023 06-12-2023 07-12-2023	Lecture Lecture Lecture Lecture Lecture Lecture Lecture
	DML, DCL, TCL Internet Basics	1 Hour	08-12-2023	Lecture

	Introduction, Features of Internet, Internet application	1 Hour	12-12-2023	Lecture
	Services of Internet, Logical and physical addresses	1 Hour	13-12-2023	Lecture
	Internet Service Providers Domain Name System	1 Hour	14-12-2023	Lecture
	Web Basics			
	Introduction to web, web browsers, http/ https URL, HTML5, CSS	1 Hour	15-12-2023	Lecture

Department- Computer Application
Subject: Information Technology Lab
Hrs/week:4 hours

Total Hrs: 56 hour

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
PART-A: HARDWARE				
1. Identification of the peripherals of a computer, components in CPU and their functions	Identification of the peripherals of a computer, components in CPU and their functions	4Hours/week	13-09-2023	Practical
2. Assembling and				

disassembling the system the system hardware components of personal computer.	Assembling and disassembling the system the system hardware components of	4Hours/week	20-09-2023	Practical
3. Basic computer Hardware Trouble shooting.	Basic computer Hardware Trouble shooting	4Hours/week	27-09-2023	Practica Practicl
	LAN and Wi-Fi Basics.	4Hours/week	04-10-2023	
4. LAN and Wi-Fi Basics.		4Hours/week	11-10-2023	Practical
5. Operating System Installation-Windows OS,UNIX/LINUX, Dual Booting	Operating System Installation-Windows OS,UNIX/LINUX, Dual Booting	4Hours/week	18-10-2023	Practical
6. Installation and Un-installation of Software-Office Tools, Utility Software(Like Anti-virus, System maintenance Tools); Application Software-Like Photo/Image Editors, Audio Recorders/Editors,vedio Editors….); Freeware, Shareware,Payware and Trialware;Internet Browsers, Programming IDEs,	Installation and Un-installation of Software-Office Tools, Utility Software(Like Anti-virus, System maintenance Tools); Application Software-Like Photo/Image Editors, Audio Recorders/Editors,vedio Editors….); Freeware, Shareware,Payware and Trialware;Internet Browsers, Programming IDEs,	4Hours/week	25-11-2023	Practical
7. System Configuration-BIOS setting, Registry Editor, MS Config, Task Manager, System Maintenance, Third-party	System Configuration-BIOS setting, Registry Editor, MS Config, Task Manager, System Maintenance, Third-party System maintenance Tools (Similar to CCleaner and Jv16 Power tools..)			

System maintenance Tools				
(Similar to CCleaner and Jv16 Power tools..) **PART-B :SOFTWARE** 1. Activity using Word Processor Software 2. Activity using Spread sheets software 3. Activity using presentation software 4. Activity involving multimedia editors(image,vedio,audio…)	Activity using word processor software Activity using spread sheets software Activity using presentation software Activity involving multimedia editors Task involving internetbrowsing Flowchart: Installation and using of flowgarithms software for different arithmetic tasks like sum,average,product,difference,quotient and remainder of given numbers, calculate area of	4Hours/week 4Hours/week 4Hours/week 4Hours/week 4Hours/week 4Hours/week	02-11-2023 08-11-2023 15-11-2023 22-11-2023 23-11-2023 29-11-2023	Practical Practical Practical Practical Practical Practical
	shapes(square,Rectangle,circle and triangle),		06-12-2023	

5. Task involving internet browsing	arrays and recursion	4Hours/week		
6. Flowchart: Installation and using of flowgarithms software for different arithmetic tasks like sum,average,product,difference,quotient and remainder of given numbers, calculate area of shapes(square,Rectangle, circle and triangle), arrays and recursion		4Hours/week	13-12-2023 14-12-2023	
7. REVISION			15-12-2023	

Department : Mathematics
Title of the Paper : Mathematical Foundation
[Course Code – 215131]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Dr. Sumathi M P/Niranjan L / Jayashree B

Total Hrs: 42 Hours (3Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
	Mathematical logic: Introduction-statements, Connectives-negation, conjunction, disjunction.	3 hours	11-09-23 to 16-09-23	Introduction class Course outcomes discussed
	Statement formulas and truth tables.	2 hours	19-09-23 to 23-09-23	Chalk and Black board

Mathematical logic: (14 hours)	Conditional and bi-Conditional statements- tautology contradiction.	2 hours	25-09-23 to 30-09-23	Chalk and Black board
	Converse, Inverse, Contra-positive, equivalence of formulas.	3 hours	03-10-23 to 07-10-23	Chalk and Black board
	Duality law, Predicates and Quantifiers,	3 hours	09-10-23 to 11-10-23	Chalk and Black board
	Arguments.	1 hours	16-10-23	Chalk and Black board
Set Theory &Matrix : (14 Hours)	Venndiagram, Cartesianproduct.	1 hour	25-10-23 to 27-10-23	Chalk and Black board
	Operations on sets – Union, Intersection, Disjoint, Difference andComplement.	3 hours	30-10-23 to 04-11-23	Chalk and Black board
	Set Identities. **Matrixalgebra:** Introduction - Types of matrices – matrix operations	3 hours	06-11-23 to 11-11-23	Chalk and Black board
	Arithmetic Operations, transpose of amatrix, determinant of matrix,	1 hours	13-11-23	Chalk and Black board
	Mathematical Foundation	1 hour	16-11-2023	15-11-2023 To 18-11-2023 C1 Internal Test
	inverse of a matrix- Cramer's rule	3 hours	20-11-23 to 25-11-23	22-11-23 Display of C1 Internal Test marks on the notice board
Matrix & Differential calculus : (14 hours)	**Matrix:** Finding rank of a matrix-normal form-echelon form, cayley-Hamilton theorem..	4 hours	27-11-23 to 02-12-23	**One special class** 1-12-23 Submission of Theory Assignments
	Eigen values **Differential calculus:** Functions andlimits - Simple Differentiation of Algebraic Functions –	5 hours	04-12-23 to 09-12-23	**Two special class**
	Evaluation of First and Second Order Derivatives–Maxima and Minima.Conclusion of Syllabus	5 hours	11-12-23 to 16-12-23	**Two special class**

	Basic concepts of set theory: Sets, powerset-	2 hours	17-10-23 to 21-10-23	Chalk and Black board

Department: BCA
Subject: C# and .Net Technologies
[Course code: 225330]
Term Period: 11/09/2023 to 15/12/2023

Hrs/week:3 Hours/week **Total Hrs:42 Hour**

Curriculum as prescribedby the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Unit-1 Introduction to .Net Technologies: Introduction to Web Technologies. HTML Basics, Scripts. Sample Programs. Advantages and Disadvantages of Client-side and Server-side Scripts. Overview of Client-side Technologies and Server-side Technologies. **Introduction to C#:** Overview of C#, Literals, Variables, Data Types, Operators, Expressions, Control Structures-Methods, Arrays, Strings, Structures, Enumerations.	Introduction to Web Technologies. HTML Basics	1 Hour	11/9/2023	Lecture
	Scripts Sample Programs.	1 Hour	12/9/2023	Lecture
	Advantages and Disadvantages of Client-side and Server-side Scripts.	1 Hour	14/9/2023	Lecture
	Overview of Client-side Technologies and Server-side Technologies.	1 Hour	19/9/2023	Lecture
	Introduction to C#: Overview of C#,	1 Hour	21/9/2023	Lecture
	Literals, Variables, Data Types	1 Hour	25/9/2023	Lecture
	Operators	1 Hour	26/9/2023	Lecture
	Operators	1 Hour	3/10/2023	Lecture

	Expressions	1 Hour	5/10/2023	Lecture
	Control Structures	1 Hour	9/10/2023	Lecture
	Control Structures	1 Hour	10/10/2023	Lecture
	Methods, Arrays	1 Hour	12/10/2023	Lecture
	Strings	1 Hour	16/10/2023	Lecture
	Structures, Enumerations.	1 Hour	17/10/2023	Lecture
Unit-2 **Introduction to VB.NET**: Introduction VB.NET -IDE – Creating a shortcut to start VB.NET. Maneuverings the Toolbar Auto-hide, Dockingand Undocking, Placing and Resizing the Windows, Forms, Properties Window and Solution Explorer. Writing and Event Procedure. Execution Basic Keywords. Data Types. VB.NET statements. Conditional statements:If Else, Select Case, Switch and Choose Loops: Do, For Next, For	Introduction VB.NET -IDE	1 Hour	19/10/2023	Lecture
	Creating a shortcut to start VB.NET.	1 Hour	26/10/2023	Lecture
	Maneuverings the Toolbar Auto-hide	1 Hour	30/10/2023	Lecture
	Dockingand Undocking, Placing and Resizing the Windows	1 Hour	31/10/2023	Lecture
	Forms, Properties Window	1 Hour	2/11/2023	Lecture
	Properties Window and Solution Explorer	1 Hour	6/11/2023	Lecture
Each Next, While loop. Arrays	Writing and Event Procedure.	1 Hour	7/11/2023	Lecture

	Execution Basic Keywords. Data Types.	1 Hour	9/11/2023	Lecture
	VB.NET statements.	1 Hour	13/11/2023	Lecture
	Conditional statements:If Else, Select Case, Switch	1 Hour	14/11/2023	Lecture
	Conditional statements:If Else, Select Case, Switch	1 Hour	16/11/2023	Lecture
	Choose Loops: Do, For Next, For Each Next	1 Hour	20/11/2023	Lecture
	Choose Loops: Do, For Next, For Each Next	1 Hour	21/11/2023	Lecture
	While loop. Arrays	1 Hour	23/11/2023	Lecture
Unit-3 **Application Development on .NET:** C#.NET: Building Windows Applications, VB.NET: Windows Forms. Working with Controls, Timer, Picture-box, Group-box, Combo-box, Horizontal and Vertical Scrollbar, Numeric-up-down, Track-bar, and Progress-bar. Subroutines and FunctionsinVB.NET. Database applications **ADO .NET**	**Application Development on .NET:** C#.NET: Building Windows Applications.	1 Hour	27/11/2023	Lecture
	VB.NET: Windows Forms.	1 Hour	28/11/2023	Lecture
	Working with Controls	1 Hour	30/11/2023	Lecture
	Timer, Picture-box	1 Hour	1/12/2023	Lecture
	Group-box, Combo-box	1 Hour	2/12/2023	Lecture
Connectivity: Introduction to ADO.NET, ADO vs ADO.NET. Architecture: Data reader, Data adopter, Accessing Data with ADO.NET. Programming Web Applications with Web Forms. ASP .NET applicationswith ADO.NET	Horizontal and Vertical Scrollbar	1 Hour	4/12/2023	Lecture
	Numeric-up-down, Track-bar, and Progress-bar.	1 Hour	5/12/2023	Lecture
	Subroutines and FunctionsinVB.NET.	1 Hour	7/12/2023	Lecture

	Database applications **ADO .NET Connectivity:** Introduction to ADO.NET	1 Hour	9/12/2023	Lecture
	ADO.NET, ADO vs ADO.NET.	1 Hour	11/12/2023	Lecture
	Architecture: Data reader, Data adopter, Accessing Data with ADO.NET.	1 Hour	12/12/2023	Lecture
	Architecture: Data reader, Data adopter, Accessing Data with ADO.NET.	1 Hour	13/12/2023	Lecture
	Programming Web Applications with Web Forms.	1 Hour	14/12/2023	Lecture
	ASP .NET applications with ADO.NET	1 Hour	15/12/2023	Lecture

Department: BCA
Subject: C# and .Net Technologies
[Course code: 225330]
Term Period: 11/09/2023 to 15/12/2023

Hrs/week: 4 Hours/week **Total Hrs: 56 Hours**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Practice Lab	HTML Basic tags	4 Hours	13/9/2023	Practical
Develop a C# .NET console applicationto demonstrate the conditional statements. Develop a C# .NET console applicationto demonstrate the control statements. Develop an application	Develop a C# .NET console application to demonstrate the conditional statements.	4 Hours	20/9/2023	Practical

in C#.NET that demonstrates the windows controls Demonstrate Multithreaded Programming in C#.NET Demonstrate subroutines and functions in C#.NET	Develop a C# .NET console application to demonstrate the control statements.	4 Hours	27/9/2023	Practical
	Develop an application in C#.NET that demonstrates the windows controls	4 Hours	4/10/2023	Practical
	Demonstrate Multithreaded Programming in C#.NET Demonstrate subroutines and functions in C#.NET	4 Hours	11/10/2023	Practical
Develop an application for deploying variousbuilt-in functionsin VB.NET Develop an MDI application for Employee Pay-rolltransactions in VB.NET Construct aconsole application to demonstrate theOOP Concepts Develop a web application in VB.NET for dynamic Login Processing Develop a windows application with database connectivity forcore-banking transactions	Practice Lab	4 Hours	18/10/2023	Practical
	I Lab IA	4 Hours	25/10/2023	Practical
	Develop an application fordeploying various built-infunctions in VB.NET	4 Hours	8/11/2023	Practical
	Develop an MDI application forEmployee Pay-roll transactionsin VB.NET	4 Hours	15/11/2023	Practical
	Construct a console applicationto demonstrate the OOP Concepts	4 Hours	22/11/2023	Practical
	Develop a web application inVB.NET for dynamic Login Processing	4 Hours	29/11/2023	Practical
	Develop a Windows application with database connectivityfor core-banking transactions	4 Hours	6/12/2023	Practical
	Practice Lab	4 Hours	13/12/2023	Practical
	II Lab IA	4 Hours	14/12/2023	Practical

Department: BCA
Subject: Computer Networks
Hrs./week:03 hrs.
Total Hrs.: 42 hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
Unit-1 **Introduction:** Computer Networks and its applications, Network structure, network architecture, Topologies, LAN, WAN, MAN, The OSI reference model, The TCP/IP reference model.	**Unit-1** **Introduction:** Computer Networks and its applications, Network structure, network architecture, Topologies, LAN, WAN, MAN, The OSI reference model, The TCP/IP reference model.	5 hrs 3 hrs	11/09/2023 12/09/2023 15/09/2023 19/09/2023 23/09/2023 25/09/2023 26/09/2023 30/09/2023	Lecture and PPT
The Physical Layer: Transmission Media – Twisted pair, coaxial cable, optical fiber, radio transmission, microwaves and infrared transmission, Switching – message switching, Multiplexing.	**The Physical Layer:** Transmission Media – Twisted pair, coaxial cable, optical fiber, radio transmission, microwaves and infrared transmission, Switching – message switching, Multiplexing.	6 hrs	03/10/2023 07/10/2023 09/10/2023 10/10/2023 13/10/2023	Lecture AND PPT
			16/10/2023	
	Total	14hrs		
Unit-2 **The Data Link Layer:** Data Link Layer design issues, Error detection – Single	**Unit-2** **The Data Link Layer:** Data Link Layer design issues, Error detection – Single	7 hrs	17/10/2023 21/10/2023 27/10/2023 28/10/2023	Lecture AND PPT

parity checking, Checksum, polynomial codes – CRC, Error correction- Hamming code, Elementary data link protocols, sliding window protocols.	parity checking, Checksum, polynomial codes – CRC, Error correction- Hamming code, Elementary data link protocols, sliding window protocols.		30/10/2023 31/10/2023 04/11/2023	
The Network Layer: Network layer design issues, Routing algorithms – Flooding, Distance vector routing, Hierarchical routing, Link state routing, Congestion, Control Algorithms – Leaky bucket, token bucket algorithm, admission control, Hop by Hop choke packets.	**The Network Layer:** Network layer design issues, Routing algorithms – Flooding, Distance vector routing, Hierarchical routing, Link state routing, Congestion, Control Algorithms – Leaky bucket, token bucket algorithm, admission control, Hop by Hop choke packets.	7 hrs	06/11/2023 07/11/2023 11/11/2023 13/11/2023 17/11/2023 18/11/2023 20/11/2023	
	Total	14 hrs		
Unit-3 **The Transport Layer, Presentation Layer and Application Layer:** Elements of Transport service, Elements	**Unit-3** **The Transport Layer, Presentation Layer and Application Layer:** Elements of Transport service, Elements	14 hrs	21/11/2023 25/11/2023 27/11/2023 28/11/2023	Lecture AND PPT
of Transport protocols, Internet transport protocols (TCP & UDP), Presentation Layer – Introduction, protocol, Application Layer DNS, Electronic Mailing, and World Wide Web, Introduction to mobile internet.	of Transport protocols, Internet transport protocols (TCP & UDP), Presentation Layer – Introduction, protocol, Application Layer DNS, Electronic Mailing, and World Wide Web, Introduction to mobile internet.		29/11/2023 02/12/2023 04/12/2023 05/12/2023 08/12/2023 09/12/2023 11/12/2023 12/12/2023 13/12/2023 14/12/2023	
	Total	14 hrs		
	Total workload	42 hrs		

Department: BCA

Subject: Statistical Computing and R Programming(DSC14)

Term Period: 25/09/2023 to 09/12/2023

Hrs/week: 4 Hours/week

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
UNIT I - 15 Hrs Introduction of the language, numeric, arithmetic, assignment, and vectors, Matrices and Arrays, Non-numeric Values, Lists and Data Frames, Special Values, Classes, and Coercion, Basic Plotting. Reading and writing files, Programming, Calling Functions, Conditions and Loops: standalone statement with illustrations in exercise ,stacking statements, coding loops, Writing Functions, Exceptions, Timings, and Visibility.	Introduction Introduction of the language Data structures: vectors, Matrices & Arrays, Non-numeric Values, Lists and Data Frames Special Values, Classes, and Coercion Basic Plotting Reading and writing files, Programming, Calling Functions	1 Hour 1 Hour 3 Hour 3 Hour 2 Hour 2 Hour	12/09/2023 13/09/2023 14/09/2023 16/09/2023 19/09/2023 20/09/2023 21/09/2023 23/09/2023 26/09/2023 27/09/2023 30/09/2023 03/10/2023	Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt
	ConditionsandLoops: standalone statement with illustrations in exercise stacking statements coding loops, Writing Functions Exceptions Timings, and Visibility	2 Hour 1 Hour	04/10/2023 05/10/2023 07/10/2023 10/10/2023	Lecture/ppt Lecture/ppt

UNIT II - 15 Hrs Statistics And Probability, basic data visualisation, probability, common probability distributions: common probability mass functions, bernoulli, binomial, poisson distributions, common probability density functions, uniform, normal,student'sdistribution.	Statistics Probability basic data visualisation, common probability distributions common probability mass functions Bernoulli distribution Binomial distribution poisson distributions uniform density function normal density function	2 Hour 2 Hour 3 Hour 2 Hour 2 Hour 1 Hour 1 Hour 1 Hour	12/10/2023 17/10/2023 18/10/2023 19/10/2023 21/10/2023 25/10/2023 26/10/2023 31/10/2023 02/11/2023 04/11/2023 07/11/2023 08/11/2023 09/11/2023 11/11/2023	Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt
UNIT III - 15 Hrs Statistical testing and modelling, sampling distributions, hypothesis testing, components of hypothesis test, testing means, testing proportions, testing categorical variables, errors and power, Analysis of variance.	Statistical testing Statistical modeling Sampling distribution Hypothesis testing Components of hypothesis testing Testing means Testing proportions Testing categorical variables	1 Hour 2 Hour 2 Hour	15/11/2023 16/11/2023 18/11/2023 21/11/2023	Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt

	Errors and powers ANOVA	1 Hour	22/11/2023 23/11/2023	Lecture/ppt
		1 Hour	25/11/2023	
	Regression introduction	1 Hour	28/11/2023	Lecture/ppt
	Simple linear regression	3 Hour	29/11/2023	
UNIT IV - 15 Hrs Simple linear regression, multiple linear regression, linear model selection and diagnostics.	Multiple linear regression Model selection and diagnostics		02/12/2023 05/12/2023	Lecture/ppt
Advanced graphics: plot customization, plotting regions and margins, point and click coordinate interaction, customizing traditional R plots, specialized text and label notation.	Advanced graphics plot customization	2 Hour		Lecture/ppt
	plotting regions and margins, point and click coordinate interaction		06/12/2023	Lecture/ppt
Defining colors and plotting in higher dimensions, representing and using color, 3D scatter plots.		2 Hour		Lecture/ppt
	customizing traditional R plots	1 Hour	07/12/2023	Lecture/ppt
	specialized text and label notation.	2 Hour	09/12/2023	Lecture/ppt
	Defining colors and plotting in higher dimensions	2 Hour	12/12/2023	Lecture/ppt
	Representing and using color	2 Hour	13/12/2023	Lecture/ppt
	3D scatter plots.	2 Hour	14/12/2023	

		1 Hour 3 Hour	16/12/2023 19/12/2023 20/12/2023 21/12/2023 23/12/2023	

Department: BCA
Subject: Statistical Computing and R Programming(DSC14)Term
Period: 25/09/2023 to 09/12/2023
Hrs/week: 4 Hours/week
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Practice Lab	Introduction for RStudio Software Familiar with basic Programs	4 Hours	25/09/2023	Practical
PART-A 1. Write a R program for differenttypes of data structures in R. 2. Write a R program that includevariables, constants, datatypes. 3. Write a R program that include linear algebra operations on vectorsand matrices. 4. Write a R Program to create, name, add,delete and update listelements. 5. Write a R Program to create twodata frames and perform the following	1. Write a R program for different types ofdata structures in R. 2. Write a R program that includevariables, constants, datatypes.	4 Hours	03/10/2023	Practical
	3. Write a R program that include linear algebra operations on vectors and matrices. 4. Write a R Program to create, name,add,delete and update list elements.	4 Hours	09/10/2023	Practical
	5. Write a R Program to create two dataframes and perform the following a. Combine Vertically two data frames b. Combine Horizontally two data frames	4 Hours	12/10/2023	Practical

a. Combine Vertically two dataframes b. Combine Horizontally two dataframes 6. Write a R program for any visualrepresentation of an object with creating graphs using graphic functions:Plot().Hist(),Line chart(). Pie(),Boxplot(),Scatterplots (). 7. Write a R Program for Quick sort implementation, Binary Searchtree.	6. Write a R program for any visual representation of an object with creating graphs using graphic functions:Plot().Hist(),Linechart().Pie() ,Boxplot(),Scatterplots().	4 Hours	16/10/2023	Practical
	7. Write a R Program for Quick sortimplementation, Binary Search tree.	4 Hours	18/10/2023	Practical
Practice Lab	Practice Lab	4 Hours	25/10/2023	Practical
1st lab Internals	Lab I.A	4 Hours	30/10/2023	Practical

PART-B 8. Write a R program to find a factorial using function (). 9. Write a R program to create functions with arguments. 10. Write a R program for calculating cumulative sums, and products, minima maxima and calculus. 11. Write a R program that includedifferent operators, control structures, default values for arguments, returning complex objects. 12. Read the data from csv file, represent it in data frame and findthe minimum, maximum,mean, media numeric data columns. 13. Write a R program to install and load the scatter plot 3d package. 14. Write a program to create an any application of Linear Regression in	8. Write a R program to find a factorialusing function (). 9. Write a R program to create functionswith arguments.	4 Hours	06/11/2023	Practical
	10. Write a R program for calculating cumulative sums, and products, minimamaxima and calculus. 11. Write a R program that include different operators, control structures, default values for arguments, returningcomplex objects.	4 Hours	08/11/2023	Practical
	12. Read the data from csv file, represent itin data frame and find the minimum, maximum,mean, media numeric data columns.	4 Hours	15/11/2023	Practical
	13. Write a R program to install and loadthe scatter plot 3d package. 14. Write a program to create an any application of Linear Regression in multivariate context for predicti purpose.	4 Hours	20/11/2023	Practical
	15. Write a R program for with any data sets containing data frame objects, indexing and subsetting data and employmanipulating and analyzing data.	4 Hours	22/11/2023	Practical

multivariate contextfor predicti purpose. 15. Write a R program for with anydata sets containing data frame objects, indexing and subsetting data and employ manipulating and analyzing data.				
Presentation	Presentation	4 Hours	27/11/2023	Practical
Practice Lab	Practice Lab	4 Hours	04/12/2023	Practical

Department Of Computer Application
Subject: Design and Analysis of Algorithm
Hrs/week :4 hours
Total Hrs:60 hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
UNIT I What is an Algorithm? Fundamentals of Algorithmic problem solving, Fundamentals of the Analysis of Algorithm Efficiency, Analysis Framework, Units for measuring Running time, Orders of Growth Worst-case, Best case and Average- case efficiencies. Asymptotic Notations: Introduction, O-notation, Ω-notation, θ-notation, Mathematical analysis of non- Recursive algorithms,	What is an Algorithm? Fundamentals of Algorithmic problem solving Fundamentals of the Analysis of Algorithm Algorithm Efficiency	1 Hour 2 Hour 2 Hour 1Hour	11/09/2023 13/09/2023 13/09/2023 14/09/2023 14/09/2023 16/09/2023	Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt
mathematical analysis of recursive algorithms.		2 Hour 1	22/09/2023 22/09/2023 23/09/2023	Lecture/ppt Lecture/ppt

What is an Algorithm? Fundamentals of Algorithmic problem solving, Fundamentals of the Analysis of Algorithm Efficiency, Analysis Framework, Units for measuring Running time, Orders of Growth Worst-case, Best case and Average-case efficiencies. Asymptotic Notations: Introduction, O-notation, Ω-notation, θ-notation, Mathematical analysis of non-Recursive algorithms, mathematical analysis of recursive algorithms.	h Analysis Framework measuring Running time Orders of GrowthWorst-case, BestcaseandAverage-caseefficiencies. AsymptoticNotations:Introduction,O-notation,Ω-notation,θ-notation Mathematical analysis of non-Recursivealgorithms,mathematicalanalysisofrecursivealgorithms. Brute Force and Exhaustive Search	Hour 2 Hour 2 Hour 2 Hour	25/09/2023 25/09/2023 27/09/2023 27/09/2023 30/09/2023 30/09/2023	Lecture/ppt Lecture/ppt Lecture/ppt
UNIT II Brute Force and Exhaustive Search: Introduction to Brute Force approach, Selection Sort and Bubble Sort, Sequential search,	Examples of Brut e Force and Exhaustive Search	1 Hour 1 Hour	04/10/2023 06/10/2023	Lecture/ppt Lecture/ppt
Exhaustive Search-Travelling Salesman Problem and Knapsack Problem, Depth First Search, Breadth	Introduction to Brute Force approach	1 Hour 1 Hour	07/10/2023 09/1 0 /2023 11/10/2023	Lecture/ppt

FirstSearch	Application of Brute Force approach	1 Hour	16/10/2023 19/10/2023	Lecture/ppt
Brute Force and Exhaustive Search: Introduction to Brute Force approach, Selection Sort and Bubble Sort, Sequential search, Exhaustive Search-Travelling Salesman Problem and Knapsack Problem, Depth First Search, Breadth FirstSearch	Selection Sort	1 Hour	20/10/2023 25/10/2023	Lecture/ppt
	Example of Selection Sort	1 Hour	27/10/2023	Lecture/ppt
	Bubble Sort	1 Hour	30/10/2023 02/11/2023	Lecture/ppt
	Example of Bubble Sort	1 Hour		Lecture/ppt
	Sequential search	1 Hour		Lecture/ppt
	Example of Sequential search	1 Hour		Lecture/ppt
	Exhaustive Search			Lecture/ppt
Brute Force and Exhaustive	Example Exhaustive			Lecture/ppt

Search: Introduction toBrute Force approach, Selection Sort and BubbleSort, Sequential search,Exhaustive Search-Travelling Salesman Problem and Knapsack Problem, Depth First Search, BreadthFirstSearch	Search Travelling Salesman Problem Knapsack Problem Depth First Search, Breadth FirstSearch	1 Hour 1 Hour 1 Hour	03/11/2023 04/11/2023 06/11/2023	Lecture/ppt Lecture/ppt Lecture/ppt
UNIT III Decrease-and-Conquer: Introduction, Insertion Sort, Topological Sorting Divide-and-Conquer: Introduction, Merge Sort, Quick Sort, Binary Search, Binary Tree traversals and related properties. Decrease-and-Conquer: Introduction, Insertion Sort, Topological Sorting	Decrease-and-Conquer introduction Insertion Sort Example of Insertion Sort Topological Sorting Example of Topological Sorting	1 Hour 1 Hour 1 Hour 1 Hour 1Hour 1	08/11/2023 09/11/2023 10/11/2023 11/11/2023 20/11/2023	Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt

Divide-and-Conquer: Introduction, Merge Sort, Quick Sort, Binary Search, Binary Tree traversals and related properties. Decrease-and-Conquer: Introduction, Insertion Sort, Topological Sorting Divide-and-Conquer: Introduction, Merge Sort, Quick Sort, Binary Search,Binary Tree traversals andrelated properties.	Divide-and-Conquer: Introduction Example of Divide-and-Conquer: Introduction Merge Sort Example Merge Sort Quick Sort Example of Quick Sort Binary Search Example of Binary Search Binary Tree traversals	1 Hour 1 Hour 1 Hour 1 Hour 1 Hour 1 Hour 1 Hour 1 Hour 1 Hour	22/11/2023 27/11/2023 29/11/2023 01/12/2023 06/12/2023 08/12/2023 09/12/202311/12/202313/11/2023	Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt
	related properties			

UNIT IV Greedy Technique: Introduction, Prim’s Algorithm, Kruskal’s Algorithm, Dijkstra’s Algorithm, Lower-Bound Arguments, Decision Trees, P Problems, NP Problems, NP Complete Problems, Challenges of Numerical Algorithm	Greedy Technique: Introduction	1 Hour	13/11/202314/12/202314/12/2023	Lecture/ppt
	Prim’s Algorithm,	1 Hour	15/12/202315/12/202316/12/202316/12/2023	Lecture/ppt
	Kruskal’s Algorithm	1 Hour	19/12/2023/19/12/2023/19/12/2023/19/12/2023/19/12/2023	Lecture/ppt
	Examples of prim's	1 Hour	22/12/2023	Lecture/ppt
		1 Hour		Lecture/ppt
Greedy Technique: Introduction, Prim’s Algorithm, Kruskal’s Algorithm, Dijkstra’s Algorithm, Lower-Bound Arguments, Decision Trees, P Problems, NP Problems, NP Complete Problems, Challenges of Numerical Algorithm	Examples of Krukal's	1 Hour		Lecture/ppt
	Dijkstra’s Algorithm	1 Hour		Lecture/ppt
	Example of Dijkstra’s	1 Hour		Lecture/ppt
	Lower-Bound Arguments	1 Hour		Lecture/ppt
	Decision Trees	1 Hour		Lecture/ppt
Greedy Technique: Introduction, Prim’s Algorithm, Kruskal’s Algorithm, Dijkstra’s Algorithm, Lower-Bound Arguments, Decision Trees, P Problems, NP Problems, NP Complete Problems, Challenges of Numerical Algorithm	P Problems N P	1 Hour		Lecture/ppt
	Problems	1 Hour		Lecture/ppt
	NP Complete Problems	1 Hour		Lecture/ppt
	Problems on Back Tracking	1 Hour		Lecture/ppt
	Problems on Branch and Bound	1 Hour	23/12/2023	Lecture/ppt
	Challenges of			
	Numerical Algorithm			Lecture/ppt

Department: BCA
Subject: Design and Analysis of Algorithm lab
Term Period: 25/09/2023 to 09/12/2023
Hrs/week: 4 Hours/week
Total Hrs: 60 Hours

Curriculum as prescribed bythe Institution	**Topics**	**No. of Hours require dto complet e**	**Date**	**Method of Deployme nt**
Practice Lab	**1.**Program to find given number is even or odd number. **2.**Program to find given number is positive or negative number. **3.**Program to find sum of two numbers. **4.**Program to print prime numbers from 1 to 10.	4 Hours	25/09/2023	Practical
PART-A 1.write a program to sort a list of N elements using selection sort Technique. 2.write a program to perform Travelling Salesman Problem. 3.write program to implement Dynamic Programming algorithm for the 0/1 knapsack problem. 4. write a program to perform Knapsack problem using greedy solution. 5.write program to implement the DFS and BFS Algorithm for a graph. 6.write a program to find minimum and maximum value in an array using	1. write a program to sort a list of N elements using selection sort Technique. 2. write a program to perform Travelling Salesman Problem. 3.write program to implement Dynamic Programming algorithm for the 0/1 knapsack problem.	4 Hours	03/10/2023	Practical
	4. . write a program to perform Knapsack problem using greedy solution. 5. write program to implement the DFS and BFS Algorithm for a graph.	4 Hours	09/10/2023	Practical

divide and conquer. 7.write a test program to implement divide and conquer strategy.Eg: Quick sort algorithm for sorting list of integers in ascending order. 8.write a program to implement Merge sort algorithm for sorting a list of intergers in ascending order. 9. Sort a given set of n integer elements using mergesort method and compute its time complexity run the program for varied values of n>5000 and record the time taken to sort.	6. write a program to find minimum and maximum value in an array using divide and conquer. 7. write a test program to implement divide and conquer strategy.Eg: Quick sort algorithm for sorting list of integers in ascending order.	4 Hours	12/10/2023	Practical
	8..write a program to implement Merge sort algorithm for sorting a list of intergers in ascending order.	4 Hours	16/10/2023	Practical
	9. Sort a given set of n integer elements using mergesort method and compute its time complexity run the program for varied values of n>5000 and record the time taken to sort.	4 Hours	18/10/2023	Practical
Practice Lab	Practice Lab	4 Hours	25/10/2023	Practical
1st lab Internals	Lab I.A	4 Hours	30/10/2023	Practical
PART-B 1. Sort a given set of n integer elements using Quicksort method and compute its time complexity run the program for varied values of n>5000 and record the time taken to sort. 2.write C program that accepts the vertices and edges for a graph and stores it as an adjacency matrix. 3.Implement function to print In-Degree,out-Degree and to display that adjacency matrix. 4.write program to implement backtracking algorithm for solving problems like N queens. 5.write program to implement the backtracking algorithm for the sum of	1. Sort a given set of n integer elements using Quicksort method and compute its time complexity run the program for varied values of n>5000 and record the time taken to sort. 2. write C program that accepts the vertices and edges for a graph and stores it as an adjacency matrix.	4 Hours	06/11/2023	Practical
	3.Implement function to print In-Degree,out-Degree and to display that adjacency matrix. 4. write program to implement backtracking algorithm for solving problems like N queens	4 Hours	08/11/2023	Practical
	5. write program to implement the backtracking algorithm for the sum of	4 Hours	15/11/2023	Practical

subsets problem. 6.write program to implement greedy algorithm for job sequencing with deadlines. 7.write program to implement Dynamic programming algorithm for the Optimal Binary Search Tree. 8.write a program that implements Prim's Algorithm to generate minimum cost spanning tree. 9. write a program that implements Kruskal's Algorithm to generate minimum cost spanning tree.	subsets problem. 6. write program to implement greedy algorithm for job sequencing with deadlines.			
	7. write program to implement Dynamic programming algorithm for the Optimal Binary Search Tree. 8. write a program that implements Prim's Algorithm to generate minimum cost spanning tree.	4 Hours	20/11/2023	Practical
	9. write a program that implements Kruskal's Algorithm to generate minimum cost spanning tree.	4 Hours	22/11/2023	Practical
Practice Lab	Practice Lab	4 Hours	27/11/2023	Practical
2nd lab Internals	Lab I.A	4 Hours	04/12/2023	Practical

Department Of BCA

Subject: Digital Marketing

Hrs/week: 3 hours

Total Hrs: 45 hours

Curriculum as prescribedby the Institution	**Topics**	**No. of Hours requiredto complete**	**Date**	**Method of deployment**
UNIT I **Introduction to Digital Marketing:** Overview of digital marketing, Evolution of digital marketing, Importance and benefits of digital marketing, Digital marketing channels and platforms.	**Introduction to Digital Marketing:** Overview of digital marketing.	1 Hour	11/09/2023	Lecture/ppt
	Evolution of digital marketing,	1 Hour	15/09/2023	Lecture/ppt

Digital Marketing Strategyand Planning: Developing a digital marketing strategy, Setting goals and objectives, Budgeting and resource allocation. Campaign planning and execution, Monitoring and adjusting digital marketing campaigns	Importance and benefits of digital marketing.	2 Hour	16/09/2023 18/09/2023	Lecture/ppt
	Digital marketing channels.	1 Hour	22/09/2023	Lecture/ppt
	Digital marketing platforms	2 Hour	23/09/2023 25/09/2023	Lecture/ppt
	Developing a digital marketing strategy.	2 Hour	29/09/2023 30/09/2023	Lecture/ppt
	Setting goals and objectives, Budgeting resource allocation.	2 Hour	06/10/2023	Lecture/ppt
	Campaign planning and execution,	2 Hour	07/10/2023	Lecture/ppt
	Monitoring and adjusting digital marketing campaigns	2 Hour	9/10/2023	Lecture/ppt
UNIT II **Social Media Marketing:** Overview of social media marketing, Creating and optimizing social media profiles, Social media content strategy, Social media advertising and analytics. **Email Marketing:** Introduction to email marketing, Building an email list, Creating effective email campaigns, Email	**Social Media Marketing:** Overview of social media marketing.	1 Hour	13/10/2023	Lecture/ppt
	Creating and optimizing social media profiles.	2 Hour	14/10/2023	Lecture/ppt
	Social media advertising and analytics.	2 Hour	16/10/2023 20/10/2023	Lecture/ppt
	Email Marketing: Introduction to email marketing.	1 Hour	21/10/2023	Lecture/ppt
	Building an email list.	1 Hour	27/10/2023 30/10/2023	Lecture/ppt

marketing metrics and analytics. **Content Marketing:** Understanding content marketing, Content strategy and planning, Content creation and distribution, Content promotion and amplification, Content marketing metrics and analytics.	Creating effective email campaigns. Email marketing metrics and analytics. **Content Marketing:** Understanding content marketing.	1 Hour 2 Hour 1 Hour	3/11/2023 4/11/2023 6/11/2023	Lecture/ppt Lecture/ppt Lecture/ppt
	Content strategy and planning, Content creation and distribution. Content promotion and amplification. Content marketing metrics and analytics.	1 Hour 1 Hour 1 Hour 1 Hour	10/11/2023 11/11/2023 13/11/2023 20/11/2023	Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt
UNIT III **Mobile Marketing:** Mobile marketing overview, Mobile advertising strategies, Mobile app marketing, Location-based marketing, Mobile marketing analytics **Analytics and Reporting:** Importance of analytics in digital marketing, Setting up web analytics tools (e.g., Google Analytics), Tracking and measuring key performance indicators(KPIs), Conversion tracking and optimization, Reporting and data visualization.	**Mobile Marketing:** Mobile marketing overview. Mobile advertising strategies Mobile app marketing, Location-based marketing Mobile marketing analytics **Analytics and Reporting:** Importance of analytics in digital marketing Setting up web analytics tools (e.g., Google Analytics) Tracking and measuring key performance indicators(KPIs) Conversion tracking and optimization Reporting and data visualization.	1 Hour 2 Hour 2 Hour 1 Hour 2 Hour 2 Hour 2 Hour 1 Hour 2 Hour	24/11/2023 25/11/2023 27/11/2023 1/12/2023 2/12/2023 04/12/2023 08/12/2023 09/12/2023 11/12/2023 15/12/2023 16/12/2023 18/12/2023	Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt

Department Of Computer Science and Application
Subject: Software Engineering(DSC-15)
Hrs/week :4 hours
Total Hrs: 60 hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
UNIT I - 15 Hrs OVERVIEW: Introduction; Software engineering ethics; Software Process models; Process activities; Coping with changes; Agile software development; Agile methods; Plan-driven and agile development.	Introduction	1 Hour	12/09/2023	Lecture/ppt
	Software engineering ethics	1 Hour	13/09/2023	Lecture/ppt
	Software Process models	3 Hour	14/09/2023 16/09/2023 19/09/2023	Lecture/ppt
	Process activities	3 Hour	20/09/2023 21/09/2023 23/09/2023	Lecture/ppt
	Coping with changes	2 Hour	26/09/2023 27/09/2023	Lecture/ppt
	Agile software development	2 Hour	30/09/2023 03/10/2023	Lecture/ppt
	Agile methods	1 Hour	04/10/2023	Lecture/ppt
	Plan-driven	1 Hour	05/10/2023	Lecture/ppt
	agile development	1 Hour	07/10/2023	Lecture/ppt
UNIT II - 15 Hrs REQUIREMENT ENGINEERING: Functional and non-functional requirements; Software requirement document; Requirement's specification; Requirements engineering processes; Requirement's elicitation and analysis;	Functional and non-functional requirements	2 Hour	10/10/2023 11/10/2023	Lecture/ppt
	Software requrirement document	2 Hour	12/10/2023 17/10/2023	Lecture/ppt
	Requirement's specification	2 Hour	18/10/2023 19/10/2023	Lecture/ppt
	Requirements	3 Hour	21/10/2023	Lecture/ppt

Requirement's validation; Requirements management	engineering processes		25/10/2023 26/10/2023	
	Requirement's elicitation and analysis	2 Hour	31/10/2023 02/11/2023	Lecture/ppt
	Requirement's validation	2 Hour	04/11/2023 07/11/2023	Lecture/ppt
	Requirements management	2 Hour	08/11/2023 09/11/2023	Lecture/ppt
UNIT III - 15 Hrs SYSTEM MODELING: Context models; Interaction models- Use case modeling, sequence diagrams; Structural models- Class diagrams, Generalization, Aggregation, Behavioral models- Data-driven modeling, Event-driven modeling; Model engineering ARCHITECTURAL DESIGN: Architectural design decisions; Architectural views; Architectural patterns- Layered architecture, Repository architecture, Client-server architecture, pipe and filter architecture, Introduction to Devops,Github, Bitbucket, Jenkins, Puppet.	Context models	1 Hour	11/11/2023	Lecture/ppt
	Interaction models- Use case modeling, sequence diagrams	2 Hour	15/11/2023 16/11/2023	Lecture/ppt
	Structural models- Class diagrams, Generalization, Aggregation	2 Hour	18/11/2023 21/11/2023	Lecture/ppt
	Behavioral models- Data-driven modeling, Event-driven modeling	2 Hour	22/11/2023 23/11/2023	Lecture/ppt
	Model engineering	1 Hour	25/11/2023	Lecture/ppt
	Architectural design decisions	1 Hour	28/11/2023	Lecture/ppt
	Architectural views	1 Hour	29/11/2023	Lecture/ppt
	Architectural patterns- Layered architecture, Repository architecture, Client-server architecture, pipe and	3 Hour	02/12/2023 05/12/2023	Lecture/ppt

	filter architecture Introduction to DevopsGithub, Bitbucket, Jenkins, Puppet	2 Hour	06/12/2023	Lecture/ppt
UNIT IV - 15 Hrs DESIGNAND IMPLEMENTATION : Object-oriented design using UML-System context and interactions, Architectural design, object class identification, Design models, Interface specification; Design patterns; Implementation Issues SOFTWARE TESTING: Development Testing- Unit testing, Choosing unit test cases, Component testing, System	Object-oriented design using UML-System context and interactions Architectural design, object class identification Design models, Interface specification Designpatterns,Implementation Issues	2 Hour 1 Hour 2 Hour 2 Hour	07/12/2023 09/12/2023 12/12/2023 13/12/2023	Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt
testing. Test-driven development; Release testing**;** User testing- Alpha, Beta, Acceptance testing.	Development Testing- Unit testing, Choosing unit test cases Component testing, System testing Test-driven development Release testing**;** User testing- Alpha, Beta, Acceptance testing	2 Hour 2 Hour 1 Hour 3 Hour	14/12/2023 16/12/2023 19/12/2023 20/12/2023 21/12/2023 23/12/2023	Lecture/ppt Lecture/ppt Lecture/ppt Lecture/ppt

Department: Computer Science and Applications
Subject: Data Structures using C
Hrs./week: 3hrs
Faculty Names: Ms Anusha M U, Ms Sushmitha B C
Term Period: 12/02/2024 to 25/02/2024
Course Code: 251230
Total Hrs: 42

Curriculum as Prescribed by Institution	Topics	No of Hours required to complete	Date	Method of deployment
Unit-1	Brief introduction data structures.	1 hr	19/02/2024	Class Room Teaching
	Definition; Types of data structures - Primitive & Non-primitive, Linear and Non-linear; Operations on data structures.	2 hrs	20/02/2024 21/02/2024	Class Room Teaching Class Room Teaching
	Dynamic memory allocation: Static & Dynamic memory allocation; Memory allocation and de-allocation functions - malloc, calloc, realloc and free.	3 hrs	26/02/2024 27/02/2024 28/02/2024	Class Room Teaching
	Algorithm Specification, Performance Analysis, Performance Measurement	2 hrs	04/03/2024 05/03/2024	Class Room Teaching
	Recursion: Definition; Types of recursions;	1 hr	06/03/2024 11/03/2024 12/03/2024	Class Room Teaching
	Recursion Technique Examples - GCD, Binomial coefficient nCr, Towers of Hanoi; Comparison between iterative and recursive functions.	2 hrs	13/03/2024 18/03/2024	Class Room Teaching Class Room Teaching
	Basic Concepts of arrays – Definition, Declaration,	1 hr	19/03/2024	Class Room Teaching
		1 hr	20/03/2024	Class Room Teaching Class Room Teaching
		1 hr	25/03/2024	Class Room Teaching Class Room Teaching
		1 hr	26/03/2024	Class Room Teaching

	Initialisation, Operations on arrays;	2 hrs	27/03/2024	Class Room Teaching
	Types of arrays;		28/03/2024	
	Arrays as abstract data types (ADT);	1 hr	01/04/2024	Class Room Teaching
	Representation of Linear Arrays in memory.			Class Room Teaching
		1 hr	02/04/2024	**25/04/2024 results was announced on notice board**
	Traversing linear arrays; Inserting and deleting elements;	1 hr	03/04/2024	Class Room Teaching
	Sorting – Selection sort, Bubble sort, Quick sort,			Class Room Teaching
	Selection sort, Insertion sort;	1 hr	08/04/2024	Class Room Teaching
Unit-2	Searching - Sequential Search, Binary search; Iterative and Recursive	2 hrs	10/04/2024 15/04/2024	Class Room Teaching
	searching;			Class Room Teaching
	Multidimensional arrays; Representation of multidimensional arrays; Sparse matrices.	1hr	**16/04/2024 to 19/04/2024 internal exam was conducted**	Class Room Teaching
				Class Room Teaching
	Basic Concepts – Definition and Representation of stacks; Operations on	1 hr	22/04/2024	Class Room Teaching
	stacks;	1 hr	23/04/2024	
	Applications of stacks;			Class Room Teaching
	Infix, postfix and prefix notations;	2 hrs	24/04/2024 29/04/2024	
	Conversion from infix to postfix using stack; Evaluation of postfix	1 hr	30/04/2024	
	expression using stack;			
	INTERNAL EXAM on 16/04/2024	1hr	03/05/2024	Class Room Teaching
		2 hrs	04/05/2024 07/05/2024	Class Room Teaching
Unit 3				Class Room Teaching
		1 hr	08/05/2024	

	Application of stack in function calls. Basic Concepts – Definition and Representation of queues; Types of queues - Simple queues, Circular queues, Double ended queues, Priority queues; Operations on Simple queues Basic Concepts – Definition and Representation of linked list. Types of linked lists - Singly linked list, Doubly liked list, Header liked list, Circular linked list; Representation of Linked list in Memory Operations on Singly linked lists – Traversing, Searching, Insertion, Deletion; Memory allocation; Garbage collection Definition; Tree terminologies –node, root node, parent node, ancestors of a node,	3 hrs 2 hrs 2 hrs 1 hr 2 hrs	13/05/2024 14/05/2024 15/05/2024 18/05/2024 20/05/2024 21/05/2024 22/05/2024 23/05/2024 24/05/2024 25/05/2024	

	siblings, terminal & non-terminal nodes, degree of a node, level, edge, path, depth; Type of binary trees - strict binary tree, complete binary tree, binary search tree and heap tree; Array representation of binary tree. Traversal of binary tree; preorder, inorder and postorder traversal.			

Department- Computer Science and Applications
Subject- Data Structures using C (LAB)
Hrs/week: 4 hours/Week
Faculty Names: Ms. Anusha M, Ms. Sushmitha B C
Term Period: 12/02/2024 to 25/02/2024
Course Code: 251230
Total Hrs: 52 hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of deployment**
PART-A				
1. Program to find GCD using recursive function.	Programs to find GCDof given two numbers.	4 Hrs/Week	19/02/2024	Laboratory and ICT
2. Program to display Pascal Triangle using binomial function.	Program to display Pascal Triangle using binomial function	4 Hrs/Week	26/02/2024	Laboratory and ICT
3. Program to generate n Fibonacci numbers using recursive function.	Program to generate n Fibonacci numbers using recursive function.			
4. Program to implement	Program to implement	4 Hrs/Week	04/03/2024	Laboratory and ICT

Towers of Hanoi. 5. Program to implement dynamic array, find smallest and largest element of the array.	Towers of Hanoi. Program to implement dynamic array, find smallest and largest element of the array.			
6. Program to read the names of cities and arrange them alphabetically. 7. Program to sort the given list using selection sort technique.	Program to read the names of cities and arrange them alphabetically. Program to sort the given list using selection sort technique.	4 Hrs/Week 4 Hrs/Week	11/03/2024 18/03/2024	Laboratory and ICT Laboratory and ICT
8. Program to sort the given list using bubble sort technique. 9. Program to sort the given list using insertion sort technique.	Program to sort the given list using bubble sort technique. Program to sort the given list using insertion sort technique.	4 Hrs/Week	25/03/2024 01/04/2024 08/04/2024	Laboratory and ICT PRACTICE INTERNAL EXAM
PART – B 1. Program to sort the given list using quick sort technique. 2. Program to sort the given list using merge sort technique.	Program to sort the given list using quick sort technique. Program to sort the given list using merge sort technique.	4 Hrs/Week	15/04/2024	Laboratory and ICT
3. Program to search an element using linear search technique. 4. Program to search an element using recursive binary search technique.	Program to search an element using linear search technique. Program to search an element using recursive binary search technique.	4 Hrs/Week	22/04/2024	Laboratory and ICT Laboratory and ICT
5. Program to implement Stack. 6. Program to convert an infix expression to postfix.	Program to implement Stack. Program to convert an infix expression to postfix.	4 Hrs/Week	29/04/2024	Laboratory and ICT
7. Program to implement simple queue.	Program to implement simple queue. Program to implement	4 Hrs/Week	06/05/2024	Laboratory

8. Program to implement linear linked list. 9. Program to display traversal of a tree.	linear linked list. Program to display traversal of a tree.	4 Hrs/Week	13/05/2024 15/05/2024 17/05/2024	and ICT PRACTICE INTERNAL EXAM

Department: Computer Science and Applications
Subject: Object Oriented concepts using java
Hrs./week: 3hrs
Faculty Names: Ms. POOJA P.S, Ms. JAYASHREE N.V
Term Period: 12/02/2024 to 25/02/2024
Course Code: 215231
Total Hrs: 42hrs

Curriculum as Prescribedby Institution	Topics	No of Hours required to complete	Date	Method of deployment
Unit-1	Brief introduction to java.	1 hr	19/02/2024	Class Room Teaching
	Definition: Basics of Java programming, Data types, Variables Operators,Control structures, selection,	4 hrs	20/02/2024 21/02/2024 22/02/2024 23/02/2024	Class Room Teaching
	Looping: For loop,while loop,do-while loop,nested for loop,Java methods, Overloading, Math class, Arrays in java.	3 hrs	26/02/2024 27/02/2024 28/02/2024	Class Room Teaching
	Objects and Classes: Basics of objects and classes in java, Constructors,	3 hrs	04/03/2024 05/03/2024 06/03/2024	Class Room Teaching
	Finalizer, Visibility modifiers, Methods and objects, Inbuilt classes	3 hr	11/03/2024 12/03/2024	Class Room Teaching

	like String, Character, String Buffer, File basics and this reference		13/03/2024	
Unit-2	Basic introduction to inheritance and types of inheritance and polymorphism and types of polymorphism and programs for each	2 hrs	15/03/2024 18/03/2024	Class Room Teaching
	Super and sub class,	1 hr	19/03/2024	Class Room Teaching
	Overriding, Object class,	1 hr	20/03/2024	Class Room Teaching
	Dynamic binding, Generic programming,	2 hr	21/03/2024 22/03/2024	Class Room Teaching
	Casting objects, Instance of operator, Abstract class,	2 hr	25/03/2024 26/03/2024	Class Room Teaching
	Abstract class, Interface in java, Package in java and UTIL package.	1 hr	27/03/2024	Class Room Teaching
	Basic Concepts – Thread life cycle and methods, Runnable interface,	2 hrs	28/03/2024 30/03/2024	Class Room Teaching
	Thread synchronization, Exception handling with try catch-finally,	1 hr	01/04/2024	Class Room Teaching
	Introduction to JavaBeans and Network Programming.	1 hr	03/04/2024	Class Room Teaching
	INTERNAL EXAM on 16/04/2024		**16/04/2024 to 19/04/2024 internal exam was**	**25/04/2024 results was announced on notice board**

			conducted	
	Introduction to gui programming		05/04/2024	Class Room Teaching
	Event handling in java	1hr	08/04/2024	Class Room Teaching
	Event types, Mouse and key events	1 hr	23/04/2024 24/04/2024	Class Room Teaching
	GUI Basics, Panels, Frames and types of frames	2 hrs	29/04/2024 30/04/2024	Class Room Teaching
	Layout Managers: Flow Layout, Border Layout, Grid Layout, GUI components like Buttons, Check Boxes	2 hrs 4 hrs	03/05/2024 04/05/2024 07/05/2024 08/05/2024	Class Room Teaching
	Radio Buttons, Labels, Text Fields, Text Areas, Combo Boxes, Lists,	2hrs	13/05/2024 14/05/2024	Class Room Teaching
	Scroll Bars,Sliders, Windows, Menus, Dialog Box	2 hrs	15/05/2024 18/05/2024	Class Room Teaching
	Applet and its life cycle, Introduction to swing, Exceptional handling mechanism.	3 hrs	20/05/2024 21/05/2024	Class Room Teaching
	Introduction to IO programming	2 hrs	22/05/2024 23/05/2024	Class Room Teaching
	Text and Binary I/O,Binary I/O classes, Object I/O	1 hrs	24/05/2024	Class Room Teaching
	Random Access Files.	1 hr	25/05/2024	Class Room Teaching

Department: Computer Application

Tiltle Of The Paper: :**Object Oriented concepts using Java(LAB)**

[Course Code:**215231**]

Term Period: 12/02/2024 to 25/05/2024

Faulty Name: JAYASHREE N.V, **POOJA P.S**

Hrs/week:4 hours/Week

Total Hrs: 52 hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment and Remarks
PART-A	1. Program to assign two integer values to X and Y. Using the 'if' statement the output of the program should display a message whether X is greater than Y. 2. Program to list the factorial of the numbers 1 to 10. To calculate the factorial value, use while loop. (Hint Fact of 4 = 4*3*2*1) 3. Program to add two integers and two float numbers. When no arguments are supplied, give a default value to calculate the sum. Use function overloading	4 Hrs/Week	15/02/24	ICT and Practical
	4. Program to perform mathematical operations. Create a class called AddSub with methods to add and subtract. Create another class called MulDiv that extends from AddSub class to use the member data of the super class. MulDiv should have methods to multiply and divide A main function should access the methods and perform the mathematical operations. 5. Program with class variable that is available for all instances of a class. Use static variable declaration. Observe the changes that occur in the object's member variable values.	4 Hrs/Week	22/02/24	ICT and Practical

	6. Program a. To find the area and circumference of the circle by accepting the radius from the user. 6.b. To accept a number and find whether the number is Prime or not	4 Hrs/Week	29/02/24	ICT and Practical
	7. Program to create a student class with following attributes; Enrollment No: Name, Mark of sub1, Mark of sub2, mark of sub3, Total Marks. Total of the three marks must be calculated only when the student passes in all three subjects. The pass mark for each subject is 50. If a candidate fails in any one of the subjects his total mark must be declared as zero. Using this condition write a constructor for this class. Write separate functions for accepting and displaying student details. In the main method create an array of three student objects and display the details.	4 Hrs/Week	05/03/24	ICT and Practical
	Object oriented using Java lab internals	4 Hrs/Week	12/03/24	C1 Practical Internal Test(PART A) 27/03/24 Marks sheet ofC1 practical internal testwas displayed on the notice board.
	8. In a college first year class are having the following attributes Name of the class (BCA, BCom, BSc), Name of the staff No of the students in the class, Array of students in the class 9. Define a class called first year with above attributes and define a suitable constructor. Also write a method called best Student () which process a first-year object and return the student with the highest total mark. In the main method define a first-year object and find the best	4 Hrs/Week	19/03/24	ICT and Practical
	student of this class			

	10.Program to define a class called employee with the name and date of appointment. Create ten employee objects as an array and sort them as per their date of appointment. ie, print them as per their seniority. 11. Create a package 'student. Fulltime.BCA 'in your current working directory a. Create a default class student in the above package with the following attributes: Name, age, sex. b. Have methods for storing as well as displaying	4 Hrs	26/03/24	ICT and Practical
PART-B	1. Program to catch Negative Array Size Exception. This exception is causedwhen thearray is initialized to negative values. 2. Program to handle Null Pointer Exception and use the "finally" method todisplay a message to the user.	4 Hrs/Week	27/03/24	ICT and Practical
	3. Program which create and displays a message on the window 4. Program to draw several shapes in the created window	4 Hrs/Week	02/04/24	ICT and Practical One special Lab was taken.
	5. Program to create an applet and draw grid lines 6. Program which creates a frame with two buttons father and mother. When we click the father button the name of the father, his age and designation must appear. When we click mother similar details of mother also appear	4 Hrs/Week	03/04/24	ICT and Practical
	7. Create a frame which displays your personal details with respect to a button click 8. Create a simple applet which reveals the personal information of yours.	4 Hrs/Week	06/05/24	ICT and Practical
	9. Program to move different shapes according to the arrow key pressed.	4 Hrs/Week	07/05/24	ICT and Practical
	10. Demonstrate the various	4 Hrs/Week	08/05/24	ICT and Practical
	mouse handling events using suitable example.			

	12. Program to create menu bar and pull-down menus.	4 Hrs/Week	09/05/24	ICT and Practical One special Lab was taken.
	Object Oriented concepts using java	4 Hrs	15/05/24 - 17/05/24	C2 Practical Internal Test(PART B) 24/05/24 Marks sheet ofC2 practical internal testwas displayed on the notice board.

Department : Mathematics
Title of the Paper : Discrete Mathematical Structure
[Course Code – 215231]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : A Radhesh/Dr. Sumathi M P / Niranjan L / Jayashree B

Total Hrs: 42 Hours (3Hrs/Week)

Curriculum as prescribedby the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
The Foundations: (14 hours)	**Logic and proofs:** Quantifiers and Nested Quantifiers	3 hours	12-02-24 to 17-02-24	Class room teaching
	Rules of Inference, Introduction to Proofs, Proof Methods and Strategy.	3 hours	19-02-24 to 24-02-24	Chalk and Black board
	Relation: Properties of relation, Composition of relation, Closer operation on relation.	3 hours	26-02-24 to 02-03-24	Chalk and Black board
	Equivalence relation and partition. Operation on relation, Representing relation.	3 hours	04-03-24 to 09-03-24	Chalk and Black board
	Functions, Sequences, and Sums: Functions, types of functions ,composition of functions. Sequences and Summations.	3 hours	11-03-24 to 16-03-24	Chalk and Black board
Counting: (14 hour	**Counting**: Basics of counting, Pigeonhole principle, Permutation and Combination,	3 hours	18-03-24 to 23-03-24	**One special class was taken to complete the unit**
	Binomial Coefficient and Combination,	3 hours	25-03-24	Chalk and Black board

s)				
	Generating Permutation and Combination**.**		to 30-03-24	
	Advanced Counting Techniques: Applications of Recurrence Relations, Solving Linear Recurrence, Relations.	3 hours	01-04-24 to 06-04-24	Chalk and Black board
	Divide and Conquer Algorithms and Recurrence Relations, Inclusion-Exclusion.	3 hours	08-04-24 to 13-04-24	**One special class was taken to complete the unit**
	Discrete Mathematical Structures	1 hour	15-04-24 to 20-04-24	C1 Internal Test
	Applications of Inclusion-exclusion.	1 hours	22-04-24	25-04-24 IA marks sheet were displayed on the notice board.
Induction and Recursion & Graphs : (14 hours)	**Induction and Recursion**: Mathematical Induction, Strong Induction and Well-Ordering,	2 hours	23-04-24 to 27-04-24	Chalk and Black board
	Recursive Definitions and Structural Induction, Recursive Algorithms, Program Corrections	3 hour	29-04-24 to 04-05-24	Chalk and Black board
	Graphs: Graphs and Graph models, Graph Terminology and Special Types of Graphs, Representing Graphs	3 hour	06-05-24 to 11-05-24	Theory Assignments were collected
	Graph Isomorphism, Connectivity, Euler and Hamilton Paths, Shortest-Path Problems (Dijkastra's Algorithm),	3 hours	13-05-24 to 18-05-24	Chalk and Black board
	Planar Graphs, Graph Coloring. Revision class with conclusion of syllabus.	3 hours	20-05-24 to 25-05-24	Chalk and Black board

Department: Computer Application
Tiltle Of The Paper: Multimeadia Animation
[Course Code:225434]
Term Period: 12/02/2024 to 25/05/2024
Faulty Name: Manasa K, Priya V N, Nithyashree R
Total Hours:42hrs

Curriculum as prescribed bythe Institution	Topics	No. of Hours required to complete	Date	Method of Deployment an Remarks
Unit 1 (14 hours)	Web Design: Origins and evolution of HTML, Basic syntax	2 Hours	12/02/24 14/02/24	Chalk and Black board
	Images, Lists, Tables	2 Hours	15/02/24 19/02/24	Chalk and Black board
	Forms,Frame, Overview and featuresof HTML5	2 Hours	21/02/24 22/02/24	Chalk and Black board
	CSS: Introduction, Levels of style sheets,Style specification formats.	2 Hours	26/02/24 28/02/24	Chalk and Black board
	Selector forms,Property value forms, Font properties.	2 Hours	29/02/24 04/03/24	Chalk and Black board
	Color,Alignment oftext, The and tags; Overview and features of CSS3.JavaScript: Object Orientation and JavaScript.	2 Hours	06/03/24 07/03/24	Chalk and Black board
	General syntactic characteristics,Primitives, operations, and expressions; Screen outputand keyboard input.Introduction to Animation: Definition, The Start and EndStates, Interpolation, Animations in HTML.	2 Hours	11/03/24 13/03/24	Chalk and Black board
	CSS Animations, Creating a Simple Animation. Keyframes, DeclaringMultiple Animations.	2 Hours	14/03/24 18/03/24	Chalk and Black board and ICT.
	Wrap-up. CSSTransitions.	2 Hours	20/03/24	Chalk and Black board
Unit 2 (14	Adding a Transition.		21/03/24	
	Transitions in Detail, The Longhand Properties. Longhand Properties vs. Shorthand Properties	2 Hours	25/03/24 27/03/24	Chalk and Black board
	Working with Multiple Transitions.HTML5 – SVG: ViewingSVGFiles.	2 Hours	28/03/24 01/04/24	Chalk and Black board andICT

hours)	Embedding SVG in HTML5 ,HTML5− SVG Circle, HTML5 −SVG Rectangle.	2 Hours	03/04/24 04/04/24	Chalk and Black board
	HTML5−SVGLine, HTML5 −SVG Ellipse HTML5 − SVG Polygon, HTML5 − SVG Polyline HTML5−SVG Gradients, HTML5 − SVG Star.	4 Hours	08/04/24 to 15/04/24	Chalk and Black board andICT. Special class was taken tocomplete the unit.
	Multimedia Animation	1 Hour	16/04/2024 To 20/04/2024	C1 Internal Test wasConducted.
Unit 3 (14 hours)	HTML5 – CANVAS: The Rendering Context Browser Support,HTML5 Canvas Examples.	2 Hours	22/04/24 23/04/24	Chalk and Black board.1 hour special class was taken.
	Canvas - Drawing Rectangles, Canvas - Drawing Paths Canvas - DrawingLines	2 Hours	24/04/24 25/04/24	Chalk and Black board
	Canvas - Drawing Bezier Curves.Canvas - Drawing Quadratic Curves.	2 Hours	29/04/24 02/05/24	Chalk and Black board 30/04/24 Marks sheet of Cl Internal test was displayed onthe notice board.
	Canvas - Using Images, Canvas - Create Gradients. HTML5 - Styles and Colors, Canvas - Textand Fonts.	2 Hours	06/05/24 08/05/24	Chalk and Black board andICT.
	Canvas - Patternand Shadow.Canvas - Save and Restore States.	2 Hours	09/05/24 13/05/24	Chalk and Black board
	Canvas– Translation. Canvas-Rotation	2 Hours	15/05/24 16/05/24	Chalk and Black board
	Canvas - Scaling, Canvas-Transforms, HTML5.	2 Hours	20/05/23 22/05/24	Chalk and Black board

Department: Computer Application
Tiltle Of The Paper: Multimeadia Animation Lab
[Course Code:225434]
Term Period: 12/02/2024 to 25/05/2024
Faulty Name: Manasa K, Priya V N, Nithyashree R

Hrs/week:4 hours/Week
Total Hrs: 52 hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment and Remarks
PART-A	1. Write an HTML program to create and display navigations menus using list tags and anchor tag. 2. Write an HTML program to display Multi-media data (text, images, audios, videos, gifs, etc) on a webpage.	4 Hrs/Week	15/02/24	ICT and Practical
	3. Write an HTML program to create student Registrations form on submitting the form check whether fields are empty or not using JavaScript. If any fields are empty display an error message	4 Hrs/Week	22/02/24	ICT and Practical
	4. Write an HTML program to create bio-data (CV or Resume) and to change the following CSS properties □ Font □ Text □ Background	4 Hrs/Week	29/02/24	ICT and Practical
	5. Write an HTML program to create div and apply the following CSS properties on created div □ Margin □ Padding □ Border □ Box shadow 6. Write an HTML program to create a box and using CSS transform and transition properties move the box to the center of the web page on loading web-page	4 Hrs/Week	07/03/24	ICT and Practical
	7. Write an HTML program to create a circle and create an animation of bouncing of the circle for 10 sec	4 Hrs/Week	14/03/24	ICT and Practical
	8. Write an HTML program to create page loading animations.	4 Hrs/Week	21/03/24	ICT and Practical
	Multimedia Animation Lab	4 Hrs	26/03/24	C1 Practical Internal Test(PART A) 27/03/24 Marks sheetof C1 practical internal test was displayed on the notice board.

PART-B	1. Write an HTML program to draw line, polyline and rectangle and fill rectangle with red color using svg tag. 2. Write an HTML program to draw star and multiple circle and with different color using svg tag .	4 Hrs/Week	28/03/24	ICT and Practical
	3. Write an HTML program to create logo with linear gradient properties using svg tag.	4 Hrs/Week	08/04/24	ICT and Practical One special Lab was taken.
	4. Write an HTML program to draw Square and Rectangle using canvas tag and JavaScript.	4 Hrs/Week	18/04/24	ICT and Practical
	5. Write an HTML program to draw bezier curve using canvas tag and JavaScript.	4 Hrs/Week	02/05/24	ICT and Practical
	6. Write an HTML Program to import an external image into a canvas and then to draw on that image.	4 Hrs/Week	09/05/24	ICT and Practical
	7. Write an HTML program to draw a rectangle box using canvas and to change background color to red, scale of the rectangle to 2 on move-over (hover)properties.	4 Hrs/Week	16/05/24	ICT and Practical
	8. Write an html program to draw a circle using canvas and to apply the rotations animations on loading the page.	4 Hrs/Week	20/05/24	ICT and Practical One special Lab was taken.
	Multimedia Animation Lab	4 Hrs	23/05/24	C2 Practical Internal Test(PART B) 24/05/24 Marks sheetof C2 practical internal test was displayed on the notice board.

Department: Computer Application
Title of the paper: Python Programming
[Course code: **225433**]
Term Period: 12/02/2024 to 25/05/2024
Faculty Names : Smt. Madhura Geetha, Sri. Roshan C L & Smt. Nandini K S

Hrs/week:3 Hours/week

Total Hrs:42 Hours

Curriculum as prescribedby the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit -1 (14 hours)	Features and Applications of Python,Installation of Python, Python Command Line mode and Python IDEs	1 Hour	12/02/2024	Lecture
	Simple Python Programs	1 Hour	13/02/2024	Lecture
	Identifiers, Keywords, Statements and Expressions,Variables.	1 Hour	16/02/2024	Lecture
	Operators, Precedenceand Association, DataTypes.	1 Hour	19/02/2024	Lecture
	Indentation, Comments,Built-in Functions , ConsoleInput and Console Output.	1 Hour	20/02/2024	Lecture
	Type Conversions,Python Libraries, Importing Libraries with Examples.	1 Hour	23/02/2024	Lecture
	Types of Control Flow,Control Flow Statements- if, else, elif,	1 Hour	26/02/2024	Lecture
	while loop, break, continue statements, for	1 Hour	27/02/2024	Lecture
	loop Statement,range () and exit () functions.			
	Types of Errors, Exceptions.	1 Hour	01/03/2024	Lecture
	Exception Handling using try, except and finally.	1 Hour	04/03/2024	Lecture
	Types of Functions; Function Definition- Syntax.	1 Hour	05/03/2024	Lecture
	Function Calling, Passing Parameters/arguments, the return statement.	1 Hour	11/03/2024	Lecture
	Default Parameters; Command line	1 Hour	12/03/2024	Lecture

	Arguments, Key Word Arguments.			
	Recursive Functions, Scope and Lifetime of Variables in Functions.	1 Hour	15/03/2024	Lecture
Unit-2 (14 hours)	Creating and Storing Strings, Accessing Sting Characters, the str()	1 Hour	18/03/2024	Lecture & ICT
	Operations on Strings- Concatenation, Comparison, Slicing and Joining, Traversing.	1 Hour	19/03/2024	
	Format Specifiers,Escape Sequences,Raw and Unicode Strings.	1 Hour	22/03/2024	
	Python String Methods.	1 Hour	25/03/2024	
	Creating Lists, Operations on Lists.	1 Hour	26/03/2024	
	Built-in Functions on Lists.	1 Hour	29/03/2024	
	Implementation of Stacks and Queues using Lists, Nested Lists.	1 Hour	01/04/2024	
	Dictionaries: Creating Dictionaries, Operationson Dictionaries.	1 Hour	02/04/2024	Lecture & ICT
	Built-in Functions on Dictionaries, Dictionary Methods.	1 Hour	05/04/2024	
	Populating and Traversing.	1 Hour	08/04/2024	
	Creating Tuples,Operations on Tuples.	1 Hour	09/04/2024	
	Built-in Functionson Tuples, Tuple Methods.	1 Hour	12/04/2024	
	Creating Sets,Operations on Sets. Built-in Functions onSets,Set Methods.	1 Hour	15/04/2024	

	Python programmingIA (C1) Unit – 1 and Unit – 2till String methods.	1 Hour	16/04/2024 to 20/04/2024	C1 internal test was conducted
Unit-3 (14 hours)	File Types, Operations on Files – Create, Open, Read,Write, Close Files.	1 Hour	23/04/2024	Lecture & ICT
	File Names and Paths;Format Operator,Inheritance-Single and mutlilevel	1 Hour	26/04/2024	
	The tkinter Module,Window and Widgets.	1 Hour	29/04/2024	
	Layout Management-pack, grid and place.	1 Hour	30/04/2024	
	The SQLite3 module; SQLite Methods-connect, cursor, execute, close.	1 Hour	03/05/2024	
	Connect to Database; CreateTable,Operationson Tables- Insert, Select, Update. Deleteand Drop Records.	1 Hour	06/05/2024	
	NumPy- Introduction to NumPy.	1 Hour	07/05/2024	
	Array Creation using NumPy.Operations on Arrays.	1 Hour	10/05/2024	
	Pandas- Introduction to Pandas, Series and DataFrames	1 Hour	13/05/2024	Lecture & ICT
	Creating DataFramesfrom Excel Sheet and .csv file,Dictionary and Tuples.	1 Hour	14/05/2024	
	Operations onDataFrames.	1 Hour	17/05/2024	
	Introduction to Data Visualisation,Matplotlib Library.	1 Hour	20/05/2024	
	Different Types of Charts using Pyplot- Line chart, Bar chart	1 Hour	21/05/2024	
	Histogram and Pie chart.	1 Hour	24/05/2024	

Department: Computer Application
Title of the paper: Python Programming lab
[Course code: **225433**]
Term Period: 12/02/2024 to 25/05/2024
Faculty Names : Smt. Madhura Geetha, Sri. Roshan C L & Smt. NandiniK S
Hrs/week: 4 Hours/week
Total Hrs.: 52 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Practice Lab	**1.**Program to find given number is even or odd number. **2.**Program to find given number is positive or negative number. **3.**Program to find sum of two numbers. 4.Program to find area of a triangle.	4 Hours	13/02/2024	Practical
PART-A 1.Check if a number belongs to the Fibonacci Sequence 2.Solve Quadratic Equations 3.Find the sum of n natural numbers 4.Display Multiplication Tables 5.Check if a given number is a Prime Number or not 6.Implement a sequential search 7.Create a calculator program 8.Explore string functions 9.Implement Selection Sort 10.Implement Stack and Queue 11.Read and write into a file	1. Check if a number belongs to the Fibonacci Sequence 2.SolveQuadratic Equations 3. Find the sum of n natural numbers	4 Hours	20/02/2024	Practical
	4.Display Multiplication Tables 5. Check if a given number is a Prime Number or not 6.Implement a sequential search	4 Hours	27/02/2024	Practical
	7.Create a calculator program 8. Explore string functions 9.Implement Selection Sort	4 Hours	05/03/2024	Practical
	10.Implement Stack and Queue 11. Read and write	4 Hours	12/03/2024	Practical

	into a file			
Practice Lab	Practice Lab	4 Hours	19/03/2024	Practical
1st lab Internals	Lab I.A	4 Hours	26/03/2024	Practical
PART-B 1.Demonstrate usage of basic regular expression	1.Demonstrate usage of basic regular expression 2.Demonstrate use of	4 Hours	02/04/2024	Practical
2.Demonstrate use ofadvanced regular expressions for data validation. 3.Demonstrate use ofList 4.Demonstrate use ofDictionaries 5.Create SQLite Database and PerformOperations on Tables 6.Create a GUI using Tkinter module 7.Demonstrate Exceptions in Python 8.Drawing Line chart and Bar chart using Matplotlib 9.Drawing Histogramand Pie chart using Matplotlib 10.Create Array usingNumPy and Perform Operations on Array 11.CreateDataFrame Excel sheet using Pandas and Perform operations on DataFrame	advanced regular expressions for data validation.			
	3.Demonstrate use of List 4. Demonstrate use of Dictionaries	4 Hours	09/04/2024	Practical
	5.Create SQLite Database and Perform Operations on Tables 6. Create a GUI using Tkinter module 7. Demonstrate Exceptions in Python 8.Drawing Line chart and Bar chart using Matplotlib	4 Hours	23/04/2024	Practical
	9.Drawing Histogram and Pie chart using Matplotlib 10.Create Array using NumPy and Perform Operations on Array 11.Create DataFrame Excel sheet using pandas and perform operations on DataFrame	4Hours	30/04/2024	Practical
Practice Lab	Practice Lab	4 Hours	07/05/2024	Practical
2nd lab Internals	Lab I.A	4 Hours	14/05/2024	Practical

Department: Computer Application
Title of the Paper: Operating System Concepts
[**Course code**:225435]
Term Period: 12/02/2024 to 25/05/2024 Faculty Name: Meghana Urs, Subhashini V

Hrs/week: 3 Hours
Total Hrs:42 Hours

Curriculum as prescribedby the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment And remarks**
UNIT1:(14hours)	Introduction to Operating System: Definition, Historyand Examples of Operating System;Computer System organization; Typesof Operating Systems; Functions ofOperating System. Systems Calls;	**3hours**	**12/02/2024 14/02/2024 16/02/2024**	Chalk and Board
	Operating System Structure. Process Management**:** Process Concept- Process Definition, Process State, Process Control Block,	**3hours**	**19/02/2024 21/02/2024 23/02/2024**	Chalk and Board
	Threads; Process scheduling-Multiprogramming,SchedulingQueues,CPUScheduling,ContextSwitch;OperationsonProcesses-CreationandTerminationofProcesses;	**3hours**	**26/02/2024 28/02/2024 01/03/2024**	Chalk and Board
	Inter process communication(IPC)-Definition and Need for Inter process Communication; IPC Implementation Methods Shared Memory and Message Passing;	**3hours**	**04/03/2024 06/03/2024 07/03/2024**	Chalk and Board
	CPUScheduling:Basicconcepts;SchedulingCriteria;SchedulingAlgorithms;Threadscheduling;MultiprocessorScheduling; Real-Time CPU Scheduling	**2hours**	**11/03/2024 13/03/2024**	Chalk and Board
UNIT2:(14hours)	Multithreaded Programming: Introduction to Threads; Types of Threads; Multithreading-Definition, Advantages; Multithreading Models; Thread Libraries; Threading Issues.	**4hours**	**15/03/2024 18/03/2024 20/03/2024 22/03/2024**	Chalk and Board

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	Process Synchronization**:** Introduction; Race Condition; Critical Section Problem and Peterson's Solution; Synchronization Hardware, Semaphores;	**3hours**	**25/03/2024** **27/03/2024** **29/03/2024**	Chalk and Board
	ClassicProblemsofSynchronization-ReadersandWritersProblem, DiningPhilosophersProblem; Monitors. Deadlocks: System Model; Deadlocks Characterization	**4hours**	**01/04/2024** **03/04/2024** **05/04/2024** **08/04/2024**	Chalk and Board
	Methods for Handling Deadlocks; Deadlock Prevention; Deadlock Avoidance; Deadlock Detection; and Recovery from Deadlock.	**3hours**	**10/04/2024** **12/04/2024** **15/04/2024**	Chalk and Board
	C1 Test (Operating System Concepts)		**16/04/2024** **to** **20/04/2024**	C1 test
UNIT3:(14 hours)	MemoryManagement**:**LogicalandPhysicalAddressSpace;Swapping;ContiguousAllocation;Paging;Segmentation;	**3hours**	**22/04/2024** **24/04/2024** **26/04/2024**	Chalk and Board
	Segmentation with Paging. Virtual Memory: Introduction to Virtual Memory; Demand Paging; Page Replacement; Page Replacement Algorithms	**3hours**	**29/04/2024** **01/05/2024** **03/05/2024**	Chalk and Board
	Allocation of frames, Thrashing. File System**:** File Concepts- Attributes, Operations and Types of Files; File System; File Access methods;	**3hours**	**06/05/2024** **08/05/2024** **10/05/2024**	Chalk and Board
	Directory Structure; Protection; File System Implementation-File System Structure, Allocation Methods, Free Space Management, Mobile Operating Systems.	**5hours**	**13/05/2024** **15/05/2024** **17/05/2024** **20/05/2024** **22/05/2024**	Chalk and Board
	Revision class	**1 hour**	**24/05/2024**	

Department: Computer Science and Applications
Title of the paper: Artificial Intelligence and Applications
[CourseCode-235629]
Term Period: 12/02/24 to 25/05/2024
Faculty Name: Apoorva D , PavithraKumar L
Total Hours: 60 hours

Curriculum as prescribed by the Institution	Topics	No. of Hours Required to complete	Date	Method of Deployment And Remarks
Unit 1 (15Hours)	What is Artificial Intelligence	1Hour	12/02/2024	Chalk and Black Board
	Foundations of AI	1Hour	14/02/2024	Chalk and Black Board
	History	1Hour	16/02/2024	Chalk and Black Board
	AI - Past, Present and Future	1Hour	17/02/2024	Chalk and Black Board
	Intelligent Agents	1Hour	19/02/2024	Chalk and Black Board
	Environments	1Hour	21/02/2024	Chalk and Black Board
	Specifying the task environment	1Hour	23/02/2024	Chalk and Black Board
	Properties of task environments	1Hour	24/02/2024	Chalk and Black Board
	Agent based programs	1Hour	26/02/2024	Chalk and Black Board
	Structure of Agents	1Hour	28/02/2024	Chalk and Black Board
	Types of agents	1Hour	01/03/2024	Chalk and Black Board
	Simple reflex agents	1Hour	02/03/2024	Chalk and Black Board
	Model based reflexagents	1Hour	04/03/2024	Chalk and Black Board

	Goal based agents	1Hour	06/03/2024	Chalk and Black Board
	Utility-based agents	1Hour	09/03/2024	Chalk and Black Board
Unit 2 (15Hours)	Problem-Solving Agents	1Hour	11/03/2024	Chalk and Black Board
	Well-defined problemsand solutions	1Hour	13/03/2024	Chalk and Black Board
	examples Problems	1Hour	15/03/2024	Chalk and Black Board
	Searching for Solutions	1Hour	16/03/2024	Chalk and Black Board
	Uninformed SearchStrategies	1Hour	18/03/2024	Chalk and Black Board
	Breadth-first search	1Hour	20/03/2024	Chalk and Black Board
	Uniform-cost search	1Hour	22/03/2024	Chalk and Black Board
	Depth-first search	1Hour	23/03/2024	Chalk and Black Board
	Depth-limited search	1Hour	25/03/2024	Chalk and Black Board
	Iterative deepeningdepth-first search	1Hour	27/03/2024	Chalk and Black Board
	Bidirectional search	1Hour	30/03/2024	Chalk and Black Board
	Greedy best-first search	1Hour	01/04/2024	Chalk and Black Board
	A* Search, AO*search	1Hour	03/04/2024	Chalk and Black Board
	Informed(Heuristic)Search Strategies	1Hour	05/04/2024	Chalk and Black Board
	Heuristic Functions	1Hour	06/04/2024	Chalk and Black Board
Unit 3 (15Hours)	Knowledge-Based Agents	1Hour	08/04/2024	Chalk and Black Board

	The Wumpus World	1Hour	10/04/2024	Chalk and Black Board
	Logic	1Hour	12/04/2024	Chalk and Black Board
	Propositional Logic	1Hour	13/04/2024	Chalk and Black Board
	Propositional Theorem Proving, Effective Propositional Model Checking	4Hours	15/04/2024 20/04/2024 22/04/2024 23/04/2024	Chalk and Black Board
	Artificial Intelligence and Applications	1 H o u r	16/04/2024 To 19/04/2024	C1Internal Test was Conducted
	Agents Based on Propositional Logic	1Hour	24/04/2024	Chalk and Black Board
	First-Order Logic, Syntax and Semantics of First-Order Logic	3Hours	25/04/2024 26/04/2024 27/04/2024	Chalk and Black Board 26/04/2024 Marks sheet of C1 Internal Test Was displayed on the notice board
	Using First Order Logic Unification	1Hour	29/04/2024	Chalk and Black Board
	Lifting Forward Chaining Backward Chaining	2Hours	01/05/2024 03/05/2024	Chalk and Black Board
Unit 4 (15 Hours)	Forms of Learning, Supervised Learning	3Hours	04/05/2024 06/05/2024 08/05/2024	Chalk and Black Board

	Machine Learning – Decision Trees	4Hours	10/05/2024 11/05/2024 13/05/2024 15/05/2024	Chalk and Black Board
	Regression	2Hours	16/05/2024 17/05/2024	Chalk and Black Board
	Classification with Linear Models	2Hours	18/05/2024 20/05/2024	Chalk and Black Board
	Text Classification and Information Retrieval.	4Hours	21/05/2024 22/05/2024 24/05/2024 25/05/2024	Chalk and Black Board

Department: Computer Science and Application
Subject: Artificial Intelligence and Applications lab [CourseCode-235629]
Term Period: 12/02/2024 to 25/05/2024
Faculty Name: Apoorva D , Mr PavithraKumar L
Hrs/week: 4 Hours/week
Total Hrs: 60 Hours

Curriculum as prescribed by theInstitution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Practice Lab	1.Write a program to find given number is even or odd. 2.Write a program to find given number is prime or not	4 Hours	13/02/2024	Practical and ICT

PART - A	1. Write a programto implement breadth first searchusing python. 2. Write a programto implement depth first search using python.	4 Hours	20/02/2024	Practical and ICT
	3. Write a programto implement 8-puzzle problem using python. 4. Write a program to implement n-queens problemusing python.	4 Hours	05/03/2024	Practical and ICT
	5. Write a programto implement alpha-beta pruning using python.	4Hours	12/03/2024	Practical and ICT
	6. Write a programto implement forward chaining algorithm.	4Hours	19/03/2024	Practical and ICT
Practice Lab	Part-A Programs	4 Hours	26/03/2024	Practical and ICT
1st lab Internals	Lab I.A	4 Hours	02/04/2024	C1 Practical Internal Test(PART A)wasconducted and 03/04/2024 Markssheet of C1 practical internal test was displayedon the notice board.
PART-B	7. Write a programto implement backward chaining algorithm.	4 Hours	12/04/2024	Practical and ICT

	8. Write a programto implement k-Nearest Neighbour algorithm to classify the Iris data set. Print bothcorrect and wrong predictions.	4 Hours	15/04/2024	Practical and ICT
	9. Train a random sample data using linear regression model and plot the graph.	4 Hours	23/04/2024	Practical and ICT
	10. Implement thenaïve Bayesian classifier for a sample training data set stored as a .csv file. Compute the accuracy of the classifier, considering few test data sets.	4 Hours	30/04/2024	Practical and ICT
	11. Demonstrate the working of SVM classifier fora suitable data set(e.g., Iris dataset).	4 Hours	03/05/2024	Practical and ICT
	12. Build a samplebinary image classification model (cat and dog)	4 Hours	08/05/2024	Practical and ICT
Practice Lab	Part-B Programs	4 Hours	16/05/2024	Practical and ICT

2nd lab Internals	Lab I.A	4 Hours	23/05/2024	C2 Practical Internal Test(PART B) wasconducted and 24/05/24 Marks sheet of C2 practical internal test was displayed on the notice board.

Department: Computer Science and Application

Subject: PHP and MYSQL

Coursecode:235630

Term Period:12/02/2024 to 25/05/2024

Hrs/week:4Hours **TotalHrs:60Hours**

Curriculum as prescribedby the Institution	**Topics**	**No. ofHours required tocomplete**	**Date**	**Method ofDeployment**
Introduction to the Course		**1hour**	**12/2/2024**	Class RoomTeaching
CourseOverviewand Test&Examination Pattern		**1hour**	**12/2/2024**	Class RoomTeaching
UNIT 1 Introduction to PHP: Introductionto PHP, History and Features of PHP, Installation & Configuration of PHP, Embedding PHP code in YourWeb Pages, Understanding PHP, HTML and White Space,Writing Comments in PHP, Sending Data to the Web Browser, Datatypes in PHP, Key words in PHP, Using Variables,Constants in PHP, Expressions in PHP,	Introduction to PHP: Introduction to PHP	**2hours**	**19/2/2024** **20/2/2024**	Class Room Teaching
	History and Features of PHP	**2hours**	**21/2/2024** **24/2/2024**	
	Installation & Configuration of PHP Embedding PHP code in Your Web Pages			

Operators inPHP. Programming with PHP: Conditional statements: if, if-else, switch, The '?'Operator, Looping statements: while Loop, do-while Loop, for Loop.		**2hours**	**26/2/2024** **27/2/2024**	Class Room Teach
	Understanding PHP. HTML and White Space, Writing Comments in PHP. Sending Data to the Web Browser,	**2hours**	**28/2/2024** **02/2/2024**	
	Data types in PHP, Key words in PHP, Using Variables, Constants in PHP. Expressions in PHP, Operators in PHP	**3hours**	**4/3/2024** **5/3/2024** **6/3/2024**	
Programming with PHP: Conditional statements: if, if-else, switch, The '?'Operator,Looping statements: while Loop, do-while Loop, forLoop.	Programming with PHP: Conditional statements: if, if-else, switch, The '?'Operator, Looping statements: while Loop, do-while Loop, for Loop.	**3hours**	**9/3/2024** **11/3/2024** **12/3/2024**	Class RoomTeaching
UNIT2: Using Functions Class-Objects,Forms in PHP: Functions in PHP, Functiondefinition, Creating and invoking user-defined	Using Functions Class- Objects, Forms in PHP.	**2hours**	**16/3/2024** **18/3/2024**	
	Functions in PHP, Function definition	**2 hours**	**19/3/2024** **20/3/2024**	

functions, Formal parameters versus actual parameters, Function and variable scope, Recursion, Library functions,Date and Time Functions. Class &;Objects in PHP: What isClass & Object, Creating and accessing a Class & Object, Object Properties, object methods.	Creating and invoking user-defined functions, Formal parameters versus actual parameters	**3hours**	**23/3/2024 25/3/2024 26/3/2024**	Class Room Teaching
	Recursion, Library functions, Date and Time Functions	**2hours**	**27/3/2024 30/3/2024**	
	Class &;Objects in PHP: What is Class & Object	**3hours**	**01/4/2024 02/4/2024 03/4/2024**	
	Creating and accessing a Class & Object, Object Properties, object methods.	**3hours**	**06/4/2024 08/4/2024 09/04/2024**	
UNIT3: Arrays in PHP: Introduction-What is Array? Creating Arrays, Accessing Array elements, Types of Arrays: Indexed v/s Associative arrays, Multidimensional arrays - Creating Array, Accessing Array, Manipulating Arrays, Displaying array, Using Array Functions, Including and Requiring Files- use of Include()	Arrays in PHP: Introduction- What is Array? Creating Arrays,	**2hours**	**2/4/2024 4/4/2024**	Class RoomTeaching
	Accessing Array elements, Types of Arrays.	**3hours**	**6/4/2024 8/4/2024 09/4/2024**	
	Indexed v/s Associative arrays, Multidimensional arrays - Creating Array, Accessing Array, Manipulating Arrays,	**3hours**	**10/4/2024 13/4/2024 15/4/2024**	

and Require(),Implicit and Explicit Casting in PHP. Strings in PHP: What is String?Creating and Declaring String, String Functions, Application program on sending Email. Form Handling: Creating HTMLForm, Handling HTML Form data in PHP.	Displaying array, Using Array Functions, Including and Requiring Files- use of Include() and Require(),Implicit and Explicit Casting in PHP	**2hours**	**16/4/2024** **17/4/2024**	
Form Handling: Creating HTMLForm, Handling HTML Form data in PHP.	Strings in PHP: What is String? Creating and Declaring String, String Functions, Application program on sending Form Handling: Creating HTML Form, Handling HTML Form data in PHP.	**4hours**	**20/4/2024** **22/4/2024** **23/4/2024** **24/4/2024**	Class RoomTeaching
UNIT4: Database Handling Using PHP with MySQL: Introduction to MySQL: Database terms, Data Types.Accessing MySQL – Using MySQL Client and Using php My Admin, MySQL Commands, Using PHP with MySQL: PHP MySQL Functions, connecting to MySQL and Selecting the Database,ExecutingSimpleQuer ies,RetrievingQueryResults,Co	Database Handling Using PHP with MySQL: Introduction to MySQL: Database terms, Data Types	**3hours**	**27/4/2024** **29/4/2024** **30/4/2024**	Class Room Teaching and ICT
	Accessing MySQL –Using MySQL Client and Using php My Admin, MySQL Commands, Using PHP with MySQL	**3hours**	**4/5/2024** **6/5/2024** **7/5/2024**	
	MySQL: PHP MySQL Functions, connecting to MySQL and Selecting the	**4hours**	**08/5/2024** **11/5/2024** **13/5/2024** **14/5/2024**	

	Database,			
Unting Returned Records ,Updating Records with PHP.	Executing Simple Queries, Retrieving Query Results, Co unting Returned Records, Updating Records with PHP.	**5hours**	**15/5/2024 18/5/2024 20/5/2024 21/5/2024 22/5/2024**	

Department: Computer Science and Application
Subject: PHP & MYSQL Lab
[Coursecode:235630]
Term Period:12/02/2024 to 25/05/2024
Hrs/week:4hours
Total Hrs:60hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
	Orientation of the paper and XAMPP Server. **Example Programs.**	**4hours**	**15/2/2024**	Laboratory and ICT
Program 1-3	1 Write a PHP script to print "hello world" 2. Write a PHP script to find odd or even numberfrom given number. 3 Write a PHP script to find maximum of threenumbers.	**4hours**	**22/2/2024**	
Program 4-6	4 Write a PHP script to swap two numbers. 5 Write a PHP script to find the factorial of a number. 6 Write a PHP script to check whether given number is palindrome or not.	**4hours**	**29/2/2024**	
Program 7-9	7 Write a PHP script to reverse a given number and calculate its sum 8 Write a PHP script to generate a Fibonacci series using Recursive function 9 Write a PHP script to implement at least seven string functions.	**8hours**	**7/3/2024 14/3/2024**	
Lab Internals	INTERNALS - I	**4hours**	**21/3/2024**	

Program 10-13	10 Write a PHP program to insert new item in array on any position in PHP. 11 Write a PHP script to implement constructor and destructor 12 Write a PHP script to implement form handling using get method. 13 Write a PHP script that receive form in put by the method post to check the number is prime or not	**12hours**	**28/3/2024 4/4/2024 11/4/2024**	
Program 14-16	14 Write a PHP script that receive string as a for min put 15 Write a PHP script to compute addition of two matrices as a form input. 16 Write a PHP script to show the functionality of date and time function.	**8hours**	**18/4/024 25/4/024**	
Program 17-20	17 Write a PHP program to upload a file 18 Write a PHP script to implement database creation 19 Write PHP script to create a table. 20 Develop a PHP program to design a college admission form using MYSQL database.	**8hours**	**2/5/2024 9/5/2024**	
Revision	Practice Lab	**4hours**	**16/5/2024**	
LAB Internals	INTERNALS - II	**4hours**	**23/5/2024**	

Department: Computer Application
Title of the Paper: Fundamentals of Data Science
[**Course code**: **23DSEBCA03**]
Term Period: 12/02/2024 to 25/05/2024
Faculty Name: Manasa M, Nagashree S

Hrs/week: 3 Hours **Total Hrs:45 Hours**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment And remarks**
	Data Science: Introduction to Data Science, Data Science Process and its applications.	**2hours**	**13/02/2024 14/02/2024**	

UNIT1:(15hours)	Data Mining: Introduction, Data Mining Definitions, types of data mining and advantage and disadvantage of data mining.	**3hours**	**15/02/2024** **20/02/2024** **21/02/2024**	Class Room Teaching
	Knowledge Discovery in Databases (KDD)	**3hours**	**22/02/2024** **27/02/2024** **28/02/2024**	
	Knowledge Discovery in Databases (KDD) Vs Data Mining, DBMS Vs Data Mining	**2hours**	**29/02/2024** **05/03/2024**	
	DM techniques, Problems, Issues and Challenges in DM, DM applications.	**5hours**	**06/03/2024** **07/03/2024** **13/03/2024** **14/03/2024** **19/03/2024**	
UNIT2:(15hours) .	Data Warehouse: Introduction, Definition of Data Warehouse. Multidimensional Data Model, Data Cleaning, Data Integration And transformation. Data reduction, Discretization.	**4hours**	**20/03/2024** **21/03/2024** **26/03/2024** **27/03/2024** **28/03/2024**	Class Room Teaching
	Mining Frequent Patterns: Basic Concept– Frequent Item Set Mining Methods –Apriori and its problem	**4hours**	**28/03/2024** **02/04/2024** **03/04/2024** **04/04/2024**	
	And Frequent Pattern Growth(FP Growth)	**2hours**	**10/04/2024** **13/04/2024**	
	C1 Test (Fundamental of datascience)		**16/04/2024 to 20/04/2024**	C1 test was Conducted

	And Frequent Pattern Growth(FP Growth) and its problem	**2hours**	**22/04/2024 24/04/2024**	Class Room Teaching
	algorithms- Mining Association Rules	**2hours**	**25/04/2024 30/04/2024**	
UNIT3:(15 hours)	Classification: Basic Concepts, Issues Algorithms: Decision Tree Induction Bayes Classification Methods.	**3hours**	**01/05/2024 02/05/2024 04/05/2024**	Class Room Teaching & ICT
	Rule- Based Classification and Lazy Learners (or Learning from your Neighbours).	**3hours**	**07/05/2024 09/05/2024 11/05/2024**	
	k Nearest Neighbors. Prediction - Accuracy- Precision and Recall	**3hours**	**14/05/2024 15/05/2024 16/05/2024**	
	Clustering: Cluster Analysis, Partitioning Methods, Hierarchical Methods	**3hours**	**18/05/2024 21/05/2024 22/05/2024**	
	Density-Based Methods, Grid- Based Methods, Evaluation of Clustering.	**3hours**	**23/05/2024 24/05/2024 25/05/2024**	

Department: Computer Science

Subject: Web Content Management System

[Coursecode:23VOCBCA02]

Term Period:12/02/2024 to 25/05/2024

Faculty Name : Sumanth yelagod, Geetanjali M

Hrs/week: 3 hours **Total Hr: 45hours**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of deployment**
UNIT 1 Introduction**:** Web Content Development and	Introduction	1 Hour	12/02/2024	Lecture/ppt

Management, Content Types and Formats, Norms and Guidelines of Content Development, Creating Digital Graphics, Audio Production and Editing, Web Hosting and Managing Multimedia Content, Creating and Maintaining a				
	Web Content Development and Management	2 Hour	13/02/2024 14/02/2024	Lecture/ppt
	Content Types and Formats	2 Hour	19/02/2024 20/02/2024	Lecture/ppt
Wiki Site.				
	Norms and Guidelines of Content Development	2 Hour	21/02/2024 26/02/2024	Lecture/ppt
	Creating Digital Graphics	1 Hour	27/02/2024	Lecture/ppt
	Audio Production and Editing	2 Hour	28/02/2024 4/02/2024	Lecture/ppt
	Web Hosting	1 Hour	5/02/2024	Lecture/ppt
	Managing Multimedia Content	2 Hour	6/02/2024 14/02/2024	Lecture/ppt

	Creating and Maintaining a Wiki Site	2 Hour	6/09/2024 11/02/2024	Lecture/ppt
Unit-2 Presentation Software**:** Presentation Software Part I, Presentation Software Part II, Screen casting. Toolsand	Presentation Software	1 Hour	12/10/2024	Lecture/ppt
	Presentation Software Part I	2 Hour	13/10/2024 18/02/2024	Lecture/ppt
Techniques, Multilingual Content Development. Planning and Developing Dynamic Web Content Sites, Website Design Using CSS Creating and Maintaining a WIKI Site, Creating and Managing a BlogSite.	Presentation Software Part II	2 Hour	19/02/2024 20/02/2024	Lecture/ppt
	Screen casting Toolsand Techniques	1 Hour	25/02/2024	Lecture/ppt
	Multilingual Content Development	1 Hour	26/02/2024	Lecture/ppt
	Planning and Developing Dynamic Web Content Sites	2 Hour	27/02/2024	Lecture/ppt
	Website Design Using CSS	2 Hour	01/04/2024	Lecture/ppt
	Creating and Maintaining a WIKI Site	2 Hour	02/04/2024	Lecture/ppt
	Creating and Managing a Blog Site	2 Hour	03/04/2024 08/04/2024	Lecture/ppt
UNIT 3 **E- Publication:** E-Publication Concept, E-Pub Tools, Simulation and Virtual Reality Applications, Creating	**E- Publication:** E-Publication Concept	1 Hour	09/04/2024	Lecture/ppt
	E- Pub Tools,	1 Hour	10/04/2024	Lecture/ppt

2D and 3 D Animations. Introduction to Moodle, Creating a New Course and Uploading, Create and Add Assessment, Add and Enroll User and Discussion Forum, Content Management System: Joomla, Content Management System: Drupal,	Simulation and Virtual Reality Applications	2 Hour	22/04/2024 23/04/2024	Lecture/ppt
	Creating 2D and 3 D Animations	1 Hour	24/04/2024	Lecture/ppt
	Introduction to Moodle	1 Hour	29/04/2024	Lecture/ppt
Demoon Web Content Management System Tools.	Creating a New Course and Uploading	1 Hour	30/04/2024	Lecture/ppt
	Create and Add Assessment, Add and Enroll User and Discussion Forum,	2 Hour	01/05/2024 06/05/2024	Lecture/ppt
	Content Management System: Joomla,	2 Hour	07/05/2024 08/05/2024	Lecture/ppt
	Content Management System: Drupal	2 Hour	13/05/2024 14/05/2024	Lecture/ppt
	Demoon Web Content Management System Tools.	2 Hour	15/05/2024 20/05/2024	Lecture/ppt

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Course Plan of Odd Semester 2023-24

Department: Criminology and Forensic Science
Title of the Paper: Fundaments of Criminology
[Course Code – 211172]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Vidyashree G V & Chandan Kumar K

Total Hrs: 56 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit–1 Introduction to Criminology (14 hours)	Syllabus & Subject Discussion	1 hours	11-09-2023 to 12-09-23	POs and Course Outcomes of the units discussed
	● Historical perspectives of Criminology ● Nature, origin and scope of Criminology	2 hours	13-09-23 to 14-09-23	Lecture using PPT
	Deviance, social context of deviance, delinquency Criminology and its relations with other social sciences – Criminology's interdisciplinary nature.	2 hours	15-09-23	Lecture using PPT
	● Crime–Etymology.	2 hours	18-09-2023 to 20-9-2023	Lecture using PPT
	Meaning, Definitions and Characteristics	2 hours	21-09-23 to 22-09-23	Lecture using PPT
	● Difference between Crime, Sin, Vice and Tort.	3 hours	25-09-23 to 26 -09-23	**One special class**
	● Classification of Crimes.	2 hours	27-09-23 to 29-09-23	Lecture using PPT

Unit–2 Explanations of Crime (14 hours)	Explanation of Crime by Different Schools	2 hours	03-10-23 to 04-10-23	Lecture using PPT
	Schools of criminology: meaning & it's Important	2 hours	05-10-23 to 6-10-23	Lecture using PPT
	Pre-Scientific schools: Demonological and Free Will Thoughts	2 hours	09-10-23 to 10-10-23	Lecture using PPT
	Classical school, Proponent and their contribution Neo-classical school Cartographic school, profounder contribution	6 hours	11-10-23 to 16-10-23	Lecture using PPT
	Positive School-Biological positivism, profounder(Lombroso, Hooton, Glueck) contribution	02 hours	17-10-23 to 18-10-23	Lecture using PPT
Unit–3 Contemporary explanation of Crime and Criminal Behaviour (14 hours)	Sociological Explanation	02 hours	19-10-23	Lecture using PPT
	Differential association, Differential Opportunity and Multi-Factor Approach	02 hours	20-10-23	Lecture using PPT
	Historical perspective and development	02 hours	25-10-23	Lecture using PPT
	Making of a profile Investigative leads	03 hours	26-10-23 to 27-10-23	Lecture using PPT
	Other Forms of Crimes & Types Criminals	05 hours	30-10-23 to 01-11-23	Lecture using PPT
Unit–4 Prevention of	Definition of concepts: Primary,	02 hours	02-11-23	Lecture using PPT
Crime and Crime Statistics (14 hours)	secondary and tertiary crime prevention			
	Prevention of various types of crim e and Methods: Punitive methods, defense methods, intervention method–	02 hours	03-11-23	Lecture using PPT
Unit-I & Unit – III	C1 Practical Internal test	3 Hours	06-11-23	C1 Practical Internal Test(Expt no 1 to Expt no 5)

Unit–4 Prevention of Crime and Crime Statistics	Crime Prevention Through Environmental Design (CPTED)–Crime prevention by police–Crime Prevention Organizations.	2 hours	06-11-23 to 07-11-23	Lecture using PPT
	Revision class	1 hour	08-11-23	13-11-23 Display of C1 Practical Internal Test marks on the notice board
	Crime statistics: Meaning and Its Importance	02 hours	09-11-23	Lecture using PPT
Unit-I & Unit - III	**Fundaments of Criminology**	1 hour	16-11-23	15-11-2023 To 18-11-2023 C1 Internal Test
Unit–4 Prevention of Crime and Crime Statistics	Crime statistics: Meaning and Its Importance	02 hours	20-11-23 to 21-11-23	22-11-23 Display of C1 Internal Test marks on the notice board
	National Crime Record Bureau: Reporting crime and Recording crime	02 hours	22-11-23 to 23-11-23	Lecture using PPT
Unit-II & Unit – IV	**C2 Practical Internal Test**	01 Week	27-11-23 to 02-12-23	C2 Practical Internal Test (Assignment)
Unit –I, II, III & IV	**Theory Assignment**			Submission of Theory Assignments
Unit–4 Prevention of Crime and Crime Statistics	Crime/victim surveys: International crime comparisons, Changing crime patterns and Unreported crime.	2 hours	04-12-23 to 05-12-23	Display of C2 Practical Assignment marks on the notice board.
	Revision class	4 hours	11-12-23 to 16-12-23	**Two special classes**

Department: Criminology and Forensic Science
Title of the Paper: Criminalistics
[Course Code – 211272]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Vidyashree G V & Chandan Kumar K

Total Hrs.: 56 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I: Introduction – Criminalistics	• Syllabus & Subject Discussion • Criminalistics: Meaning • Conceptual definitions • Scope of Criminalistics • Basic principles of Criminalistics • Forensic tools and techniques • Application in Criminal Investigation	14 hours	13-02-2024 to 12-03-2024	Lecture using PPT
Unit II: Physical Evidence	• Physical Evidence • Significance of evidence • Lockard's principle • Types of evidence • Classification of physical clues, evidence: Biological, Chemical and Physical. • Collection of evidence • Preservation of evidence • chain of custody, blood, fiber, paint, firearms, tyre marks, fingerprints, footprints, bite marks	14 hours	14-03-2024 to 04-04-2024	Lecture using PPT

Unit III: Forensic Documents	Forensic Document Examination
	  Introduction
	  Types of documents
	  Tools and techniques for examination and identification
	  Types of forgeries
	  Characteristics and detection
	  Types of handwriting and its characteristics
		14 hours	04-04-2024 to 02-05-2024	Lecture using PPT

Unit IV Crime Scene Management (CSM)	• Nature and importance of CSM • Basic principles and stages involved • Examination of witness and statement of suspect • Mobile forensic units • Dog squad and other scientific aids.	14 hours	02-05-2024 To 25-05-2024	Lecture using PPT
C1 Assessment (Theory & Practical)	Unit 1 and 2	1 hour	16-04-2024 To 17-04-2024	Test Conducted
C2 Assessment	Unit 3 and 4		30-04-2024 To 02-05-2024	Assignment given

Practical sessions are designed to impart skills on various topics that have been discussed in thetheoretical session, by the lecture mode. The students conduct newspaper analysis, record observations and submit in the form of Practical Record at the end of every session. The same isevaluated at the term end examinations, which has a *viva voce* content also.

Practical Titles	**Mode of Conducting**	**Hours**
• Identification, location and preservation of physical evidence in crimes including, but not restricted to homicide, suicide, robbery & dacoity, and HBT (Burglary). • Scene of crime – documentation, searching sketching (rough and neat),	Demonstration and supervision of the conduction by the student; verification of the entry into the records and approval.	04 04

photography and Videography, reconstruction. • Searching methods of crime scene- Outdoor scene of crime, Indoor scene of crime, Mobile scene of crime • Questioned documents: Collection of standards for comparison, characteristics of handwriting. • Questioned documents: Comparison of typewritten and printed documents. • Identification of forgeries, collection of standards for detection. • Handling, Packing &Forwarding of Biological, Physical & Chemical evidence		04 04 04 04 04

Department: Criminology and Forensic Science
Title of the Paper: Fingerprint Science
[Course Code – 21OECRI202]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Vidyashree G V & Chandan Kumar K

Total Hrs.: 42 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-I: Basics of Fingerprinting	• **Chapter-1** Fingerprint: Meaning, Concept and history background, with special reference to India. • **Chapter-2** Biological basis of fingerprints, Formation of ridges and Fundamental principles of fingerprinting. • **Chapter-3** Types of fingerprints, Fingerprint patterns and Fingerprint characters/minutiae. • **Chapter-4** Methods of Recording of Plain and rolled fingerprints. • **Chapter-5** Classification of fingerprint record.	14 hours	12-02-2024 to 13-03-2024	Lecture using PPT
	• **Chapter-6** Type of Chance prints at a crime scene and their development.			

Unit-II: Development of Fingerprints	• **Chapter-7** Latent fingerprints" detection by physical and chemical techniques. • **Chapter-8** Preservation of developed fingerprints. • **Chapter-9** Digital imaging for fingerprint enhancement.	14 hours	16-03-2024 to 15-04-2024	Lecture using PPT
Unit-III: Other Impressions and Prints	• **Chapter-10** Footprints: Meaning and Importance. • **Chapter-11** Casting of foot prints and Electrostatic lifting of latent foot prints. • **Chapter-12** Palm prints and their historical importance.	14 hours	17-04-2024 to 22-05-2024	Lecture using PPT
C1 Assessment (Theory)	Chapter 1 to 3 and chapter 7 to 10	1 hour	19-04-2024	Test Conducted
C2 Assessment	Unit 3		30-04-2024 To 15-05-2024	Assignment given

Department: Criminology and Forensic Science
Title of the Paper: Correctional Administration
[Course Code – 221472]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Vidyashree G V & Chandan Kumar KTotal

Hrs.: 60 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit – 1 Introduction to Correctional Administration	• Penology and correctional administration • Penology– Historical Development, Meaning and Definitions • Concepts of correction – Genesis, Objectives and Purpose • Theories of Punishment Deterrence theory Retributive theory Preventive theory Reformation theory	15 hours	14-02-2024 to 16-03-2024	Lecture using PPT
Unit–2 Natureof Punishment	• Punishment Definition, objective and purpose Types of Punishment Recent approaches to punishment • Sentencing Principles Policies Procedures and Amendments (Legal and Constitutional)	15 hours	16-03-2024 to 06-04-2024	Lecture using PPT

Unit–3 Institutional Corrections	• Prison and Prisoners in India Meaning, Definitions and purpose Historical development of prison system Classification: Central prison, district prison, sub-jails, open prison, women's prison and Special Jails. Classification of Prisoners • Legal Provisions for Prisoners Legal Rights of prisoners Constitutional provisions of prisoners Nelson Mandela rules for the treatment of prisoners	15 hours	10-04-2024 to 08-05-2024	Lecture using PPT
Unit-4 Non-Institutional Corrections and Victimology	• Community based corrections Probation, Parole Furlough Aftercare services Role of NGOs in reformation and rehabilitation • Victimology Meaning, Definitions and Importance Typology of Victims Victimizing Factors and Victim Compensation	15 hours	09-05-2024 To 25-05-2024	Lecture using PPT
C1 Assessment (Theory & Practical)	Unit 1 and 2	1 hour	16-04-2024 To 20-04-2024	Test Conducted
C2 Assessment	Unit 3 and 4		30-04-2024 To 02-05-2024	Assignment given

Practical sessions are designed to impart skills on various topics that have been discussed in thetheoretical session, by the lecture mode. The students conduct newspaper analysis, record observations and submit in the form of Practical Record at the end of every session. The same isevaluated at the term end examinations, which has a *viva voce* content also.

Practical Titles	**Mode of Conducting**
• To visit and study the over view of Prison as a correctional institution • To visit and study the reformatory measures, training and rehabilitation process. • To visit and study various facilities provided in Prison • To visit and study the non-institutional treatment programmes • To visit and study the functions and powers of JJB and CWC • To visit and study the functions and powers of Probation • To visit and study the after-care services and other NGOs working toward reformation, rehabilitation and resocialization of inmates.	Visit was made for each place and interactive sessions were done about the respective place's nature of work, composition and their contribution to the society

Title of the Paper: Forensic Dactyloscopy and DNA Fingerprinting
[Course Code – 231672]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Vidyashree G V & Chandan Kumar K
Total Hrs.: 60 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**

Unit-I: Introduction to Dactyloscopy	**Chapter-1Meaningof Dactyloscopy** • Meaning and Scope; Print Science, Importance of Print Science, • Morphology of Finger prints and Footprints, Embryogenesis. • Basic Features and Principles of Fingerprints • Historical Development of Print Science. • Organization of State and Central Finger print Bureaus, • Dermatological formation and Diseases influence on the damages of fingerprints, Biometric unique ness, and Finger prints as Evidence. **Chapter-2Classification of Finger Prints Patterns** • Meaning and importance of classification of fingerprint patterns. • Explaining various types of classification of Fingerprints; • Henry classification and its examination, • Secondary classification system, • Subsecondaryclassificationnsystem,	15 hours	14-02-2024 to 05-03-2024	Lecture using PPT
	• Secondary sub secondary classification system, • Key classification • Final classification and Single digit classification system • Fingerprint Patterns: Fingerprint Peculiarities / Minutiae and Characteristic **Chapter-3 Significance of palm prints** • Significance of palmprints, ATD Angle, Shape, Size of Palms, Ridge Tracing, Biometric Minutiae. Poro scopy and Edgeoscopy, Characteristics of pores–size, position and latent print formation of pores.			

Unit-II Development of Finger Prints.	**Chapter–4 Development of Finger Prints** • Types of Chance Prints at Scene of Crime • Location and preservation of chance print at scene of crime. **Chapter-5 Physical Methods for Latent Fingerprint Development** • Powder Methods: Regular: - Black powder and white powder. Metallic: Aluminum powder and Magnetic black powder. Fluorescent: Greene scent and pink scent fluorescent powders. • Iodine Fuming& Cyanoacrylate. **Chapter-6ChemicalandPhotography Methods for Fingerprint Development** • Gentian Violet and Silver Nitrate Method. • Ninhydrin Method etc. • Recording of Latent Prints and Visible prints by Slanting Photograph. **Chapter-7 Biometric, Digital Imaging and Green Methods** • Forensic application of Biometrics, Biometric Impression on Scanner/Live Scans. • Application of digital imaging process in Fingerprint science. AFIS application in Finger Print Bureau, Application of Alternate light sources (ALS) in finger print detection	15 hours	05-03-2024 to 01-04-2024	Lecture using PPT
Unit-III Foot Prints	**Chapter-8 Development of Foot Prints** • Meaning, Types, Importance • Tracing of surface footprints, • Casting and lifting of surface and sub-sunken footprints • Gait pattern analysis– • Determination of Sex, Height, Age of a person Gait pattern analysis	15 hours	02-04-2024 to 29-04-2024	Lecture using PPT

Unit-IV DNA Finger Prints	**Chapter-9MeaningandImportanceof DNA profile** • Meaning of DNA Finger Prints and Scopes • Importance of DNA profile • Legal procedure for conducting DNA profile • Circumstances of usage of DNA Profile **Chapter–10LegalprovisionsofDNAprofile.** • Source of DNA: Body Fluids, Hair, Skin Tissues and Nail etc. • Role of DNA is Sexual offence cases	15 hours	30-04-2024 To 21-05-2024	Lecture using PPT
C1 Assessment (Theory & Practical)	Unit 1 and 2	1 hour	16-04-2024 To 20-04-2024	Test Conducted
C2 Assessment	Unit 3 and 4		30-04-2024 To 02-05-2024	Assignment given

Practical sessions are designed to impart skills on various topics that have been discussed in thetheoretical session, by the lecture mode. The students conduct newspaper analysis, record observations and submit in the form of Practical Record at the end of every session. The same isevaluated at the term end examinations, which has a *viva voce* content also.

Practical Titles	**Mode of Conducting**	**Hours**
• Recording of fingerprints – Pattern analysis, • Identification of Ridge characteristics, • Ridge tracing & ridge counting,	Demonstration and supervision of the conduction by the student; verification of the entry into the records and approval.	04 04 04 04
Comparison of fingerprints • Developing latent fingerprints – Physical methods &amp • Developing latent fingerprints – Chemical Methods • Recording of foot prints • Identification of Gait patterns		04 04 04 04

• Tracing of surface footprints • Casting method of Sunken footprints. • Recording of fingerprint using iodine fuming method.		

Department: Criminology and Forensic Science
Title of the Paper: Corporate Crimes
[Course Code – 231673]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Vidyashree G V & Chandan Kumar K
Total Hrs.: 60 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1 Introduction to Corporate Crimes	**Chapter-1 Nature of Corporate Crime** • Meaning and Definition of Corporate Crimes. • Various Types of Corporate Crimes • Famous Cases of Corporate Crimes **Chapter-2 Forms of Corporate Crimes** • Bankruptcy related Frauds • Exploiting assets and scams • Mortgage Frauds • Share Sale Frauds	15 hours	14-02-2024 to 8-03-2024	Lecture using PPT

	• Final classification and Single digit classification system • Fingerprint Patterns: Fingerprint Peculiarities / Minutiae and Characteristic			
Unit-2 Corporate Frauds	**Chapter-3 Various kinds of Corporate Frauds in India.** • Meaning & Definition of Fraud • Types of Fraud- Individual & Corporate • Characteristics of Fraud • Trends of Scams: National &Globa Perspective **Chapter-4Fraudin Banking Sector** • Definition & Scope of Fraud in Banking Sector • Banking Impersonation **Chapter-5 Types of Frauds** • Fraud against accounts • Fraud against Card (Debit/Credit) • Electronic Fraud and Miscellaneous Fraud	15 hours	13-03-2024 to 05-04-2024	Lecture using PPT
Unit-3 Introduction to Insurance Frauds	**Chapter-6MeaningofInsuranceFrauds** • Definition, Nature & Scope of Insurance • Losses due to Insurance Frauds. **Chapter-7 Types of Insurance Frauds** • Property Insurance • Motor Vehicle Insurance • Health Insurance • Role of Investigation in Insurance Frauds offence cases	15 hours	06-04-2024 To 09-05-2024	Lecture using PPT
Unit-4 Prevention of Corporate Crimes	**Chapter-8Measures in preventing Corporate Crimes in India** • Laws, Regulation and Supervision • Corporate Governance **Chapter-9Private Sector in India** • Governance of Private Sectors in India. • Laws, Regulation and Supervision Suspicious Transaction reporting	15 hours	10-05-2024 to 25-05-2024	Lecture using PPT
C1 Assessment	Unit 1 and 2	1 hour	16-04-2024 To 20-04-2024	Test Conducted

(Theory & Practical)				
C2 Assessment	Unit 3 and 4		30-04-2024 To 02-05-2024	Assignment given

Practical sessions are designed to impart skills on various topics that have been discussed in thetheoretical session, by the lecture mode. The students conduct newspaper analysis, record observations and submit in the form of Practical Record at the end of every session. The same isevaluated at the term end examinations, which has a *viva voce* content also.

Practical Titles	**Mode of Conducting**	**Hours**
1. To analysis the Famous Indian Corporate Crimes.	Demonstration and supervision of the conduction by the student; verification of the entry into the records and approval.	04
2. Examination and Identification of the Forged Check Books		04
3. Examination and Identification of the Forged affidavits and other Government Documents		04
4. Counterfeit of Notes and Coins.		04
5. Examination of Forged Signature		04
6. Evaluate and study of preventive measures towards Frauds in local and national banks (Plastic Cards, E-transactions, Gold and other ornaments)		04
7. Examination of Peculiar Characteristics of Different Documents like: Income Tax Returns, Insurance Bonds, E-certificates and E-documents.		04
8. Explore cases of corporate environmental crimes, such as illegal dumping or pollution.		04
9. The media's coverage of corporate crime		04
10. To find common themes and disparities, compare and contrast corporate crimes across other businesses,such as the pharmaceutical, financial, or energy sectors		04

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Department: Economics – I Sem BA
Title of the Paper: Basic Economics- I - (DSC-1)
[Course Code – 211137**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Dr Pushparani P G
Total Hrs:42 Hours
Hrs/week: 3 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of hours required to complete**	**Date**	**Method of deployment& Remarks**
Introductory class	Explained briefly about Program Outcomes and Course outcomes	01 hr	11.09.2023	POs & COs ofthe BA Program explained briefly
Unit– 1 Basic Concepts in Economics: (14Hrs)	**Chapter No. 1 Nature and Scope of Economics:** Meaning of Economics Nature of Economics Scope of Economics Methods of Economics	04hrs	12.09.23 to 22.09.23	Lecture Method
	Chapter No. 2 Thinking Like an Economist: Thinking Like an Economist The Economist as Scientist The Economist as a Policy Adviser	05 hrs.	25.09.23 to 06.10.23	Lecture method andStudent interaction
	Chapter No. 3 Economic System: Meaning and Types of Economic Systems Circular Flow of Economic Activities Evolution of the Present Economic System	05 hrs	09.10.23 to 19.10.23	Lecture method and Graphical representation
Unit – 2 Demand, Supply and Markets: (14Hrs)	**Chapter No. 4. Firms and Households:** Meaning of Firms and Household Relationship Between Firms and Household Input and output markets	04 hrs	20.10.23 to 30.10.23	Lecture method and Graphical representation

	Chapter No. 5. Demand and Supply: Individual Demand Market Demand Determinants of Demand & Supply Market Equilibrium	05 hrs	02.11.23 to 13.11.23	Lecture method and Graphical representation
	(Unit-1) C1 Test Dates – 15.11.2023 to 18.11.2023			
	Chapter No. 6. Elasticity and itsMeasurement: Meaning & Types of Elasticity ofDemand Price, Income and Cross Elasticity ofDemand Measurement of Elasticity of DemandDeterminants of Elasticity of Demand	05hrs	20.11.23 to 23.12.23	Lecture method and Graphical representation
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of Submission- 1.12.2023				
Unit – 3 Cost and Market Structures: (14Hrs)	**Chapter No. 7 Production andProduction Function:** Meaning and types of productionFunction Total Product Average Product Marginal Product	04 hrs	24.11.23 to 01.12.23	(Internal TestMarks Displayed onthe Dept. Notice Boardon 29.11.23) Lecture method, Calculation and Graphical representation
	Chapter No. 8. Production, Cost andRevenue Curves: TC, AC and MC Cost in the Short-run Fixed Costs and Variable CostsLong run AC and MC TR, MR and AR	05 hrs	06.12.23 to 11.12.23	Lecture method, Calculation and Graphical representation
	Chapter No. 9. Market Structure: Markets: Meaning and Features of Perfect and Imperfect/Monopolistic Competition Meaning and Features of Monopoly,Duopoly and Oligopoly	05 hrs	14.12.23 to 16.12.23	Lecture method, Calculation and Graphical representation
Extra classes engaged to complete portions from 18.12.23 to 23.12.23				

Department : Economics I SEM BA

Title of the Paper: Contemporary Indian Economy (DSC-2)

[Course Code –211138**]**

Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Venkatalakshmi M N
Total Hrs: 42 Hours
Hrs/week: 3 Hours

Curriculum as prescribed by the Institution	Topics	No. of hours required to complete	Date	Method of deployment
Introductory class	Explained briefly about Program Outcomes and Course outcomes	1	11.09.23	POs & COs of the BA Program explained briefly
Unit – 1, LPG Policies, Economic Reforms and Agriculture: (14Hrs)	**Chapter No. 1 Recent Issues:** Concept of LPG India's population policy Demographic Dividend	04 hrs	12.09.23 to 19.09.23	Lecture Method & ICT
	Chapter No. 2 Urbanization and governance: Urbanization and Smart City Mission Impact of COVID-19 Pandemic Atma Nirbhara Bharat Abhiyan	04 hrs	20.09.23 to 27.09.23	Lecture method
	Chapter No. 3 Economic Reforms and Agriculture: Commercialization and Diversification Public Distribution System : TPDS Doubling Farm Incomes - MGNREGS (brief introduction)	06 hrs	29.09.23 to 13.10.23	Lecture method
Unit – 2 Industry, Business, Fiscal Policy: (14Hrs)	**Chapter No. 4. Industrial Policy:** New Industrial Policy and changesPublic sector reforms Privatisation and Disinvestment	04 hrs	17.10.23 to 25.10.23	Lecture method and Student interaction
	Chapter No. 5. Business: Ease of Doing Business	05 hrs	26.10.23 to 08.11.23	Lecture method
	Performance of MSMEs Role of MNC's in IndustrialDevelopment			
	Chapter No. 6. Fiscal Policy; Tax, Expenditure, Budgetary Deficits GST (meaning and features)	02 hrs	11.11.23 to 13.11.23	Lecture method and Student interaction
(Unit-1) C1 Test Dates – 15.11.2023 to 18.11.2023				

	Fiscal Federalism and Fiscal Consolidation (in brief) Recommendations of the Current Finance Commission	03 hrs	20.11.23 To 29.11.23	(Internal Test Marks Displayed on the Dept. Notice Board on 29.11.2023) Lecture method
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of Submission: 28-11-2023				
Unit – 3 Monetary Policy, Foreign Trade and Investment: (14Hrs)	**Chapter No. 7. Monetary Policy:** Organisation of India's Money Market Financial Sector Reforms	03 hrs	01.12.23 to 05.12.23	Lecture method & ICT
	Chapter No. 8. Money and Capital Markets: Working of SEBI in India Changing roles of the Reserve Bank of India Foreign banks and Non-Banking Financial Institutions Demonetization and its impact	05 hrs	06.12.23 to 09.12.23	Lecture method & ICT
	Chapter No. 9. Foreign Trade and Investment: Direction of India's Foreign Trade Balance of Payments since1991 (trends) FDI – Trends and Patterns New EXIM Policy Bilateral and Multilateral Trade Agreements (in brief)	06 hrs	11.12.23 to 16.12.23	Lecture method
Extra Classes engaged to complete portions from 18.12.23 to 23.12.23				

Department: Economics - I SEM - OE

Title of the Paper: Pre- reforms Indian Economy (OE)

[Course Code – 21OEECO102]

Term Period: 11.09.2023 to 16.12.2023

Faculty Name: Dr Pushparani P G

Total Hrs: 42 Hours

Hrs/week: 3 Hours

Curriculumas prescribed by the Institution	Topics	No. of hours required to complete	Date	Method of deployment
Introductoryclass	Explained briefly about course outcomes	01 hr	11.09.2023	COs of OE explained briefly
Unit– 1 Features andproblems of Indian Economy: (14Hrs)	**Chapter 1: Features of Indian Economy:** India as a Developing Economy Demographic Features Problems of Poverty: Unemployment and Income Inequality	04 hrs	13.09.23 to 27.09.23	Lecture method and Student interaction
	Chapter 2: Issues in Agriculture sector in India: Agriculture Marketing in India Agricultural Price Policy	05 hrs	30.09.23 to 09.10.23	Lecture method
	Chapter 3: Industrial and Service Sectors: Industrial Policy Micro, Small and Medium Enterprises Service Sector in India.	05 hrs	11.10.23 to 25.10.23	Lecture method
Unit – 2 Economic Policies: (14Hrs)	**Chapter 4: Planning:** Bombay Plan Gandhian Model Nehru-Mahalanobis Model Objectives and Achievements of Economic Planning in India (before 1991)	05 hrs	30.10.23 to 08.11.23	Lecture method and ICT
	Chapter 5: Monetary policy in India Instruments of Monetary Policy Black money in India – Magnitude and Impact	03 hrs	11.11.23 to 13.11.23	Lecture method
	(Unit-1) C1 Test Dates – 15.11.2023 to 18.11.2023			
	Chapter-6: Fiscal Policy in India: Tax Revenue Public Expenditure Budgetary Deficit	06 hrs	20.11.23 to 24.11.23	(Internal Test Marks Displayed on the Dept. Notice Board on 29.11.2023) Lecture method

Unit – 3 External sector and Nature of Reforms in India (14Hrs)	**Chapter-7: India's Foreign Trade:** Salient Features Volume, Composition and Direction of Trade Balance of Payments	06 hrs	25.11.23 to 02.12.23	Lecture method
	Assignment 1 - (Unit-2) & Assignment 2- (Unit-3)Date of Submission: 02-12-2023			
	Chapter-8: Pre-reforms Strategies: Stabilization Strategies/Measures in all the three sectors of the economy Tariff Policy: Types and Impact Exchange Rate Dynamics	04 hrs	04.12.23 to 09.12.23	Lecture method
	Chapter 9: Planning Commission: Organization and Objectives Functions	04 hrs	11.12.23 to 16.12.23	Lecture method
Extra classes Engaged to complete portions from 18.12.23 to 23.12.23				

Department: Economics III SEM BA

Title of the Paper: Micro Economics - (DSC-5)

[Course Code – 221337]

Term Period: 11.09.2023 to 16.12.2023

Faculty Name: Dr Pushparani P G

Total Hrs: 42 Hours

Hrs/week: 3 Hours

Curriculum as prescribedby the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductory class	Explained briefly about Course outcomes	01 hr	11.09.2023	COs of the DSC explained briefly
Unit–1: Basicsof Micro Economics	**Chapter:1 Exploring Microeconomics**: Nature and scope of economics – Opportunity cost, Scarcity, Production possibility frontier - Market system as a way to organise economic activities	03 Hours	12.09.23 to 15.09.23	Lecture method

	Chapter:2 Supply and Demand: Law of demand, Demand schedule and Exceptions to Law of Demand, Law of supply; supply schedules and shifts in the demand and supply curves.	03 Hours	19.09.23 to 22.09.23	Lecture method &ICT
Unit -2: Consumption Decisions	**Chapter 3 The Households:** Diminishing marginal utility; Indifference curves – Meaning and properties;Budget constraint; Maximization of satisfaction; Price, Income and Substitution effects;	05 Hours	26.09.23 to 04.10.23	Lecture method
Unit -3: Production andCosts	**Chapter 4: The Firms**: Concept of firm and industry; Production function; Law of variable proportions; iso-quant and iso-cost lines, cost minimizing equilibrium condition; Meaning of Cobb-Douglas production function	04 Hours	06.10.23 to 17 .10.23	Lecture method andStudent interaction
	Chapter 5: Cost of Production: Short run and long run costs; Returns to Scale.(diminishing,constant and increasing)	03 Hours	20.10.23 to 27 .10.23	Lecture method &ICT
Unit -4: Pricing	**Chapter 6: The Markets**: Meaning of market structure and Types; Pricing under perfect competition Monopoly pricing and price discrimination; Monopolistic competition –Oligopoly, Interdependence, Collusive and non-collusive oligopoly;	07 Hours	31.10.23 to 13.11.23	Lecture method
	(Units-1,2,4) C1 Test Dates – 15.11.2023 to 18.11.2023			
	Chapter 7: The Inputs (Factors): Functional and Personal income; Demand for and supply of factors; Marginal productivity theory of distribution; Meaning and determinants of rent, wages, interest and profits.	06 Hours	21.11.23 to 01.12.23	(Internal Test Marks Displayed on the Dept. NoticeBoard on 29.11.2023) Lecture method
Assignment 1 - (Unit-3) & Assignment 2- (Unit-5) Date of Submission: 01-12-2023				
Unit -5: Welfare Economics	**Chapter 8: Welfare Economics:** Meaning of welfare; Pigou's welfare economics; Compensation principle; Impediments to attain maximum social welfare	06 Hours	05.12.23 to 12.12.23	Lecture method andStudent interaction
Unit -6: Economics in Action	**Chapter 9: Economic Theory and Policy**: Basics of monetary and fiscal policies; controls and regulations; incentives and penalties	04 Hours	13.12.23 to 16.12.23	Lecture method &ICT
Extra classes engaged to complete portions from 18.12.23 to 23.12.23				

Department : Economics III SEM BA

Title of the Paper : Mathematics for Economics - (DSC-6)

[Course Code – 221338]

Term Period : 11.09.2023 to 16.12.2023

Faculty Name : Venkatalakshmi M N

Total Hrs: 42 Hours

Hrs/week: 3 Hours

Curriculum asprescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductoryclass	Explained briefly about the Courseoutcomes	01 hr	11.09.2023	COs of the DSCexplained briefly
Unit–1: Preliminaries(12 Hrs)	**Chapter:1- Introduction to Mathematical Economics:** Nature and scope of mathematical economics- Role of mathematics in economic theory	4 Hours	12.09.23 to 16.09.23	Lecture method
	Chapter:2 - Number system and Set theory: Types of Numbers: Natural Number, Real number, integers, Irrational number, Complex number. Concepts of sets- meaning –types- union of sets, interaction of sets.	4 Hours	21.09.23 to 27.09.23	Lecture method& Mathematical calculations
	Chapter:3 - Functions: Meaning of function- Types of functions: Linear Function: Derivation of Supply and Demand Functions through Two Point Formula. Non-Linear Functions: Quadratic Functions	4 Hours	29.09.23 to 07.10.23	Lecture method &Mathematical calculations
Unit -2: Economic Functions, their Application andMatrices (14Hrs)	**Chapter 4 Economic Functions:** Demand function, Supply function, Production function,Cost, Revenue and Profit function, Consumption function	4 Hours	09.10.23 to 16.10.23	Lecture method &Mathematical calculations
	Chapter-5: Applications of Functions: Graph of economic functions, Market equilibrium; Equilibrium price and quantity, Impact of specific tax and subsidy on market equilibrium	5 Hours	17.10.23 To 26.10.23	Lecture method, graphical representation & Mathematical calculations

	Chapter-6: Matrices: Definition and Types of matrices- Matrix operations: Addition, Subtraction and Multiplication, Transpose of a matrix, Determinants of matrix- Cramer's rule	5 Hours	27.10.23 to 04.11.23	Lecture method &Mathematical calculations
Unit -3: Differential Calculus and its applications (14Hrs)	**Chapter 7- Limits:** Limits of functions, differentiation and rules of differentiation	4 Hours	06.11.23 to 13.11.23	Lecture method &Mathematical calculations
(Unit-1) C1 Test Dates – 15.11.2023 to 18.11.2023				
	Chapter 8 Derivatives of Economic functions: Derivation of marginal functions from total function-Marginal production, Marginal cost, Marginal revenue and Marginal profit.	6 Hours	20.11.2023 to 02.12.2023	(Internal Test marks displayedon the notice board on 29.11.23) Lecture method &Mathematical calculations
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of Submission: 23-11-2023				
	Chapter 9 - Applications of Derivatives and Higher order derivatives: Elasticity of demand- Second order derivatives- Maxima and Minima of economic function.	5 Hours	04.12.2023 to 16.12.2023	Lecture method &Mathematical calculations
Extra Classes engaged to complete portions from 18.12.23 to 23.12.23				

Department : Economics-III SEM

Title of the Paper : Rural Economics (OE)

[Course Code – 22OEECO301]

Term Period : 11.09.2023 to 16.12.2023

Faculty Name : Chaluvegowda SM Total

Hrs: 42 Hours

Hrs/week: 3 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Introductoryclass	Explained briefly about Course outcomes	01 hr	11.09.2023	COs of OE explained briefly

Unit–1: (14Hrs)	**Chapter:1 - Introduction to Rural Economy** Meaning and objectives of rural economy- Characteristics of Rural Economy-Indicators of rural development- Concepts of inclusive and sustainable development	5hrs	12.09.2023 to 15.09.2023	Lecture method
	Chapter:2 - Approaches to Rural Development: Gandhian model: Community development approach, Minimum needs approach, Integrated ruraldevelopment and Inclusive growth approach.	4hrs	19.09.2023to 23.09.2023	Lecture method and Student Interactions
	Chapter:3 Poverty and Unemployment in Rural India Meaning and measurement of poverty Causes of poverty - Farm and non-farm employment Measurement and types of employment - Review of poverty alleviation and employment generation programs in India.	4hrs	25.09.2023 to 05.10.2023	Lecture method
Unit -2: (13 Hrs)	**Chapter 4- Rural Enterprises** Meaning and importance, Classification of MSME - Progress and problems of MSME Khadi and **Village industries**	4hrs	09.10.2023 to 17.10.2023	Lecture method &ICT
	Chapter-5: Rural Banking and Finance Credit co-operative societies-Regional rural banks - Role of NABARD-Microfinance institutions	4hrs	20.10.2023 To 31.10.2023	Lecture method
	Chapter-6: Rural Infrastructure Educational and health Infrastructure-Housing and sanitation, Drinking water supply - Rural transport and communication rural electrification	5hrs	03.11.2023 To 13.11.2023	Lecture method and Student Interactions
C1 Test Dates – 15.11.2023 to 18.11.2023				
Unit-3: (15 Hrs)	**Chapter7- Rural Development Programs** Wage employment programs- Self-employment and entrepreneurship development programs - Rural housing programs - Rural sanitation programs	5hrs	20.11.2023 to 29.11.2023	(Internal Test marks displayed onthe notice board on 29.11.23) Lecture method

	Chapter 8 - Rural Markets Meaning and types of rural markets-Defects and government measures for removal of defects in rural markets-Co-operative marketing societies - Meaning and importance of regulated markets-digital marketing(e-MAN).	5hrs	01.12.2023 to 06.12.2023	Lecture method and Student Interactions
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of submission: 08-12-2023				
	Chapter 9 - Rural Governance Legislations powers, functions and sources of revenue of panchayat raj institutions-Role of NGOsin rural development - People's participation in rural development	5hrs	08.12.2023 to 16.12.2023	Lecture method
Extra Classes engaged to complete portions from 18.12.2023 to 23.12.2023				

Department : Economics-V SEM

Title of the Paper : Public Economics (DSC-9)

[Course Code – 231537]

Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Venkatalakshmi M N

Total Hrs: 60 Hours
Hrs/week: 4 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment &Remarks**
Introductoryclass	Explained briefly about the Courseoutcomes	01 hr	11.09.2023	COs of the BAProgram explained briefly
Module-1:	Introduction to Public Economics Public Economics: Meaning, definitions, Scope and Significance, Public Finance and Private Finance: Meaning, and Distinction; Public good and private good: Meaning and Distinction, Principle of Maximum Social Advantage, Externalities: Meaning and its Role, Market Failure: Meaning, causes. Market failure and role of government; Corrective actions.	15 hours	12.09.2023 to 07.10.2023	Lecture Method& ICT

Module-2:	**Public Revenue and Public Expenditure** Meaning and sources of revenue; Taxation –Cannons of taxation, Characteristics of a sound tax system, Impact, Incidence- Division of Tax burden, Shifting of tax, Economic Effects of tax on production, distribution and other effects, Progressive and Regressive, Proportional Tax, Direct and Indirect Taxes –Merits and Demerits. Public Expenditure; Meaning,	17 hours	09.10.2023 to 31.10.2023	Lecture Method& ICT
	Classification & Cannons, Reasons for the growth of public expenditure, Wagner's law of increasing state activities, Effects of public expenditure: Production, Distribution &Other effects.			
Module-3:	**Public Debt:** Meaning, Types & Effects**;** Sources of Public Borrowing; Burden of Public Debt - Classical/ Ricardian views and Keynesian views(in brief); Causes of the Rise in Public Debt**;** Methods of debt redemption.	12 hours	02.11.2023 to 23.11.2023	Lecture Method& Student interaction
(Module-1&2) C1 Test Dates – 15.11.2023 to 18.11.2023				
Assignment 1 - (Module-3) & Assignment 2- (Module-4) Date of Submission: 21-11-2023				
Module-4:	**Public Budget, Fiscal Policy and Fiscal Deficit** Budget: Meaning, process & Types of budget, Economic and functional, classification of the budget; Balanced and unbalanced budget, Types of Budget Deficits; Fiscal Policy: Meaning, objectives & Tools; Fiscal deficit: Meaning, Computation, Deficit Financing: Meaning, Advantages and Disadvantages	15 hours	24.11.2023 to 16.12.2023	(Internal Test marks displayedon the notice board on 29.11.23) Lecture Method& ICT
Extra Classes engaged to complete portions from 18.12.23 to 23.12.23				

Department: Economics -V SEM
Title of the Paper: Development Economics (DSC-10)
[Course Code – 231538**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Dr Pushparani P G & Mr. Siddappa R
Total Hrs: 60 Hours
Hrs/week: 4 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours requiredto complete**	**Date**	**Method of Deployment & Remarks**
Introductor yclass	Explained briefly about the Course outcomes	01 hr	11.09.2023	COs of the DSC explained briefly
Module-1:	**Introduction to Economic Development**: Concept - Definitions - Distinction between Economic Growth and Development - Indicators of Growth and Development, Measures of EconomicDevelopment: Gross National Product (GNP) - Physical Quality of Life Index (PQLI), Human Development Index (HDI), Happiness Index, Multi- Dimensional Poverty Index(MDPI).	14 Hours	12.09.23 to 03.10.23	Lecture method &ICT
Module-2:	**General Theories of Economic Growth and Development** Adam Smith's Theory, David Ricardo's Theory, T.R. Malthus' Theory, Karl Marx'sTheory, Schumpeter's Theory and Rostow'sGrowth Theory - Harrod-Domar Model (in brief).	16 Hours	04.10.23 to 13.11.23	Lecture method and Graphical representation
	(Module-1&2) C1 Test Dates – 15.11.2023 to 18.11.2023			
Module-3:	**Partial Theories of Economic Development**: Lewis Labour Surplus Model – Harris Todaro model of Migration (in brief) Rodan's Big Push Theory - Lieberstein's Critical Minimum Effort Approach -Balanced Vs. Unbalanced Growth, Factors in the Development Process - Capital Accumulation - Capital-Output Ratio - Technology and Economic Development.	15 Hours	20.11.23 to 05.12.23	(Internal Testmarks displayed on the notice board on 29.11.23) Lecture method and Graphical representation
Assignment 1 - (Module-3) & Assignment 2- (Module-4) Date of Submission: 01-12-2023				

Module-4:	**Sustainable Development:** Inclusive DevelopmentMillennium Development Goals - Sustainable Development Goals, Targets and Achievements with reference to India.	14 Hours	06.12.23 to 16.12.23	Lecture Method, Student interaction &ICT
Extra classes engaged to complete portions from 18.12.23 to 20.12.23Conducted revision classes on 21st & 22nd Dec 2023.				

Department : Economics - V SEM

Title of the Paper : Indian Banking & Finance (DSC-11)

[Course Code – 231539**]**

Term Period : 11.09.2023 to 16.12.2023

Faculty Name : Venkatalakshmi M N, Dr.Pushparani PG & Chaluvegowda S M

Total Hrs: 60 Hours

Hrs/week: 4 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment & Remarks**
Introductoryclass	Explained briefly about the Course outcomes	01 hr	11.09.2023	COs of theDSC explaine dbriefly
Module-1:	**Introduction to banking: India** Indian Banks: Evolution, Structure: Public sector, private sector, Foreign, Cooperative, RRB, Small finance banks, Payment banks; Role and importance of banks in the Indian economy; Commercial bank: Meaning and Functions; Central Bank: Meaning and Functions; Issues in banking sector; NPA crisis.	15 hours	12.09.2023 To 30.09.2023	Lecture Method &ICT

Module-2	**Banking services:** Types of bank accounts; Account opening and importance of KYC; Bank loans; types, Documents required; eligibility, interest rates, maturity; Other services: Locker facility, payment and remittance services; debit cards, credit cards; ATMs; internet and mobile banking; Modern banking products: Insurance on deposits and loans, Investment services in capital market- stocks, bonds and mutual funds.	15hours	03.10.2023 To 21.10.2023	Lecture Method &ICT
Module-3: Modern Banking	**Modern banking** Modern banking facilities; Digital banking; Digital Wallets; Digital account opening; Biometrics; contact less payment system; instant payments; personal finance management tools; Use of artificial intelligence and machine learning in banks; Cyber security in banking; Credit scoring	15 hours	25.10.2023 to 13.11.2023	Lecture Method & Student Interaction
(Module-1&2) C1 Test Dates – 15.11.2023 to 18.11.2023				
Assignment 1 - (Module-3) & Assignment 2- (Module-4) Date of Submission: 08.12.2023				
Module-4:	**Financial Markets:** Introduction to Indian financial markets; Equity markets and stock exchanges; Debt markets and bond markets; Currency markets and forex trading; Commodity markets and trading; Capital market: Meaning and its products; Risk in capital market investments; Role of SEBI, Fin-tech	15 hours	20.11.2023 to 16.12.2023	(Internal Test marks displayed on the notice board on 29.11.23) Lecture Method & Student Interaction
Extra Classes engaged to complete portions from 18.12.23 to 23.12.23				

Department: Economics- II Sem BA
Title of the Paper: Basic Economics – II (DSC-3)
[Course Code – 211237]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr Pushparani P G
Total Hrs: 42 Hours
Hrs/Week: 3 Hrs

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Introductory class	Explained briefly about the Course outcomes	01 hr	12.02.24	COs of the DSC explained briefly
Unit-I Macroeconomic Concepts and Relationships**:** (12 Hrs)	**Chapter-1: Macro Economy;** Introduction to National Income Accounting Concepts of GDP, GNP and National Income Approaches to calculating GDP, Personal Income, Nominal and Real GDP Limitations of the GDP Concept	05 hrs	13.02.24 to 21.02.24	Lecture and calculation method
	Chapter-2: Monetary Economy Characteristics of MoneyThe Demand for Money The Supply of Money and Overall Liquidity Position, Credit Creation	04 hrs	22.02.24 to 01.03.24	Lecture method
	Chapter-3: Inflation Meaning and Causes of Inflation Calculating Inflation Rate, Impact of Inflation	03 hrs	04.03.24 to 11.03.24	Lecture and calculation method
Unit-II Macroeconomic Challenges and Policies: (12 Hrs)	**Chapter-4: Macroeconomic Challenges:** Business Cycles Economic Growth	03 hrs	14.03.24 to 21.03.24	Lecture method and Graphical representation
	Chapter-5: Monetary Policy: Objectives, Instruments	03 hrs	22.03.24 to 01.04.24	Lecture method
	Chapter-6: Fiscal Policy: Public Finance vs. Private Finance Fiscal policy - Role of Government: Allocation, Distribution and Stabilization	06 hrs	04.04.24 to 15.04.24	Lecture andICT method
	(Unit-1) C1 Test Dates – 16.04.2024 to 20.04.2024			
	Chapter 7: Poverty and Public Policy: Meaning, Types and Measurement of			(Internal testMarks

	Poverty Poverty Alleviation Strategies in India	06 hrs	22.04.24 to 03.05.24	Displayed onDept. Notice Board on 26.4.24) Lecture method
	Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Dare of Submission: 29.4.2024			
Unit – III Public Policy and Globalization: (18 Hrs)	**Chapter 8: International Trade:** The Economic basis for trade— AbsoluteAdvantage and Comparative Advantage.Terms of Trade: Meaning and Types Exchange Rates: Meaning,Types& Determinants Trade Barriers: Tariffs, Subsidies and Quotas Balance of Payments: The Current and Capital Account	09 hrs	06.05.24 to 17.05.24	Lecture , Graphical representatio nand ICT method
	Chapter 9: Globalization: Meaning, Importance Pros and cons of Globalization **Practicum:** Survey on identification of poor; Calculating the components of BoP of India	03 hrs	21.05.24 to 24.05.24	Lecture andICT method
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department : Economics- II SEM
Title of the Pape : Karnataka Economy (DSC-4)
[Course Code – 211238]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Venkatalakshmi M N
Total Hrs: 42 Hours
Hrs/week: 3 Hrs

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductory Class	Explained briefly about the Course outcomes	01 hr	12.2.24	COs of the DSC explained briefly

Unit-1 Characteristics of Karnataka Economy:(12 Hrs)	**Chapter-1: State Income** State Domestic Product and PCI Measures to redress economic inequality	02 hrs	13.2.24 to 16.2.24	Lecture and ICT method
	Chapter-2: Human and Natural Resources Population Human Development Index Poverty and Unemployment– Anti-Poverty and Employment Generation Programs Functioning of Panchayat Raj Institutions	06 hrs	17.2.24 to 29.2.24	Lecture method
	Chapter-3: Natural Resources in Karnataka: Land, Water, Forest and Mineral Resources in Karnataka Sustainable Development Goals in Karnataka Karnataka Environmental Policy	04 hrs	02.03.24 to 12.03.24	Lecture and ICT method
Unit-2 Agriculture and Industries in Karnataka: (18Hrs)	**Chapter-4: Agriculture in Karnataka:** Importance of Agriculture Problems in Agriculture Land Reforms Cropping Pattern Irrigation Watershed Development Programme Dry Land Farming Farmers Suicide – Causes and Solutions	09 hrs	13.03.24 to 02.04.24	Lecture and ICT method
	Chapter-5: Rural Development: Regional Imbalance: Prof. D. M. Nanjundappa report Public Distribution System Rural Development Programs	04 hrs	03.04.24 to 13.04.24	Lecture method& Student Interaction
(Module1 &2) C1 Test Dates – 16.04.2024 to 20.04.2024				
	Chapter 6: Industrial Development in Karnataka: Major Industries in Karnataka - Problems and Prospects, MSMEs - Problems and Measures, IT Industries in Karnataka Industrial Finance in Karnataka Industrial Policy of Karnataka	05 hrs	23.04.24 to 30.04.24	(Internal test Marks Displayedon Dept. Notice Board on 26.4.24) Lecture method& Student Interaction
Assignment 1 - (Module -2) & Assignment 2- (Module-3) Date of submission: 29.4.2024				
Unit-3 Infrastructure and Finances:(1	**Chapter7: Economic Infrastructure in Karnataka:** Transportation: Road, Rail, Water and Air Transport, Information and Communication Technology Facilities	03 hrs	04.05.24 to 08.05.24	Lecture and ICT method

2Hrs)				
	Chapter 8: Social Infrastructure: Drinking Water, Sanitation, Housing, Health and Education Health and Education, Rural Electrification	03 hrs	09.05.24 to 15.05.24	Lecture method
	Chapter 9: State Finance: Sources of Revenue: Direct and Indirect Taxes GST: Impact of GST State Expenditure States Indebtedness State Finance Commission Current State Budget	06 hrs	16.05.24 to 25.05.24	Lecture and ICT method
Extra classes engaged to complete portions from 27.05.2024 up to 31.05.2024				

Department: Economics- II Sem-OE
Title of the Paper: Contemporary Indian Economy(OE)
[Course Code – 21OEECO201]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr Pushparani P G Total
Hrs: 42 Hours
Hrs/week: 3 Hrs

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductoryclass	Explained briefly Course outcomes of theDSC	01hr	12.02.24	COs of the DSC explained briefly
Unit – 1 LPG Policies, Economic	**Chapter No. 1 Recent Issues:** Concept of LPG India's population policy Demographic Dividend	04 hrs	13.02.24 to 21.02.24	Lecture method
	Chapter No. 2 Urbanization and governance: Urbanization and Smart City Mission Impact of COVID-19 Pandemic Atma Nirbhara Bharat Abhiyan	04 hrs	24.02.24 to 02.03.24	Lecture method& ICT

Reforms And Agriculture: (14Hrs)	**Chapter No. 3 Economic Reforms and Agriculture:** Commercialization and Diversification of Agriculture Public Distribution System: TPDS Doubling Farm Incomes -MGNREGS (brief introduction)	06 hrs	04.03.24 to 18.03.24	Lecture method & student interaction
Unit – 2 Industry, Business, Fiscal Policy: (14Hrs)	**Chapter No. 4. Industrial Policy:** New Industrial Policy and ChangesPublic Sector Reforms Privatisation and Disinvestment	04 hrs	20.03.24 to 27.03.24	Lecture method
	Chapter No. 5. Business: Ease of Doing Business Performance of MSMEs Role of MNC's in Industrial Development	05 hrs	01.04.24 to 15.04.24	Lecture method & student interaction
	(Unit-1)C1 Test Dates – 16.04.2024 to 20.04.2024			
	Chapter No. 6. Fiscal Policy: Tax, Expenditure, Budgetary Deficits GST (meaning and features), Fiscal Federalism and Fiscal Consolidation (inbrief) Recommendations of the Current FinanceCommission	05 hrs	22.04.24 to 29.04.24	(Internal testMarks Displayed onDept. Notice Board on 26.4.24) Lecture method
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of Submission:29.4.2024				
Unit – 3 Monetary Policy, Foreign Trade and Investment (14Hrs)	**Chapter No. 7 Monetary Policy:** Organisation of India's Money MarketFinancial Sector Reforms	05 hrs	04.05.24 to 11.05.24	Lecture method &Chart
	Chapter No. 8. Money and CapitalMarkets Working of SEBI in India Changing roles of the Reserve Bank of IndiaForeign Banks and Non-Banking Financial Institutions, Demonetization and its impact	05 hrs	13.05.24 to 17.05.24	Lecture andICT method
	Chapter No. 9. Foreign Trade and Investment: Direction of India's foreigntrade Balance of payments since1991 (trends)FDI – Trends and Patterns New EXIM policy Bilateral and Multilateral Trade Agreements(in brief)	04 hrs	18.05.24 to 25.05.24	Lecture andICT method
Engaged extra classes to complete portions from 27.05.24 to 31.05.24				

Department : Economics- IV SEM
Title of the Paper : Macro Economics
[Course Code – 221437]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Venkatalakshmi M N
Total Hrs: 42 Hours
Hrs/week: 3 Hrs

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductory class	Course Out comes of the DSC explainedbriefly	01hr	12.02.24	COs of the DSC explained briefly
Unit–1: Theoryof National Income Determination (14 Hrs)	**Chapter:1 Classical Framework:** Typical Features of classical theory of employment; Assumptions - Basis of Classical theory: Say's Law, Pigou's wage-price flexibility, Fisher's quantity theory of money, Knut Wicksell's loanable funds theory, Criticism of classical theory	07 hrs	13.02.24 to 28.02.24	Lecture Method with Graphical representation
	Chapter-2: **The Keynesian Framework** Introductory: connecting growth of national income to development; why incomes of all fall or rise? Are income, output, and employment related? Some basic concepts: The idea of equilibrium and identity; ex- ante and ex-post concepts. Aggregate demand and its components. Consumption function: Marginal and Average propensity to consume. Investment function; savings and investment relationship. Aggregate Supply: Meaning and graphical explanation;	07 hrs	29.02.24 to 15.03.24	Lecture Method with Graphical representation

	Effective demand. Determination of national income in Keynes' two sector economy with Aggregate Demand and Aggregate Supply Determination of national income in Keynes' two sector economy with investment and savings.			
Unit -2: Aggregate Consumption and Investment (15 Hrs)	**Chapter-3: Theories of Determinants of Consumption**: Keynesian psychological law of consumption; determinants and permanent income hypothesis of Milton Friedman	05 hrs	16.03.24 To 22.03.24	Lecture Method with Graphical representation
	Chapter-4: Investment and Savings Types of investment-Determinants of investment: rate of interest and marginal efficiency ofcapital: meaning and determinants-Savings and its determinants	05 hrs	28.03.24 To 06.04.24	Lecture Method with Graphical representation
	Chapter-5: Concepts of Multiplier and Accelerator Investment Multiplier: Meaning and assumptions. multiplier; leakages;	05 hrs	12.04.24 To 15.04.24	Lecture Method with Graphical representation
(Unit-1)C1 Test Dates – 16.04.2024 to 20.04.2024				
Unit - 3: Monetary Economics(13 Hrs)	**Chapter-6: Money Supply:** Concept of Money Supply; recent measures of money supply as suggested by RBI - Determinants of money supply: high powered money and money multiplier. The reserve ratio and deposit multiplier	05 hrs	25.04.24 To 04.05.24	(Internal testMarks Displayed onDept. Notice Board on 26.4.24) Lecture Method with Graphical representation
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of submission: 30.4.2024				
	Chapter-7: Money demand: Cash transactions approach (only meaning) and Cambridge approach (Only Marshall'sequation) -The liquidity preference approach of Keynes	04 hrs	06.05.24 To 16.05.24	Lecture Method with Graphical representation
	Chapter-8: Inflation and Unemployment: Phillips Curve and Wage cut theory and employment	04 hrs	17.05.24 To 25.05.24	Lecture Method with Graphical representation
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department: Economics- IV Sem BA
Title of the Paper: Statistics for Economics[Course Code – 221438]
Term Period:12.02.2024 to 25.05.2024
Faculty Name: Dr Pushparani P G
Total Hrs: 42 Hours
Hrs/week: 3 Hrs

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductory class	Course Out comes of the DSC explained briefly	01hr	12.02.24	COs of the DSC explained briefly
Unit–1 Preliminaries: (12Hrs)	**Chapter:1 Introduction to Statistics:** Meaning and importance of statistics, functions of statistics, types of statistics: descriptive statistics and inferential statistics- variables; qualitative variable and quantitative variable	4 hrs	13.02.24 to 20.02.24	Lecture Method
	Chapter-2 Data types, sources and collection of data: qualitative and quantitative data - cross section data, time series data and panel data - primary and secondary sources of data – methods of collecting primary data	4 hrs	21.02.24 to 28.02.24	Lecture Method
	Chapter-3: Tabulation and presentation of data: classification and tabulation of data - frequency distributions – continuous and discrete frequency distribution. graphical presentation-histogram- frequency polygon - Ogive curves -bar diagram, pie chart	4 hrs	04.03.24 to 11.03.24	Lecture Method & Graphical representation
Unit -2: Measuresof Central Tendency and Dispersion (14Hrs)	**Chapter-4: Arithmetic Average**: Definition of central tendency, types of central tendency: Arithmetic mean: meaning and properties of arithmetic mean – computation of arithmetic mean	5 hrs	12.03.24 to 20.03.24	Lecture Method& Calculation
	Chapter-5: Positional Averages-Median and Mode: Definition and importance of median-calculation of median- definition and importance of mode - calculation of mode.	4 hrs	25.03.24 to 01.04.24	Lecture Method & Calculation

	Chapter-6:Dispersion:Meaning of dispersion- measures of dispersion- range- quartile deviation- mean deviation - standard deviation - coefficient of variation and their computation.	5 hrs	02.04.24 to 15.04.24	Lecture Method & Calculation
(Unit-1) C1 Test Dates – 16.04.2024 to 20.04.2024				
Unit -3: Correlation, Regression andTime Series Analysis (16 Hrs)	**Chapter-7: Correlation:** Meaning of correlation - types of correlation - methods of measuringcorrelation- Karl Pearson's correlation coefficients.	5 hrs	22.04.24 to 29.04.24	(Internal testMarks Displayed onDept. Notice Board on 26.4.24) Lecture Method & Calculation
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of submission: 30.4.2024				
	Chapter-8: Regression: Meaning and importance of regression - regression equation -estimation of regression equation - applications of regression equation in economics.	6 hrs	06.05.24 to 15.05.24	Lecture Method , Calculation &ICT
	Chapter-9: Time Series Analysis: Definition of time series – components of time series –estimation and forecasting of trend.	5 hrs	20.05.24 to 25.05.24	Lecture Method , Calculation &ICT
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department : Economics- IV SEM

Title of the Paper : Karnataka Economy(OE)

[Course Code – 22OEECO401]

Term Period : 12.02.2024 to 25.05.2024

Faculty Name : Chaluvegowda S M

Total Hrs: 42 Hours

Hrs/week: 3 Hrs

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductory class	Course Out comes of the DSC explained briefly	01hr	12.02.24	COs of the DSC explained

				briefly
Unit–1 Karnataka Economy – An overview (15Hrs)	**Characteristics of Karnataka Economy** Features of Karnataka economy -Trends and sectoral distribution of state domestic product andper capita income Measures to redress regional imbalances – Dr. Nanjundappa committee report	6 hrs	13.02.24 to 20.02.24	Lecture Method
	Chapter-2 Human Resources Human resources: importance, size and health indicators - Human Development Index – Poverty and unemployment– Eradication programs	4 hrs	21.02.24 to 28.02.24	Lecture Method
	Chapter-3 Natural Resources Management Natural Resources: Importance and volume of different natural resources – Karnataka environmental policy	5 hrs	04.03.24 to 11.03.24	Lecture Method & Seminar
Unit -2 Agriculture, Rural development, and Industries in Karnataka(11Hrs)	**Chapter-4: Agriculture in Karnataka:** Importance of Agriculture Problems in Agriculture Farmers Suicide – Causes And Solutions	2hrs	12.03.24 to 20.03.24	Lecture Method
	Chapter-5: Rural Development Public distribution system - Rural development programs (brief) - Government schemes for rural women	2 hrs	25.03.24 to 01.04.24	Lecture Method & Seminar
	Chapter-6 Industries in Karnataka Major industries in Karnataka: problems and	7 hrs	02.04.24 to	Lecture Method &
	prospects - MSMEs : problems and measures IT industries in Karnataka - Industrial finance in Karnataka - Industrial policy of Karnataka		15.04.24	Student Interaction
	(Unit-1)C1 Test Dates – 16.04.2024 to 20.04.2024			
Unit -3: Infrastructure and Finance in Economic Infrastructure (16Hrs)	**Chapter-7: Economic Infrastructure** Transportation: Road, Rail, Water and Air transport. Information and communication technologyfacilities	6 hrs	22.04.24 to 29.04.24	(Internal testMarks Displayed onDept. Notice Board on 26.4.24) Lecture Method &Student Interaction

Assignment 1 - (Unit-2) & Assignment 2- (Unit- 3) Date of Submission: 30.4.2024				
	Chapter-8: Social Infrastructure Drinking water - Housing and Sanitation - Health and Education - Rural Electrification	4 hrs	06.05.24 to 15.05.24	Lecture Method &ICT
	Chapter-9: State Finance Sources of Revenue: Direct and Indirect Taxes - Impact of GST on Karnataka economy - State Expenditure - State Finance Commission - Current State Budget (Brief)	6 hrs	20.05.24 to 25.05.24	Lecture Method &ICT
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department : Economics- VI SEM

Title of the Paper: International Economics (DSC-12)

[Course Code – 231637]

Term Period : 12.02.2024 to 25.05.2024

Faculty Name : Venkatalakshmi M N

Total Hrs: 60 Hours

Hrs/week : 4 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductoryclass	Explained briefly about Course outcomes	01 hr	12.02.24	COs of the DSC explained briefly
Module- 1: International Trade Theories	Meaning and Importance of International trade; Differences between Internal and International Trade; Trade Theories: Mercantilist view; Absolute cost and comparative cost advantage theories; Haberler's Opportunity cost theory; Hecksher-Ohlin theory; Leontief's paradox	15 hrs	13.02.24 to 12.03.24	Lecture Method, ICT & Graphical representation
Module-2: Terms of Trade and Trade Policy	Terms of trade- Concepts, Factors determining Terms of Trade; Trade Policy: Free trade v/s Protection; Tariffs: Types and effects; Quotas;Anti-dumping.	17 hrs	13.03.24 to 15.04.24	Lecture , Graphical representationand ICT method
(Module 1&2) C1 Test Dates – 16.04.2024 to 20.04.2024				
	Balance of Payments: Concept, Components; Disequilibrium in Balance of Payments: Causes and Measures to			(Internal testMarks

Module - 3: Balance of Payments and Capital Flows	correct disequilibrium; Foreign Exchange rate: Meaning and types; determination of Foreign exchange rate: Demand for and Supply of Forex; Purchasing Power Parity (PPP) theory; Capital Flows: Meaning, concept and types of Foreign Investment; Forms of FDI; Advantages and disadvantages of FDI.	13 hrs	22.04.24 to 11.05.24	Displayed onDept. Notice Board on 26.4.24) Lecture Method, ICT & Graphical representation
Assignment 1 - (Module-3) & Assignment 2- (Module-4) Date of Submission: 02.05.2024				
Module-4: International Financial Institutions and Trade Organisations	Bretton Woods Institutions: IMF and IBRD - IDA and IFC: Organization, Objectives, Functions. Evolution of WTO: GATT – principles and objectives; WTO: Organization, Objectives, Functions, Agreements and current issues	15 hrs	13.05.24 to 25.05.24	Lecture Method & ICT
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department: Economics -V Sem BA
Title of the Paper: Indian Public Finance (DSC-13)
[Course Code – 231638]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr Pushparani P G & Mr. Siddappa R
Total Hrs: 60 Hours
Hrs/week : 4 hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment & Remarks**
Introductory Class	Explained briefly about Course outcomes	01 hr	12.02.24	COs of the DSC explained briefly
Module-1: Public Revenue:	**Direct Tax Revenue -** Trends and Patterns of Tax Revenue in India; Direct Tax in India; PersonalIncome Tax Rates and Slabs**;** Corporate Tax. **Indirect Tax Revenue -** Indirect Taxes in India – Earlier Taxes-VAT and MODVAT; Goods and Services Tax (GST)- Objectives and Classification of GST, Tax Rates of GST; Trends and Patterns ofGST; Impact of GST on Indian Economy**;** TaxReform Commissions.	18 Hours	13.02.24 to 11.03.24	Lecture method &ICT

Module-2: Public Expenditure	**Revenue Expenditure -** Classification of PublicExpenditure in India**;** Revenue Account Expenditure- Trends and Patterns**;** Capital Account Expenditure-Trends and Patterns**;** FiscalResponsibility and Budget Management (FRBM)Act**;** Impact of Public Expenditure on IndianEconomy**;** Expenditure Reforms Commission (ERC) in India; **Union Budget and Its Analysis -** Meaning andClassification of Budgets; Zero- Based Budget; Composition of Union Budget; Union BudgetAnalysis (current one); Different Concepts ofDeficits- Revenue, Fiscal and Primary Deficits(in brief).	15 Hours	12.03.24 to 13.04.24	Lecture method and Student interaction
	(Module-1&2)C1 Test Dates – 16.04.2024 to 20.04.2024			
Module-3: Public Debt and Its Management : Public Borrowings and Debt	Meaning of Public Debt; Trends and Patterns ofCentral Government Debt; Main Characteristics ofIndian Public Debt; Causes of Public Debt in India; **Burden of Public Debt and Management in India**Meaning of Burden of Public Debt; Importance ofPublic Debt Management; Principles of Public Debt	14 Hours	22.04.24 to 03.05.24	Lecture method and ICT (Internal test Marks Displayedon Dept. Notice
	Management; Repayment of Public Debt in India; Impact of Public Debt on Indian Economy.			Board on 26.4.24)
Assignment 1 - (Module- 3) & Assignment 2- (Module-4) Date of submission: 02.05.2024				
Module-4: Fiscal and Monetary Policies and Federal Finance in India	Fiscal and Monetary Policy in India: trends in fiscal deficits. **Indian Federal Finance -** Meaning and Importance-Allocation of Resources- Division of Functions and Resources; Principles of Federal Finance; Current Finance Commission and its Recommendations.	13 Hours	06.05.24 to 25.05.24	Lecture Method, Student interaction& ICT
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department : Economics- VI SEM

Title of the Paper: Environmental Economics (DSC-14)

[Course Code -231639]

Term Period : 12.02.2024 to 25.05.2024

Faculty Name : Venkatalakshmi M N, Dr. Pushparani PG & Chaluvegowda S M

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment & Remarks**
Introductory Class	Explained briefly about the course outcomes	01 hr	12.02.24	COs of the DSC explained briefly
Module-1: Environment and Ecology	Meaning, Nature and Scope of Economics of Environment; Linkages between Environment and the Economy; Environmental Kuznets curve; Environmental Stress; Population and Environment; Poverty and Environment; Meaning and elements of ecology; Biotic and Abioticcomponents; Material Balanced Principle (Entropylaw); Rio Summit; Green Accounting.	15 Hours	13.02.24 to 09.03.24	Lecture method &ICT
Module-2: Natural Resources Scarcity and Conservation	Meaning and Characteristics of Renewable andNon-renewable resources; Non-Renewable Resources and the problem of depletion ; ResourceScarcity and Economic Growth (Limits to Growth Model); Energy and Economic Development; Energy resources and their Pricing; Alternative energy sources; Conservation of Natural Resources- 3Rs – Reduce, Reuse and Recycling Measures	15 Hours	11.03.24 to 13.04.24	Lecture method and Student interaction
	(Module-1&2) C1 Test Dates – 16.04.2024 to 20.04.2024			
Module-3: Environmental Pollution	Types of Pollution –Air, Water, Soil, Noise - Causes and consequences. Climate change, Global warming, Greenhouse Effect-Ozone depletion- Carbon footprint. Environmental hazards: rivers, land: floods, drought, acid rain. Environmental impact assessment (cost-benefit analysis).	15 Hours	22.04.24 to 09.05.24	(Internal testMarks Displayed onDept. Notice Board on 26.4.24) Lecture

				method andICT
Assignment 1 - (Module-3) & Assignment 2- (Module-4) Date of Submission: 02.05.2024				
Module-4: Environmental Policy and Regulations	Environmental regulatory system in India; Pollution Control Boards and their Functions; Provisions of the Environmental Protection Act, 1986; Environmental Movements in India (Chipko); Role of Citizens and NGOs in Environmental Protection. Global agenda for environmentalprotection..	15 Hours	13.05.24 to 25.05.24	Lecture Method, Student interaction &ICT
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

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Course Plan of Odd Semester 2023-24

Department: English
Title of the Paper: DSC I Introduction to Literature
[Course Code –211179]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Dr. Indrani. M.R, Hamsaveni N.C, Ranjitha M.R
Total hrs.: 42 Hours (3 hrs. per Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit 1 Introduction to theStudy of Literature (14 hours)	Syllabus Discussion **Chapter 1** What is Literature?	01	13/09/2023	POs and Course Outcomes of the units discussed
	Defining Literature-	01	20/09/2023	Lecture and Discussion
	Why We Study Literature?	01	27/09/2023	Lecture and Discussion
	Chapter 2 Literature and Society	03	04/10/2023 11/10/2023 18/10/2023	Lecture and Discussion
	Literature and Life	02	25/10/2023 08/11/2023	Lecture and Discussion
	Chapter 3 Literature and Science-	01	22/11/2023	Lecture and Discussion
	Canon- Elements of Literature	05	29/11/2023 06/12/2023 13/12/2023 2 extra classes	Lecture and Discussion
Unit-2 Literary Terms **(14 Hours)**	**Poetry** Lyric, Sonnet, Ballad, Epic,Elegy, Mock-Epic	04	12/09/2023 19/09/2023 26/09/2023 03/10/2023	Lecture and Discussion
	Drama Comedy, Tragedy, Tragic-Comedy, One Act Play	05	10/10/2023 17/10/2023 31/10/2023 07/11/2023	Lecture and Discussion

			21/11/0203	
	Prose: Novel, Novella, Short Story, Essay, Biography, Autobiography	05	28/11/2023 5/12/2023 12/12/2023	Lecture and Discussion
Unit I and Unit II	**Internal Assessment for C1 Component**	**01**	**16/11/2023**	**15/11/2023 to 18/11/2023 Internal Assessment Test Test conducted for20 marks**
Unit-3 Literary Termsand Figurative Language (14 hours)	Couplet, H Allegory, Alliteration,Assonance, Refrain, Aside, Monologue, Soliloquy,	02	16/09/2023 23/09/2023	Lecture and Discussion **Display of Test Marks onNotice Board on 23/11/2023**
	Meta-Fiction, Plot, Character,Setting, Narrative Technique	02	30/09/2023 07/10/2023	Lecture and Discussion
	Farce, Simile, Metaphor, Personification, Hyperbole,Satire, Prologue, Epilogue	02	14/10/2023 21/10/2023	Discussion through exercises for identificatio n
	Art for Art's Sake, Expressionism, Meter and Metrical Devices, Narratology,Romanticism, Canon	04	04/11/2023 11/11/2023 25/11/2023 02/12/2023	Lecture and Discussion
	Simile, Metaphor, Personification, Hyperbole, Onomatopoeia,	01	09/12/2023	Lecture and Discussion
Unit III	Euphemism, Irony, Oxymoron,Synecdoche, Understatement, Paradox, Allusion	03	16/12/2023 Extra class	Lecture and Discussion
	Internal Assessment for C2	**01 Week**	**04/12/2023 To 10/12/2023**	**Submission of Assignments on 10/12/2023**

Department: English
Title of the Paper: DSC 2 Introduction to Literature
[Course Code –211180]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Geetha. D, Dr Indrani, Ranjitha
M.RTotal Hrs: 42 Hours (3 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1 History of Indian English Literature (Pre-Independence Period) (14 hours)	Syllabus Discussion The Nature and Scope of Indian English Literature	02	15/09/2023 22/09/2023	POs and Course Outcomes of the units discussed
	Charges against Indian English Literature	02	29/09/2023 06/10/2023	Lecture and Discussion
	Pre –Pre-Independence Indian English Poetry, Prose, Drama and Novel	04	13/10/2023 20/10/2023 27/10/2023 03/11/2023	Lecture and Discussion
	Introducing Authors/texts • Raja Ram Mohan Roy • Toru Dutt • Sri Aurobindo • Swami Vivekananda • Bankim Chandra Chattopadhyay	03	10/11/2023 24/11/2023 01/12/2023	Lecture and Discussion Present
	□ Mahatma Gandhi □ Dr B R Ambedkar □ Rabindranath Tagore □ Sarojini Naidu □ Henry Derozio, □ Dean Mahomet	03	08/12/2023 15/12/2023 Extra Class	Lecture and Discussion Presentation by Students
Unit-2 Pre Independence-Fiction	Selection from Untouchable by Mulk Raj Anand (Selected Episodes)	04	14/09/2023 21/09/2023 05/10/2023 12/10/2023	Lecture and Discussion
(14 Hours)	Kanthapura by Raja Rao (Selected Chapters)	03	19/10/2023 26/10/2023 02/11/2023	Lecture and Discussion
	Swami and Friends by R.K Narayan (Selected Chapters)	05	09/11/2023 23/11/2023 07/12/2023 14/12/2023 Extra Class	Lecture and Discussion

Unit I and Unit II	**Internal Assessment for C 1**	**01**	**17/11/2023**	**15/11/2023/to 18/11/2023 Internal Assessment TestTest conducted for 20 marks**
Unit-3 Indian English Poetry, Short Stories and Essays (14 hours)	**Select Poems** Our Casuarina Tree by Toru Dutt	02	11/09/2023 25/09/2023	Lecture and Discussion
	Coromandel Fishers by Sarojini Naidu-	01	09/10/2023	Lecture and Discussion
	To India –My Native Land by Henry Dorezio	01	1610/2023	Lecture and Discussion
	Select Stories Mulk Raj Anand Barber's Trade Union	02	30/10/2023 06/11/2023	Lecture and Discussion
	Rabindranath Tagore My Lord the Baby	02	13/11/2023 20/11/2023	Lecture and Discussion **Display of Marka on Notice Board 23/11/2023**
	R K Narayan- A Horse and Two Goats	02	27/11/2023 04/12/2023	Lecture and Discussion
	Select Essays M K Gandhi- The Great Sentinel	02	11/12/2023 Extra Class	Lecture and Discussion
	Swami Vivekananda 'Chicago Address'	01	Extra Class	Lecture and Discussion
	B R Ambedkar A Childhood Journey to Koregon	02	Extra Class	Lecture and Discussion
Unit III	**Internal Assessment for C2**	**01 Week**	**01/12/2023 to 07/12/2023**	**Submission of Assignment 07/12/2023**

Department: English
Title of the Paper: Poetry, Prose, and Language
ComponentCourse Code – [21Eng120] B. Com/BBA
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Manjunath, Geetha, Dr Indrani, Hamsaveni, Ranjitha,
SumaTotal Hrs: 56
Hrs/week: 04

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I Poetry (18 hours)	When Forty Winters Shall Besiege Thy Brow by Willam Shakespeare	2 hours	12/09/2023 13/09/2023	POs and COswere introduced Lecture
	The World is Too Much with Us by William Wordsworth	3 hours	19/09/2023 20/09/2023 28/09/2023	Lecture and Discussion
	A Wagon of Shoes by Avrom Sutzkever	3 hours	29/09/2023 06/10/2023 07/10/2023	Lecture and Discussion
	Nine Gold Medals by David Roth	2 hours	17/10/2023 18/10/2023	Lecture and Discussion
	False Religion by Rabindranath Tagore	3hours	02/11/2023 03/11/2023 28/11/2023	Lecture and Discussion
	Avarice by George Herbert	2 hours	29/11/2023 08/12/2023 09/12/2023	Lecture and Discussion
	O, My Love's Like a Red, Red, Rose by Robert Burns	1 hour	10/12/2023	Lecture and Discussion
	On Killing a Tree by Gieve Patel	2 hours	11/12/2023	Lecture and Discussion
Unit II Prose (16 hours)	The Miser by George Orwell	4 hours	14/09/2023 21/09/2023 30/09/2023 08/10/2023	Lecture and Discussion
	The Storyteller by Saki	3 hours	27/10/2023 04/11/2023	Lecture and Discussion
			31/11/2023	
	Internal Assessment for C1 **Unit I and Unit II**	01	**15/11/2023**	**15/11/2023 to 18/11/2023 Internal Assessment Test Conducted**

				for20 marks
	Going Green by Ramachandra Guha	4 hours	10/11/2023 24/11/2023 27/11/2023 04/12/2023	Lecture and Discussi on **Display of Test Marks onNotice Board on 21/11/2023**
	The Position of Women in Hinduism and Buddhism by Dr B R Ambedkar	5hours	15/12/2023 19/12/2023 21/12/2023 2 Extra Class	Lecture and Discussion Presentation byStudents
	Punctuation	4 hours	15/09/2023 22/09/2023 03/10/2023 27/10/2023	Discussion and Classroom Activity
	Articles	4hours	28/10/2023 05/11/2023 06/11/2023 11/11/2023	Discussion and Classroom Activity
	Prepositions	4 hours	27/11/2023 05/12/2023 06/12/2023 01 Extra Class	Discussion and Classroom Activity
	The verb in Relation to Tense, Person and Number of the Subject (Subject-Verb Agreement/Concord)	5 hours	12/12/2023 13/12/2023 14/12/2023 15/12/2023 01 Extra Class	Discussion and Classroom Activity
	Internal Assessment for C2 **Unit III**	**01 Week**	**08/12/2023 to** **14/12/23**	**Submission of Assignment** **Last date 14/12/20 23**

Department: English
Title of the Paper: Poetry, Prose, and Language
ComponentCourse Code – [21Eng119] BA, B.Sc., BCA
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Manjunath, Geetha, Dr Indrani, Hamsaveni, Ranjitha, SumaTotal Hrs: 56 Hrs/week: 04

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I Poetry (20 hours)	When in Disgrace by William Shakespeare	3 hours	12/09/2023 13/09/2023 19/09/2023	POs and Cos were introduced Lecture
	The Pulley by George Herbert	3 hours	20/09/2023 26/09/2023 27/09/2023	Lecture and Discussion
	The Quiet Life by Alexander Pope	2 hours	03/10/2023 04/10/2023	Lecture and Discussion
	Fidelity by William Wordsworth	2 hours	10/10/2023 11/10/2023	Lecture and Discussion
	The Man He Killed by Thomas Hardy	2 hours	17/10/2023 18/10/2023	Lecture and Discussion
	Freedom by Rabindranath Tagore	3 hours	25/10/2023 31/10/2023	Lecture and Discussion
	Refugee Blues by W.H Auden	3 hours	07/11/2023 08/11/2023 22/11/2023	Lecture and Discussion
	The Cold Within by James Patrick Kinney	2 hours	28/11/2023 29/11/2023	Lecture and Discussion
Unit II Prose (16 hours)	With the Photographer by Stephen Leacock	4 hours	14/09/2023 21/09/2023 05/10/2023 12/10/2023	Lecture and Discussion
	Internal Assessment for C1 Unit I and Unit II	01	**15/11/2023**	**15/11/2023 to 18/11/2023 Internal Assessment Test Conducted for 20 marks**
	Prospects of Democracy in India by Dr B R Ambedkar	4 hours	19/10/2023 26/10/2023 02/11/2023 09/11/2023	Lecture and Discussion **Display of TestMarks on Notice Board on 21/11/2023**

	What is Science? by George Orwell	5hours	16/11/2923 23/11/2023 07/12/2023 14/12/2023 1 Extra Classes	Lecture and Discussion
	Fool's Paradise by Isaac Bashevis Singer	3 hours	Extra Classes	Lecture and Discussion Presentation by Students
Unit III Language Component (20 hours)	Punctuation	5 hours	15/09/2023 22/09/2023 29/09/2023 06/10/2023 13/10/2023	Discussion and Classroom Activity
	Articles	4 hours	20/10/2023 27/10/2023 03/11/2023 10/11/2023	Discussion and Classroom Activity
	Prepositions	5 hours	17/11/2023 24/11/2023 01/12/2023 08/12/2023 15/12/2023	Discussion and Classroom Activity
	The verb in Relation to Tense, Person and Number of the Subject (Subject-Verb Agreement/Concord)	6 hours	Extra Classes	Discussion and Classroom Activity
	Internal Assessment for C2	**01 Week**	**04/12/2023 to 10/12/2023**	**Submission of Assignments on 10/12/2023**

Department: English
Title of the Paper: DSC 5 British Literature Up to 1800 (From Chaucer to the Age ofTransition) [Course Code – 221379)
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Geetha, Dr Indrani, Vidya
Total Hrs: 42 Hours (3 Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
	The Social Context of Medieval English Literature,	02	14/09/2023 21/09/2023	POs and Course Outcomes of the units discuss Lecture

Unit I (14 hours)	Renaissance,	02	05/10/2023 12/10/2023	Lecture and Discussion
	Elizabethan Poetry, Elizabethan Drama,	03	19/10/2023 26/10/2023 2/11/2023	Lecture and Discussion Presentation by Students
	Metaphysical Poetry,	02	09/11/2023 23/11/2023	Lecture and Discussion
	Restoration Drama,	02	07/12/2023	Lecture and Discussion
	18th Century Prose	01	14/12/2023	Lecture and Discussion
	Development of the Novel in 18th Century	02	Extra Classes	Lecture and Discussion
Unit II Representative Writers and Works	• Geoffery Chaucer, • Francis Bacon, • Ben Jonson, • John Milton, • John Dryden, • Alexander Pope, • Dr. Samuel Johnson,	05	13/09/2023 20/09/2023 27/09/2023 04/10/2023 11/10/2023	Lecture and Discussion Presentation by Students
	• William Shakespeare, • Oliver Goldsmith, • John Bunyan,			
	• Aphra Behn, • Margeret Cavendish, • Elizebeth Cary, • Anne Finch, • Amelia Lanyer, • Fanny Burney • Elizebeth Carter	03	18/10/2023 25/10/2023 8/11/2023	Discussion
	Texts to Familiarize • King Lear, • As You Like It, • Volpone, • Paradise Lost, • Absalom and Achitophel, • Rape of the Lock, • Pamela, • Letters of Elizabeth Carter	06	22/11/2023 29/11/2023 6/12/2023 13/12/2023 2 extra classes	Lecture and Discussion
	Internal Assessment for C1 Unit I and Unit II	**01**	**17/11/2023**	**15/11/2023/to 18/11/2023 Internal Assessmen tTest Test conductedfor 20 marks**
	Sonnet Sonnet 18 Shall I Compare Thee To A Summer's Day- William Shakespeare	02	11/09/2023 25/09/2023	Lecture and Discussion

Unit III Representative Texts (14 hours)	On His Blindness-John Milton	02	09/10/2023 16/10/2023	Lecture and Discussion Presentation by Students
	Lyric Lover's Infiniteness by John Donne	02	30/10/2023 06/11/2023	Lecture and Discussion
	A Poison Tree- William Blake	01	13/11/2023	Discussion
	Essay Of Love-Francis Bacon	01	20/11/2023	Lecture and Discussion
	Man in Black-Oliver Goldsmith	01	27/11/2023	**Display of Test Marks on Notice Board on 22/11/2023** Lecture and Discussion
	Play Dr Faustus - Christopher Marlowe • Summary and Analysis	05	04/11/2023 11/12/2023	Lecture and Discussion
	• Opening Scene • The signing of the Bond • Comic Scenes • Last Soliloquy • Theme of Good and Evil		Extra Classes	Presentation by Students
Unit III	**Internal Assessment for C2**	**01 Week**	**02/12/2023 To 08/12/2023**	**Submission of Assignment on 08/12/2023**

Department: English
Title of the Paper: DSC -6 Indian Literature in Translation
[Course Code – 221380)
Term Period : 11.09.2023 to 16.12.2023
Faculty Name :, Geetha. D, Dr Indrani,
Smt.HamsaveniTotal Hrs: 42 Hours (3 Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit- 1 Introduction to Translation **(14 hours)**	Translation as Discovery- Sujit Mukherjee	08 hours	15/09/2023 22/09/2023 29/09/2023 6/10/2023 13/10/2023 20/10/2023 27/10/2023 03/11/2023	POs and Course Outcomes of the units discussed
	Indian Literature in English Translation- G N Devy		10/11/2023 24/11/2023	

		06 hours	01/12/2023 08/12/2023 15/12/2023 Extra Class	Lecture and Discussion
Unit II **Representative Texts** **(14 hours)**	• Vachana of Basavanna: no 59 Cripple me Father, No.97 The Master in the House	05 hours	12/09/2023 19/09/2023 26/09/2023 03/10/2023 10/10/2023	Lecture and Discussion
	• Vachanas of Akkamahadevi: no 26 and 73 (From Speaking of Siva)	03hours	17/10/2023 31/10/2023 07/11/2023	Lecture and Discussion
	• Kanakadasa: Do Not Quarrel over Caste(Translation by Dr. S G Vaidya)	03hours	21/11/2023 28/11/2023 05/12/2023	Lecture and Discussion
	• Songs of Sheriff (Translation- Dr S G Vaidya)	03	12/12/2023	Lecture and Discussion
	Internal Assessment for C 1 Unit I and Unit II	**01**	**17/11/2023**	**15/11/2023/to 18/11/2023 Internal Assessment Test Test conducted for 20 marks**
Unit III **Representative Texts** **(14 hours)**	**Novel:** • Chemmeen- T S Pillai • Introduction • Plot Analysis- Depiction ofFisherman Community • Conflict between Traditional Customs andModernism • Subjugation of Women • Character of Karuthamma	06	16/09/2023 23/09/2023 30/09/2023 07/10/2023 14/10/2023 21/10/2023	Lecture and Discussion Presentatio nby Students
	Short Stories: The Silent Rattle- Dr. Basu Bevinagidad	02	04/11/2023 11/11/2023	Lecture and Discussion
	The Weed- Amrita Pritam	02	25/11/2023 2/12/2023	Lecture and Discussion
	A Tale of 1947 – Sadat Hasan Manto	02	09/12/2023 16/12/2023	Lecture and Discussion

	The Curd Seller- Masti	02	Extra Class	Lecture and Discussion
Unit III	**Internal Assessment for C2**	**01 Week**	02/12/2023 To 08/12/2023	**Submission of Assignment on 08/12/2023**

Department: English
Title of the Paper: Generic English L2 Drama and Language Component
Course Code –[22Eng 320] B.Com/BBA
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Geetha. D, Dr Indrani M R, Smt. Hamsaveni, Smt.Vidya .S
Total Hrs: 56 Hours
Hrs/week: 4)

Curriculumas prescribed by the Institution	**TOPIC**	**No.of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit-1 Macbeth- William Shakespeare	Receptive Skills: Reading and Listening Skills-Play	**26 Hours**		
	William Shakespeare as a Writer	01 hour	11/09/23	COs and POs Discussed Lecture
	Summary, Plot Outline, Characters	01 hour	12/09/23	Lecture
	Act 1, Scene 1 Opening Scene	01 hour	13/09/23	Lecture and Discussion
	Scene- 2 Military Camp	03 hours	15/09/23 20/09/23 22/09/23	Lecture
	Scene -3 Introduction of Supernatural Powers	02 hours	27/09/23 29/09/23	Lecture and Discussion
	Scene- 5 and 6 Introduction of - Lady Macbeth	02 hours	09/10/23 10/1020/23	Lecture and Discussion Audio Visual Display
	Scene -7 Lady Macbeth's Hospitality towards King Duncan	01 hour	16//10/23	Lecture and Discussion
	Act 2, Scene- 1 Conversation between Banquo and Fleance	01 hour	17/10/23	Lecture and Discussion
	Scene- 2 Murder Scene	02 hours	20/10/23 25/10/23	Lecture

	Scene-3 and 4 Porters Scene	01 hour	27/10/23	Lecture and Discussion Audio Visual
	Act 3, Scene-1 and 2 Banquo suspects Macbeth Sleep Walking Scene	01 hour	30/10/23	Lecture and Discussion
	Scene-3and 4 Banquo is murdered and Banquet Scene	01 hour	31/10/23	Lecture and Discussion Presentation by students
	Scene 5 and 6 Apparition Scene,	01 hour	03/11/23	Lecture Discussion
	Act 4, Scene-1 and 2 Meeting Weird Sisters/ Three Witches, (Murder of Lady Macduff and Her Child)	01 hour	06/11/23	Lecture and Discussion
	Scene -3 Macduff Runs away, Malcolm plans to take revenge	01 hour	10/11/23	Lecture and Discussion
	Internal Assessment for C1 **Unit I and Unit II**	01	**15/11/2023**	**15/11/2023 to 18/11/2023 Internal Assessment Test Conducted for 20 marks**
	Act 5 Scene 1- Death of Lady Macbeth	01 hour	20/11/23	Lecture and Discussion **Display of Test Marks on Notice Board on 21/11/2023**
	The Prophecy of Witches	04 hours	21/11/23 24/11/23 28/11/23 29/11/23	Lecture and Discussion Presentation by students
	Scene 7, 8, 9 and 10 Chaos of Battle, Macbeth Confessing, Climax, Macbeth Death	04 hours	04/12/23 05/12/23 06/12/23 11/12/23	Lecture and Discussion
	Screening of Movie	03 hours	12/12/23 13/12/23	Audio Visual Display
			15/12/23	
	Listening Skills: Persuasive Speeches	**05 hours**		
	Swami Vivekananda's Speeches at the World Parliament of Religions in Chicago	01 hour	14/09/23	Discussion Audio Visual Display

	Crisis of Civilization Speech by Rabindranath Tagore at Shanti Nikethan in April 1941	01 hour	22/09/23	Discussion Audio Visual Display
	Quit India _ Mahatma Gandhi on August 8, 1942	01 hour	29/09/23	Discussion Audio Visual Display
	Dr B R Ambedkar's Constituent Assembly Speech on Dec 17,1946	01 hour	06/10/23	Discussion Audio Visual Display
	I have a Dream-Martin Luther King Junior	01 hour	13/10/23	Discussion Audio Visual Display
	Productive Skills: Speaking and Writing Skills	**26 hours**		
Speaking Skills	Presentation Skills: • InformativeInstructional Presentation • Persuasive Presentation • Decision Making Presentation • Demonstrative Presentation	05 hours	15/09/23 25/09/23 06/10/23 16/10/23 25/10/23	Explanation and writing exercises
	Introduction to writing and types of writing			
WritingSkills	• Introduction to writing and types of writing: • Descriptive Writing • Narrative Writing • Reflective Writing • Persuasive/ Argumentative Writing • Comparative Writing • Cause and Effect Writing	05 hours	09/11/23 20/11/23 24/11/23 29 /11/23 08/12/23	Lecture and writing exercises, Class based activity
	Business Correspondence			
WritingSkills	• Letters of Enquiry, Order Letters, Letters of Complaint, Reply to Letter of Complaint, Promotion Letters, Sales Letter	06 hours	08/11/23 15/12/23 22/11/23 24/11/23 04/12/23 16/12/23	Lecture and writing exercises, Class based activity
	Commercial Writing			
WritingSkills	• Advertisement Writing • Product Manual • Poster/ Brochure Writing	05 hours	09/11/23 20/11/23 28/11/23 05/12/23 13/12/23	Lecture and writing exercises, Class based activity

	Internal Assessment for C2 **Unit III and Unit IV**	**01 Week**	**08/12/2023 to 14/12/23**	**Submission of Assignment Last date 14/12/2023**

Department: English
Title of the Paper: Generic English L2 Drama and Language Component
[Course Code – [22 Eng319] BA, B.Sc. BCA
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Geetha. D, Dr Indrani M R, Smt. Hamsaveni, Smt.Vidya .S
Total Hrs: 56 Hours Hrs/week: 4

Curriculumas prescribed by the Institution	**TOPIC**	**No.of Hours required to complete**	**Date**	**Method of Deployment of Syllabus and Remarks**
Unit I Othello- William Shakespeare	**Receptive Skills : Reading and Listening Skills-Play**	**26 hours**		
	William Shakespeare as a Writer	01 hour	11/09/23	COs and POs Discussed Lecture
	Summary, Plot Outline, Characters	01 hour	12/09/23	Lecture
	Act-1:Scene-1- Opening Scene	01 hour	15/09/23	Lecture and Discussion
	Scene-2 Message from The Duke	01 hour	20/09/23	Lecture
	Scene -3- Court Scene	02 hours	22/09/23 27/09/23	Lecture and Discussion
	Importance of Soliloquy in Drama (Iago's Soliloquy)	01 hour	29/09/23	Lecture and Discussion Audio Visual Display
	Act II Scene 1- Island of Cyprus Iago's Soliloquy	01 hour	09/10/23	Lecture and Discussion
	Scene 2 – Proclamation read by Herald	01 hour	10/10/23	Lecture and Discussion
	Scene 3- Dismissal of Cassio	02 hours	16//10/23 17/10/23	Lecture
	Act III Scene- II and III- Temptation Scene,	03 hours	20/10/23 25/10/23 27/10/23	Lecture and Discussion Audio Visual
	Scene IV Desdemona and Othello's Conversation to forgive Cassio	02 hours	30/10/23 31/10/23	Lecture and Discussion
	Act IV Scene 1-Othello's determination to kill Desdemona	02 hours	03/11/23 06/11/23	Lecture and Discussion Presentation by students

	Internal Assessment for C1 Unit I and Unit II	01	**15/11/2023**	**15/11/2023 to 18/11/2023 Internal Assessment Test Conducted for 20 marks**
	Scene 2 – Othello Questioning Emilia Desdemona begging Othello to tell the reason for his anger	03 hours	8/11/23 9/11/23 13/11/23	Lecture and Discussion
	Scene III- Othello suspects Desdemona	03 hours	27/11/23 4/12/23 5/12/23	**Display of Test Marks on Notice Board on 21/11/2023** Lecture and Discussion
	Screening of the Movie	02 hours	8/12/23 9/12/23	Audio Visual Display
	Act V Scene 1- Plan to kill Cassio, True character of Othello	02 hours	11/12/23 12/12/23	Student presentation
	Scene 2- Climax – Death of Desdemona. Othello	02 hours	13/12/23 15/12/23	Discussion
ListeningSkills	**Listening Skills Persuasive Speeches**	**05 hours**		
	Swami Vivekananda's Speech at the World Parliament of Religions in Chicago	01 hour	13/09/23	Discussion Audio Visual Display
	Crisis of Civilization Speech by Rabindranath Tagore at Shanti Nikethan in April 1941	01 hour	25/09/23	Discussion Audio Visual Display
	Quit India _ Mahatma Gandhi on August 8, 1942	01 hour	03/10/23	Discussion Audio Visual Display
	Dr B R Ambedkar's Constituent Assembly Speech on Dec 17,1946	01 hour	11/10/23	Discussion Audio Visual Display
	I have a Dream-Martin Luther King Junior	01 hour	20/10/23	Discussion Audio Visual Display
Unit II Speaking Skills	**Productive Skills: Speaking and Writing Skills**	**26hours**		

	• Presentation Skills: • Informative/ Instructional Presentation • Persuasive Presentation • Decision Making Presentation • Demonstrative Presentation	05 hours	15/09/23 26/09/23 06/10/23 13/10/23 25/10/23	Explanation and writing exercises
Unit III Writing Skills	**Introduction to writing and types of writing**			
	Introduction to writing and types of writing: • Descriptive Writing • Narrative Writing • Reflective Writing • Persuasive/ Argumentative Writing • Comparative Writing • Cause and Effect Writing	05 hours	30/10/23 31/10/23 07/11/23 21 /11/23 29/11/23	Lecture and writing exercises, Class based activity
	Business Correspondence			
	• Letters of Enquiry, Order Letters, Letters of Complaint, Reply to Letter of Complaint, Promotion Letters, Sales Letter	06 hours	08/11/23 10/11/23 22/11/23 24/11/23 04/12/23 05/12/23	Lecture and writing exercises, Class based activity
Unit IV	**Commercial Writing**			
	• Advertisement Writing • Product Manual • Poster/ Brochure Writing	05 hours	20/11/23 28/11/23 06/12/23 13/12/23	Lecture and writing exercises, Class-based activity
	Internal Assessment for C2 Unit III and Unit IV	**01 Week**	**08/12/2023 to 14/12/23**	**Submission of Assignment Last date 14/12/2023**
	Revision	**02**	14/12/23 15/12/23	

Department: English
Title of the Paper: DSC 9 Literary Criticism
[Course Code –231579]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Sri Manjunath K.R, Dr. Indrani M R
Total Hrs: 60 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I Introduction to Criticism (15Hours)	What is Criticism? Meaning, Definitions,	02	12/09/2023 19/09/2023	POs and COs were introduced and discussed
	Functions, Methods of Criticism.	03	26/09/2023 03/10/2023 10/10/2023	Lecture and Discussion
	Introduction to the following critics: Philip Sidney John Dryden, Alexander Pope Samuel Johnson,	03	17/10/2023 28/10/2023 31/10/2023	Lecture and Discussion
	William Wordsworth S T Coleridge P B Shelley S T Coleridge	03	07/11/2023 21/11/2023 28/11/2023	Lecture and Discussion
	D H Lawrence, Virginia Woolf T.S Eliot	02	05/12/2023 12/12/2023	Lecture and Discussion
	F R Leavis, IA Richards	02	Extra Class	Lecture and Discussion
Unit II Classical Criticism (15 Hours)	• Aristotle's Concept of Tragedy • Definition of Tragedy • Six Elements of Storytelling	08	13/09/2023 20/09/2023 27/09/2023 04/10/2023 11/20/2023 18/10/2023	Lecture and Discussion
	• Plot, Character, Dialogue • Setting, Song		25/10/2023 08/11/2023	
	Longinus Concept of Sublime	07	22/11/2023 29/11/2023 06/12/2023 13/12/2023 Extra classes	Lecture and Discussion
Unit and Unit II	**Internal Assessment for C1**	01	**15/11/2023**	**15/11/2023 to 18/11/2023 Internal Assessment Test Conducted for 20 marks**
	Coleridge's 'Concept of Imagination	04	11/09/2023 25/09/2023 09/10/2023 16/10/2023	Lecture and Discussion

Unit III Romantic Criticism (15 Hours)	Preface to the Lyrical Ballads - William Wordsworth	04	30/10/2023 06/11/2023 13/11/2023 20/11/2023	Lecture and Discussion **Display of Test Marks on Notice Board on 21/11/2023**
	Walter Pater's Essay on Style from *Appreciations*	03	27/11/2023 04/12/2023 11/12/2023	Lecture and Discussion
Unit 1V Modern Criticism (15 Hours)	Why the Novel Matters by D H Lawrence	03	13/09/2023 20/09/2023 27/09/2023	Lecture and Discussion
	Metaphysical Poets - T S Eliot	04	04/10/2023 11/10/2023 18/10/2023 25/10/2023	Lecture and Discussion
	Four Kinds of Meaning - IA Richards	05	08/11/2023 22/11/2023 29/11/2023 06/12/2023 13/12/2023/	Lecture and Discussion
Unit III and Unit IV	**Internal Assessment for C2**	**01 Week**	**08/12/2023 to 14/12/2023**	**Submission of Assignment Last date 14/12/2023**

Department: English
Title of the Paper: DSC 10 Subaltern Studies
[Course Code –231580]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Smt Rnjitha, Smt. VidyaTotal
Hrs: 60 Hours (4 Hrs/Week)

Curriculum as prescribed by theInstitution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit I Introduction (15Hours)	Annihilation of Caste (Essay) Dr. B.R. Ambedkar	05	11/09/2023 12/09/2023 25/09/2023 09/10/2023 16/10/2023	POs and COs were introduced and discussed
	Caste and Subaltern Consciousness - Partha Chatterjee	05	30/10/2023 03/11/2023 06/11/2023 13/11/2023 20/11/2023	Lecture and Discussion

	On Some Aspects of Historiography of Colonial India – Ranajit Guha	05	27/11/2023 04/12/2023 11/12/2023 Extra Class	Lecture and Discussion
Unit II *Rudaali* – Mahasweta Devi**(15 Hours)**	Mahashweta Devi as the voice of the Marginalized women Introduction and Bio note	02	15/09/2023 22/09/2023	Lecture and Discussion
	Summary	01	29/09/2023	Lecture and Discussion
	Plot Analysis, setting and life of a professional mourner	02	06/10/2023 13/10/2023	Lecture and Discussion
	Characters Life of Sanichari	02	20/10/2023 27/10/2023	Lecture and Discussion
	The theme of Caste and Class and the Patriarchal society	02	03/11/2023 10/11/2023	Lecture and Discussion
	Poverty and Humiliation faced by the lo caste women	03	24/11/2023 01/12/2023 08/12/2023	Presentation by Students
	Movie Rudaali Directed by Kalapana Lazmi	01	15/12/2023	Discussion
	Internal Assessment for C1 Unit I and Unit II	**01**	**16/11/2023**	**15/11/2023 to 18/11/2023 Internal Assessment Test Conducted for 20 marks**
Unit III (15 Hours) *Jokumaraswamy* ChandrashekharaKambara	Introduction to the Writer and the Drama	02	12/09/2023 19/09/2023	Lecture and Discussion
	Patriarchal Society and its impact on the Lives of the Women	03	26/09/2023 03/10/2023 10/10/2023	Discussion
	The character of Goda and his Hypocrisy	02	17/10/2023 31/10/2023	Discussion
	Characters Shari and Ningi and their importance	02	07/11/2023 21/11/2023	**Discussion Display of Test Marks on Notice Board**
	Sexuality and Violence as a theme	02	28/11/2023 05/12/2023 12/12/2023	Discussion
	Bama as a Dalit Woman Writer Karukku as an Autobiographical novel	02	16/09/2023 23/09/2023	Lecture and Discussion

Unit 1V (15 Hours) *Karukku* – Bama	The Village and the Caste Discrimination	02	30/09/2023 07/10/2023	Lecture and Discussion
	Portrayal of Parayars and Chaalliyar community	01	14/10/2023	Lecture and Discussion
	Childhood memories	01	21/10/2023	Lecture and Discussion
	Bama's Bhakti and Belief in God Identified the fake behaviour of the Church	02	04/11/2023 11/11/2023	Lecture and Discussion
	Exploring the Writer's Tamil Dalit Identity	02	25/11/2023 02/12/2023	Presentation by Students
	Gender Discrimination as a theme of the novel	02	09/12/2023 16/12/2023	Lecture and Discussion
	The theme of Subjugation to Liberation	03 hours	Extra Class	Lecture and Discussion
	Internal Assessment for C2 Unit III and Unit IV	**01 Week**	**08/12/2023 to 14/12/2023**	**Submission of Assignment Last date 14/12/2023**

Department: English
Title of the Paper: DSC 11 Life Narratives
[Course Code –231581]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Ms Geetha. D, Smt. HamsaveniTotal

Hrs: 60 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit I Introduction to Life Narratives (15Hours)	What are Life Narratives? Genres of Life Narratives	02 hours	14/09/2023 21/09/2023	Pos and Cos were introduced and discussed
	Introduction to The New Critical Idiom: Autobiography- Linda Anderson		05/10/2023 12/10/2023 19/10/2023 26/10/2023	Lecture and

		03 hours	02/11/2023 09/11/2023 23/11/2023 70/12/2023 14/12/2023	Discussion
Unit II Autobiography (15 Hours)	Unbreakable- M.C Mary Kom	15 hours	05/10/2023 12/10/2023 19/10/2023 26/10/2023 2/11/2023 09/11/2023 23/11/2023 07/12/2023 14/12/2023	Lecture and Discussion
	Internal Assessment for C1 Unit I and Unit II	**01**	**17/11/2023**	**15/11/2023 to 18/11/2023 Internal Assessment Test**
				Conducted for 20 marks
Unit III Memories and Diaries (15 Hours)	**Memoirs of My Working Life (Chapter 6**) Sir. M.V Visvesvaraya The Appointment and Meeting of Maharaja	01hour	16/09/2023	Lecture and Discussion
	Honesty and Integrity	01 hour	23/09/2023	Lecture and Discussion
	Building of KRS Dam and Technical Features	01 hour	30/09/2023	Lecture and Discussion
	The personality of Sir MV	01 hour	07/10/2023	Lecture and Discussion
	My Dateless Diary R.K.Narayan Introduction New York Days	02 hour	14/10/2023 21/10/2023	Lecture and Discussion **Display of Test marks on Notice Board on 23/11/2023**
	Through the Midwest	01 hour	04/11/2023	Lecture and Discussion
	Chicago	01 hour	11/11/2023	Lecture and Discussion
	Westward Bound and Los Angeles	01 hour	25/11/2023	Lecture and Discussion

	Grand Canyon and Beyond	01 hour	02/12/2023	Lecture and Discussion
	Gurukula and Washington DC	01 hour	09/12/2023	Lecture and Discussion
	New York Again	01 hour	16/12/2023	Presentation by Students
	Cross Cultural Aspect in the Diary	02 hours	Extra Classes	
Unit 1V **C.V Raman: A Biography- Uma Parameswaran** **(15 Hours)**	**C.V Raman: A Biography- Uma Parameswaran** Introduction and Family Background	02 hours	15/09/2023 22/09/2023	Lecture and Discussion
	College Education and Marriage	01 hour	29/09/2023	Lecture and Discussion
	Star Gazing in Calcutta	01 hour	06/10/2023	Lecture and Discussion
	Blue Mediterranean	01 hour	13/10/2023	Lecture and Discussion
	Raman Effect	01 hour	20/10/2023	Presentation by Students
	Nobel Prize	01 hour	27/10/2023	Presentation by Students
	Women's Education	01 hour	3/11/2023	Lecture and Discussion
	Panchavati	01 hour	10/11/2023	Presentation by Students
	Raman Institute of Science	01 hour	24/11/2023	Lecture and Discussion
	Mr. Prime Minister, All that glitters is not Gold	02 hour	01/12/2023 08/12/2023	Presentation by Students
	The Final Decade	02 hours	15/12/2023	Lecture and Discussion
	Internal Assessment for C2 **Unit III and Unit IV**	**01 Week**	**02/12/2023 to 09/12/2023**	**Submission of Assignment Las date** **09 /12/2023**

Department: English
Title of the Paper: DSC 3 Introduction to Phonetics and Linguistics
[Course Code –211279]
Term Period: 12.02.2024-25.12.2024
Faculty Name: Dr Indrani, Hamsaveni, Vidya
Total Hrs: 42 Hours (3 Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit-1 Introduction to Phonetics and Linguistics (14 hours)	**Syllabus Discussion** **Chapter 1** Language-its nature & definitions	04	16/02/2024 23/02/2024 15/03/2024 22/03/2024	POs and Course Outcomes of the units discussed
	Characteristics features	03	05/04/2023 12/04/2023 19/04/2023	Lecture
	Chapter 2 Linguistics- Definitions and	02	26/04/2023 08/05/2024	Lecture
	Scope of Linguistics	02	17/05/2024 Extra class	Lecture
	Chapter 3 Branches of Linguistics	03	Extra Class	Lecture and Discussion
Unit-2 Phonetics and Phonology (14 Hours)	**Chapter 4** Speech Mechanism,	02	16/02/2024 23/02/2024	Lecture and Discussion
	Organs of Speech	02	15/03/2024 22/03/2024	Lecture and Video Playing
	Chapter 5 Production of Speech Sounds,	02	05/04/2023 12/04/2023	Lecture and Discussion
	Classification of Speech Sounds- Vowels and Consonants	03	19/04/2024 26/04/2024 08/05/2024	Lecture and Discussion
	Chapter 6 Transcription of words,	03	17/05/2024 Extra Class	Lecture and Practice by dictation
	Word stress, phonetics-phone, allophone- Phoneme	02	Extra Class	Lecture
	Internal Assessment Test for C 1 **From Unit I and Unit II**	**01**	**17/04/2024**	**IA Test from 15/04/2024 to 18/04/2024** **Test conducted for 20 marks**

Unit-3: Morphology, Syntax and Semantics and Lexicon (14 hours)	**Chapter-7** Morphology- Morph-word Classes: Lexical Categories, Functional Categories	02	14/02/2024 21/02/2024	Lecture and Discussion
	Morphological Properties of English Verbs and Building Words,	02	06/03/2024 13/03/2024	Lecture and Discussion
	Allomorph, Morphome	01	20/03/2024	Lecture and Discussion
	Chapter-8 Syntax-Types of sentences basic terminology	01	27/03/2024	Lecture and Discussion
	Categories and Functions of Sentences	02	03/04/2024 10/04/2024	Lecture and Discussion
	Functions of Clauses	02	24/04/2024 3/05/2024	**Display of Marks on Notice Board on 24/04/2024**
	Chapter -9 Semantics and Lexicon- word meaning: semantic features	02	15/05/2024 22/05/2024	Lecture and Discussion
	Entailment and Hyponymy, meaning opposites,	01	24/05/2024	Lecture
	Dictionaries and Prototypes	01	Extra Class	Lecture
	Internal Assessment Assignment for C2 From Unit 3	**01 Week**	03/05/2024 to 09/05/2024	**Submission of Assignment 09/05/2024**

Department: English
Title of the Paper: DSC -4 Indian Writing in English (Part -2)
[Course Code –211280]
Term Period: 12.02.2024-25.12.2024
Faculty Name: K R Manjunath, Geetha, Ranjitha M R
Total Hrs: 42 (3Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: History	Post-Independence (1947-1980) Indian English Poetry, Prose	05	15/02/2024 22/02/2024 29/02/2024 07/03/2024 14/03/2024	POs and Course Outcomes of the units discussed

of Indian English Literature (Post-Independence Period) (14 hours)	Post–Post-Independence Indian English Drama and Novel	05	21/03/2024 28/03/2024 04/04/2024 25/04/2024 2/05/2024	Lecture and Discussion
	Post-1980's Indian English Literature	04	09/05/2024 16/05/2024 23/05/2024 Extra Class	Lecture and Discussion
Unit II Introducing Writers of the Post-Independence Era	Kamala Das, Shashi Deshpande, Chamman Nahal, Manohar Malgonkar, Amitav Gosh, K.A Abbas, Vikram Seth, Arundathi Roy, Arun Joshi, G V Desani, TP Kailasam, Girish Karnad	05	13/02/2024 20/02/2024 27/02/2024 05/03/2024 12/03/2024	Discussion and Classroom presentation by students Watching of Interviews of Select Writers
	Anita Desai, Manju Kapur, Arvind Adiga, Chitra Banerjee Namitha Gokhale	05	19/03/2024 26/03/2024 02/04/2024 23/04/2024 30/04/2024	Discussion and Classroom presentation by students
				Watching of Interviews of Select Writers
	Kiran Desai, Anita Nair, Mahesh Dattani, Salman Rushdie, Ruskin Bond, Jeet Thayil, Sunitha Namjoshi, Arun Kolatkar	04	07/05/2024 14/05/2024 21/05/2024 Extra Class	Lecture and Discussion
	Internal Assessment Test for C 1 From Unit I and Unit II	**01**	**17/04/2024**	**IA Test from 15/04/2024 to 18/04/2024 Test conducted for 20 marks**
	Poetry • Syed Amanuddin- Don't Call Me an Anglo Indian	01	12/02/2024	Lecture and Discussion
	• Kamala Das- An Introduction	02	19/02/2024 26/02/2024	Lecture and Discussion
	• A.K Ramanujan- Small Scale Reflections on a Great House	02 hours	04/03/2024 11/03/2024	Lecture and Discussion
	• Nissim Ezekiel- Good by Party to Miss Pushpa T.S	01	18/03/2024	Lecture and Discussion

Unit III Illustrative Texts	**Short Play** Seven Steps Around the Fire by Mahesh Dattani • Theme of Marginalization, Plight of the Eunuch Committee • Characters of Uma, Suresh Rao, Munswamy, Champa • The Women characters like Kamala, Anarkali, Champa	03	25/03/2024 01/04/2024 08/04/2024	Lecture and Discussion
	Novel Train to Pakistan by Kushwanth Singh • Introduction and popularity of Partition Novels • Theme of Partition • Manjra the Village • Jugat Singh and Iqbal • The Train Episode	05	22/04/2024 29/04/2024 06/05/2024 13/05/2024 20/05/2024	Lecture and Discussion Screening of the Movie **Display of Test marks on Notice board on 22/04/2024**
	Internal Assessment Assignment for C2 From Unit 3	**01 Week**	**03/05/2024 to 09/05/2024**	**Submission of Assignment 09/05/2024**

Department: English
Title of the Paper: Poetry, Prose, and Language Component
(Course Code –[21Eng220] BBA B. Com/BBA
Term Period:12-02-24 to 25-05-24
Faculty Name: K R Manjunath, Geetha. D, Dr Indrani, Smt Hamsaveni, Ranjitha
Total Hrs: 56
Hrs/Week: 4

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit I **Poetry** **(18 hours)**	Death, Be Not Proud by John Donne	2 hours	12-02-24 19-02-24	POs and COs were introduced Lecture and Discussion
	My Last Duchess by Robert Browning	3 hours	15-02-24 26-02-24 28-02-24	Lecture and Discussion
	Ozymandias by PB Shelley	2 hours	18-03-24 25-03-24	Lecture and Discussion
	Unknown Citizen by W H Auden	3 hours	3-04-24 22-04-24 29-04-24	Lecture+ Discussion
	I, Too Langston Huges	1hour	5-04-24	Lecture+ Discussion

	Mirror by Sylvia Plath	2 hours	12-04-24 26-04-24	Lecture Discussion
	Mending Wall by Robert Frost	2 hours	2-05-24 09-05-24 16-05-24	Lecture Discussion
	Ulysses by the Merlion- Edwin Thamboo	3 hours	7-05-24 14-05-24 21-05-24	Lecture Discussion
Unit II Prose (16 hours)	After Twenty Years- O Henry	4 hours	14-02-24 21-02-24 4-03-24 11-03-24	Lecture Discussion
	On the Rule of the Road- A G Gardiner	4 hours	22-2-24 29-02-24 6-03-24 12-03-24	Lecture Discussion
	We Want no Caesars (Rashtrapati)- Jawaharlal Nehru	4 hours	13-03-24 20-03-24 27-03-24 03-04-24	Lecture Discussion
	The Night Train to Deoli- Ruskin Bond	4 hours	10-04-24 24-04-24 4-04-24 18-04-24	Lecture Discussion
	C-1 INTERNAL TEST	**01 hour**	**16/04/2024**	**16/04/2024 to 20/04/2024 Internal Assessment Test Conducted for20 marks**
Unit III Language Component (20 hours)	Adjectives	6 hours	12-02-24 19-02-24 15-02-24 26-02-24 28-02-24	Lecture and writing exercises
	Adverbs	5 hours	18-03-24 25-03-24 03-04-24 22-04-24 29-04-24	Lecture and writing exercises, Class-based activity **Display of Test Marks onNotice Board on 21/04/2024**
	Linkers (Conjunctions)	5 hours	16-02-24 23-02-24 15-03-24 22-03-24 01-04-24	Lecture and writing exercises through worksheets

	Words Often Confused (Text Based)	4 hours	08-04-24 06-05-24 13-05-24 20-05-24	Lecture and writing exercises, Class-based activity
	C2-INTERNAL ASSESSMENT **Unit III**	**1 Week**	**05/05/2024 to 11/05/2024**	**Submission of Assignment 11/05/2025**
	Revision	2 hours		

Department: English
Title of the Paper: Poetry, Prose, and Language Component
Course Code – [21Eng219] BA, B.Sc., BCA
Term Period:12.02.2024 to 25.05.2024
Faculty Name: Manjunath, Geetha, Dr Indrani, Hamsaveni, Ranjitha, Suma
Total Hrs: 56

Hrs/week: 04

Curriculumas prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit I Poetry (18 hours)	How Do I Love How Thee? Elizabeth Barret Browning	3 hours	12-02-24 19-02-24 26-02-24	Pos and Cos were introduced Lecture
	The Laboratory by Robert Browning	3 hours	17-02-24 24-02-24 02-03-24	Lecture and Discussion
	Thou Art Indeed Just, Lord by GM Hopkin	2 hours	07-03-24 14-03-24	Lecture and Discussion
	The Bread of the People byBertolt Brecht	2 hours	21-03-24 28-03-24	Lecture and Discussion
	No Men are Foreign by JamesKirkup	1 hour	09-03-24	Lecture and Discussion
	Bankers Are Like Anybody byOgden Nash	3 hour	16-03-24 23-03-24 30-03-24	Lecture and Discussion
	The Caged Bird by MayaAngelou	2 hours	11-05-24 18-05-24	Lecture and Discussion
	Stammer by K Sachidananda Murthy	2 hour	16-05-24 18-05-24	Lecture and Discussion

Unit II Prose (16 hours)	The Story of an Hour – KateChopin	4 hours	13-02-24 20-02-24 27-02-24 05-03-24	Lecture and Discussion
	The Social Responsibilities of a Scientist-Bertrand Rusell	4 hours	04-03-24 11-03-24 18-03-24 25-03-24	Lecture and Discussion
	A Devoted Son- Anita Desai	4 hours	04-04-24 25-04-24 02-05-24 09-05-24	Lecture and Discussion
	Pandit Jasraj- Captain Gopinath	4 hours	06-04-24 13-04-24 27-04-24 04-05-24	Lecture and Discussion Presentation byStudents
	C-1 INTERNAL TEST	**01 hour**	**16/04/2024**	**16/04/2024 to 20/04/2024 Internal Assessment Test Conducted for 20marks**
Unit III Language Component (20 hours)	Adjectives	4 hours	15-03-24 22-03-24 29-03-24 07-03-24	Discussion and Classroom Activity **Display of Test Marks on NoticeBoard on 21/04/2024**
	Adverbs	5hours	12-03-24 19-03-24 26-03-24 02-04-24 23-04-24	Discussion andClassroom Activity
	Linkers (Conjunctions)	4 hours	12-02-24 19-02-24 26-02-24	Discussion andClassroom Activity
			17-02-24	
	Words Often Confused (Text Based)	5 hours	24-02-24 02-03-24 07-03-24 14-03-24 21-03-24	Discussion and Classroom Activity

	C2-INTERNAL ASSESSMENT **Unit III**	**1 Week**	**05/05/2024** **to** **11/05/2024**	**Submission ofAssignment** **11/05/2025**

Department: English
Title of the Paper: DSC 7 British Literature (19th Century and 20th Century)
Course Code – [221479]
Term Period: 12/02/2024- 25/05/2024
Faculty Name: Sri Manjunath KR, Dr Indrani, Vidya. S
Total Hrs: 42 Hours (3 Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment andRemarks**
UNIT I **14 Hours**	• Romantic Poetry	01	14/02/2024	POs and Cos wereintroduced and discussed
	• Victorian Poetry	01	21/02/2024	Lecture and Discussio n
	• Modern Drama	01	06/03/2024	Presentation byStudents
	• Pre-Raphaelite Poetry	01	13/03/2024	Lecture and Discussio n
	• Oxford Movement	01	20/03/2024	Lecture and Discussio n
	• Victorian Novel,	01	27/03/2024	Lecture and Discussio n
	• 19th century Prose	01	03/04/2023	Lecture and Discussio n
	• Modern Poetry	01	10/04/2024	Lecture and Discussio n
	• War Poetry	01	24/04/2024	Presentation byStudents
	• Oxford Poets	01	03/05/2024	Lecture and

				Discussio n
	• Modern Novel	01	15/05/2024	Lecture and Discussio n
	• Problem Plays	01	22/05/2024	Presentation byStudents
	• Irish Theatre Movement,	01	24/05/202 4	Lecture and Discussion
	• Modern Prose	01	Extr a Clas s	Lecture and Discussion
UNIT II **Representativ e writers works and trends**	• William Wordsworth	01	16/02/202 4	Presentation byStudents
	• Jane Austen,	01	23/02/202 4	Lecture and Discussion
	• Charles Lamb, WilliamHazlitt,	01	15/03/202 4	Lecture and Discussion
	• Walter Scott,	01	22/03/202 4	Lecture and Discussion
	• Alfred Tennyson, Matthew Arnold,	01	05/04/202 4	Lecture and Discussion
	• John Ruskin, ThomasCarlyle, Cardinal Newman,	01	12/04/202 4	Presentation byStudents
	• Thomas Hardy,	01	19/04/202 4	Lecture and Discussion
	• Charles Dickens, • T. S. Eliot, W.B Yeats	01	26/04/202 4	Lecture and Discussion
	• Virginia Woolf • D. H. Lawrence, • W. H. Auden. • G. B. Shaw,	02	08/05/202 4 Extra Class	Lecture and Discussion
	• Graham Green, Somerset Maugham, • J. M. Synge, JohnGalsworthy etc.	02	17/05/202 4 Extra Classes	Lecture and Discussion
	Internal Assessment Test for C 1 From Unit I and Unit II	**01**	**16/04/202 4**	**IA Test from 15/04/2024 to 18/04/2024 Test conducted for**

				20 marks
Unit III **Representative** **Texts**	**Poems** • Dover Beach - Arnold	01	12/02/2024	Lecture and Discussion
	• Ode on a Grecian Urn - John Keats	01	19/02/2024	Lecture and Discussion
	• Journey of the Magi - T. S.Eliot	01	26/02/2024	Lecture and Discussion
	• Second Coming - W. B.Yeats	01	04/03/2024	Lecture and Discussion
	Essays • Unto this Last (Veins ofWealth) - John Ruskin	01	11/03/2024	Lecture and Discussion
	• Enslaved by Civilization - D. H. Lawrence	01	18/03/2024	Lecture and Discussion
	• On Letter Writing - A. G.Gardiner	01	25/03/2024	Discussion
	• With the Photographer - Stephen Leacock	01	01/04/2024	Discussion and Presentation by Students
	Novel: Heart of Darkness - Joseph Conrad • Plot Analysis • Theme of Imperialism • Characters of Marloaeand Mistah Kurtz • The Journey to the InnerStation • Significance of the title	06	08/04/2024 22/04/2024 29/04/2024 06/05/2024 13/05/2024 20/05/2024	**Display of Test Marks on notice Board on 22/04/2024** Lecture and Discussion
	Internal Assessment Assignment for C2 From Unit 3	**01 Week**	02/12/2024 To 09/12/2024	**Submission of Assignment on 09/12/2024**

Department: English
Title of the Paper: DSC 8 Gender Studies
Course Code –]221480]
Term Period: 12/02/2024- 25/05/2024
Faculty Name: Geetha, Dr Indrani, HamsaveniTotal
Hrs: 42 Hours (3 Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
UNIT I Introduction to Gender Studies (14 Hours)	• Sex and Gender	2	15/02/2024 22/02/2024	PO s and Cos introduced Lecture
	• Femininity, • Body Feminist	01	29/02/2024	Lecture and Discussion
	• Politics • Patriarchy	01	07/03/2024	Lecture and Discussion
	• Masculinity	01	14/03/2024	Lecture and Discussion
	• Discrimination • Gynocentrism	01	21/03/2024	Lecture and Discussion
	• Dichotomy	01	28/03/2024	Lecture and Discussion
	• , Queer Studies • Third Gender	01	04/04/2024	Lecture and Discussion
	Essays • Toward Feminist Poetics - Elaine Showalter	03	18/04/2024 25/04/2024 02/05/2024	Lecture and Discussion
	• What is Patriarchy? /Understanding Gender - Kamala Bhasin	03	09/05/2024 16/05/2024 23/05/2024	Lecture and Discussion
Unit II Representative Writers (14 Hours)	**Short Stories** • Stench of Kerosine -Amrita Pritam	04	17/02/2024 24/02/2024 02/03/2024 09/03/2024	Lecture and Discussion
	• Draupadi by Mahashweta Devi	03	16/03/2024 23/03/2024 31/03/2024	Lecture and Discussion
	• The Shadow-Shashi Deshpande	03	06/04/2024 13/04/2023 20/04/2024	Lecture and Discussion
	• Gulabi Talkies – Vaidehi	04	27/04/2024 04/05/2024 11/05/2024 18/05/2025	Lecture and Discussion

	Internal Assessment Test for C 1 From Unit I and Unit II	**01**	**16/04/2024**	**IA Test from 15/04/2024 to 18/04/2024 Test conducted for 20 marks**
Unit III Representative Texts (14 Hours)	**Poems** • Meeting Poets-Eunice D'Souza	02	13/02/2024 20/02/2024	Lecture and Discussion
	• My Grandmother's House-Kamala Das	02	23/02/2024 05/03/2024	Lecture and Discussion
	• Blessing-Imtiaz Dharkar	02	12/03/2024 15/03/2024	Lecture and Discussion
	• To a Daughter on Rakshabandhan -Smita Agarwal	01	26/03/2024	Lecture and Discussion
	Novel • The Prison We Broke – Baby Kamble • The Genre of Autobiography • Early life of Baby Kamble • The depiction of Maharcommunity • Threefold subjugation of thenovel- Gender, Caste, and Economic subjugation of women • Socio-economic culturalaspects of the society	06	16/04/2024 23/04/2024 30/04/2024 07/05/2024 14/05/2024 21/05/2024	Lecture and Discussion **Display of Test Marks on 22/04/2024**
	Internal Assessment Assignment for C2 From Unit 3	**01 Week**	**04/ 05/2024 to 10/05 /2024**	**Submission of Assignment on 10/05/2024**

Department: English
Title of the Paper: Generic English L2 Drama and Language Component
[CourseCode – 22Eng419 BA/B.Sc/BCA
Term Period: 12.02.2024 to 30.05.24
Faculty Name: Dr Indrani M R, Smt. Hamsaveni, Smt.Vidya .S ,Sushma
Total Hrs: 56 Hours 4/Hrs/week

Curriculumas prescribed by the Institution	**TOPIC**	**No.of Hours required to complete**	**Dates**	**Method of Deployment of Remarks**
	Receptive Skills: Reading and Listening Skills-Play	**26 hours**		

UNIT-1 **Novel- Talkative Man by R KNarayan**	Introduction to Indian Literature – About R K Narayan and his works.	02 hours	13/02/2024 14/02/2024	COs and POs Discussed Lecture
	Novel Outline, Plot and Characters Introduction	02 hours	20/02/2024 21/02/2024	Lecture
	Library Introduction of Dr Rann	02 hours	27/02/2024 28/02/2024	Lecture and Discussion
	About Station Master	02 hours	05/03/2024 06/03/2024	Lecture
	Plight of Dr Rann at waiting room	01 hour	12/03/2024	Lecture and Discussion
	Gopichand and his profession	01 hour	13/03/2024	Lecture and Discussion
	Talkative and Rann in search of new house	01 hour	19/03/2024	Lecture and Discussion
	Article published by Talkative man	03 hours	20/03/2024 26/03/2024 27/03/2024	Lecture and Discussion
	Sarasa's appearance and Rann's crookedness	02 hours	02/04/2024 03/04/2024	Lecture and Discussion
	Relation between Dr Rann and Girija	02 hours	10/04/2024 23/04/2024	Lecture and Discussion
	Lecture on Futurology	02 hours	24/04/2024 07/05/2024	Lecture and Discussion Presentation by students
	Dr Rann was whisked away successfully in his wife's company	01 hour	08/05/2024	Lecture
	Talkative man consoles Girija	01 hour	14/05/2024	Lecture
	Girija's positiv e approach towards life	02 hours	15/05/2024 21/05/2024	Lecture and Discussion
	Sarasa hoping to find Dr Rann	02 hours	22/05/2024 28/0520/24	Lecture
	C-1 INTERNAL TEST	**01 hour**	**16/04/2024**	**16/04/2024 to 20/04/2024 Internal Assessment Test Conducted for 20 marks**
	Listening Skills	**05 hours**		
	: Darkling Thrush-Thomas Hardy	01hour	15/02/2024	Lecture and writing exercises,

				Class-based activity
	Good- Bye Party forPushpa T S-Nissim Ezekiel	01 hour	22/02/2024	Lecture & Discussion **Display of Test Marks on Notice Board on 21/04/2024**
	Snake – D H Lawrence	02 hours	29/02/2024 07/03/2024	Lecture and Discussion
	The Learned Astronomer-WaltWhitman	01 hour	14/03/2024	Lecture and Discussion
	Productive skills: Speaking and WritingSkills	**25 hours**		
	• Group Discussion • Public Speaking	06 hours	16/02/2024 23/02/2024 04/03/2024 11/03/2024 18/03/2024,	Explanation and writing exercises

Department: English
Title of the Paper: DSC 12 Post Colonial Studies
[Course Code –231679]
Term Period: 12/02/2024-24/05/2024
Faculty Name: Ms Geetha. D, Smt. Ranjitha M RTotal
Hrs: 60 Hours (4 Hrs/Week)

Curriculumas prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit I Introductionto Post- Colonial Studies (15 Hours)	**Key Concepts** • Colonial Discourse,	02	15/02/2024 17/02/2024	Pos and Cos were introduced Lecture
	• Colonialism • Decolonization,	03	22/02/2024 24/02/2024 29/02/2024	Lecture and Discussion
	• Hegemony • Hybridity	02	02/03/2024 07/03/2024	Lecture and Discussion
	• Postcolonialism,	01	09/03/2024	Lecture and Discussion
	• The Subaltern Text: *Minutes on Indian Education* - Macaulay	03	14/03/2024 16/03/2024 21/03/2024	Lecture and Discussion

	• Nationalism • Orientalism	02	20/04/2024 25/04/2024	Lecture and Discussion
	• Imperialism,	01	27/04/2024	Presentation by Students
Unit II Essays on Post-Colonial Studies (15 Hours)	• The Beginnings of English Literary Study in British India" – Gauri Vishwanathan	06	23/04/2024 28/03/2024 30/03/2024 04/04/2024 06/03/2024 13/04/2023	Lecture and Discussion
	• "On National Cultures" from *The Wretched of the Earth* - Frantz Fanon • (Source: *Literature in The Modern World: Critical Essays and Documents* Edited by Dennis-Walder)	06	02/05/2024 04/05/2024 09/05/2024 11/05/2024 16/05/2024 18/05/2024	Lecture and Discussion
	• Introduction to *Colonialism/Postcolonialism* – Ania Loomba	02	23/05/2024 25/05/2024	Lecture and Discussion
	Internal Assessment Test C 1 **For Unit I and Unit II**	**01**	**17/04/2024**	**IA Test from 15/04/2024 to 18/04/2024** **Test conducted for 20 marks**
Unit III PostcolonialTexts and Talks (15 Hours)	• The Danger of a Single Story • Chimamanda Adichie • (TED Talk)	07	13/02/2024 17/02/2024 20/02/2024 24/02/2024 27/02/2024 02/03/2024 05/03/2024	Lecture and Discussion Video clipping ofthe audio played
	• Cast Out Poem by Meena Kandaswamy	03	09/03/2024 12/03/2024 16/03/2024	Lecture and Discussion
	• Toba Tek Singh (short story) - Saadat Hasan Manto	03	15/03/2024 23/03/2024 26/03/2024	Presentation by students on the Horrors of Partition Lecture and Discussion
Unit 1V Novel Things Fall Apart by	• Introduction to the writer, historical and cultural context of the text	02	30/03/2024 06/04/2024	Lecture and Discussion
	• Plot analysis and Characters • Okonkwo, Oberika, Unoka, Ikemefuna, Ezinma	02	13/04/2024 16/04/2024	Lecture and Discussion

Chinua Achebe (15 Hours)	**Part I of the novel** • Okonkwo's rise and fall within the village	03	20/04/2024 23/04/2024 27/04/2024	Lecture and Discussion **Display of Marks on Notice Board on 23/04/2024**
	Part 2 of the novel	03	30/04/2024 04/05/2024 07/05/2024	Lecture and Discussion
	• Exile and arrival of Christian missionaries			
	Part 3 of the novel • Return to Umuofia and the conflict	03	11/05/2024 14/05/2024 18/05/2024	Lecture and Discussion
	• Themes of the novel • Role of Fate, Masculinity, • Effect of Colonialism	02	21/05/2024 25/05/2024	Lecture and Discussion Presentation by Students
	Internal Assessment Assignment for C 2 Unit III and Unit IV	**01 Week**	**02/05/2024 To 09/05/2024**	**Submission of Assignment on 09/05/2024**

Department: English
Title of the Paper: DSC 13 Introduction to the History of English Language
[Course Code –231680]
Term Period:12/02/2024-24/05/2024
Faculty Name: Manjunath K R, Dr Indrani M.RTotal
Hrs: 60 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit I Introduction to the History of the English Language (15Hours)	Language Families	03	14/02/2024 16//04/2024 22/04/2024	POs and Cos were introduced Lecture and Discussion
	Indo-European Family of Languages	05	23/02/2024 06/03/2024 13/03/2024 15/03/2024 20/03/2024	Lecture and Discussion Display of the family tree chart
	English as part of the Germanic Family	04	17/04/2024 19/04/2024 24/04/2024 26/04/2024	Lecture and Discussion
	Landmarks in the Development of the English Language	03	08/05/2024 13/05/2024 15/05/2024	Discussion Presentation by students
	Latin Influence		22/03/2024	

Unit II **Influences on English Vocabulary (15 Hours)**		04	27/03/2024 03/04/2024 05/04/2024	Lecture and Discussion
	Greek Influence	04	10/04/2024 12/04/2024 17/05/2024 22/05/2024	Lecture and Discussion
	French Influence	04	02/05/2024 06/05/2024 08/05/2024	Lecture and Discussion
			24/05/2024	
	Other Influences including Arabic	03	21/05/2024 2 Extra Classes	Lecture and Discussion
	Internal Assessment Test C 1 For Unit I and Unit II	**01**	**17/04/2024**	**IA Test from 15/04/2024 to 18/04/2024 Test conducted for 20 marks**
Unit III Makers of English Language (15 Hours)	Bible Translators	03	12/02/2024 13/02/2024 19/02/2024	Lecture and Discussion
	William Shakespeare	04	20/02/2024 26/02/2024 27/02/2024 28/02/2024	Lecture and Discussion
	Edmund Spenser, JohnMilton,	04	04/03/2024 05/03/2024 11/03/2024 12/03/2024	Lecture and Discussion
	Dr. Johnson, William Wordsworth	04	18/03/2024 19/03/2024 25/03/2024 26/03/2024	Lecture and Discussion
Unit 1V English Language Development (15 Hours)	Development of Spellingand Pronunciation	02	01/04/2024 02/04/2024	Lecture and Discussion
	Development of EnglishDictionaries	02	08/04/2024 15/04/2024	Lecture and Discussion
	Standard English; English as World Language; Varieties ofEnglish	03	22/04/2024 23/04/2024 29/04/2024	Lecture and Discussion **Display of Marks on Notice Board on 23/04/2024**
	Influence of Radio and Television on the English language	03	30/04/2024 06/05/2024 07/05/2024	Discussion and Presentation by students
	Influence of Cinema and Pop Culture on the English Language	03	13/05/2024 14/05/2024 20/05/2024	Discussion and presentation by students

	Influence of social media on the English language	02	21/05/2024 One extra class	Discussion
	Internal Assessment Assignment for C 2 Unit III and Unit IV	**01 Week**	**06/05/2024 To 13/05/2024**	**Submission of Assignments on 13/05/2024**

Department: English
Title of the Paper: DSC 14 Women's Writing
[Course Code –231681]
Term Period: 12/02/2024 - 25/12/2024
Faculty Name: Smt. Hamsaveni N C and Vidya S
Total hrs.: 60 Hours (4 hrs./Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I Introduction to Women's Writings(15 Hours)	• Introduction to *Women Writing in India: 600 B.* C. *tothe Early Twentieth Century* - Susie Tharu and K Lalitha – Eds	08	15/02/2024 16/02/2024 22/02/2024 23/02/2024 29/02/2024 07/03/2024 14/03/2024 15/03/2024	POs and COs were introduced and discussed Lecture and Discussion
	• Chapter One - *A Room of One's Own* - Virginia Woolf • Invitation to deliver a speechto female students	03	21/03/2024 22/03/2024 28/03/2024	Lecture and Discussion
	• Concept of Freedom and Money	01	04/04/2024	Lecture and Discussion
	• The Library Episode	01	05/04/2024	Lecture and Discussion
	• The Riverside Walk	01	12/04/2024	Lecture and Discussion
Unit II Women Poets(15 Hours)	• Palanquin Bearers - SarojiniNaidu	01	25/04/2024	Lecture and Discussion
	• Phenomenal Woman - MayaAngelou	01	26/05/2024	Lecture and Discussion

	• She - Lakshmi Kannan	02	02/05/2024 08/05/2024	Lecture and Discussio n
	• Women Like Me - Maram Al-Massri	02	09/05/2024 16/05/2024	Lecture and Discussio n
	• Flying Inside Your Own Body - Margaret Atwood	02	17/05/2024 23/05/2024	Lecture and Discussion
	Internal Assessment Test C 1 For Unit I and Unit II	**01**	**18/04/2024**	**IA Test from 15/04/2024 to 18/04/2024 Test conducted for 20 marks**
Unit III Short Stories **(15 Hours)**	• "Two Words" - Isabel Allende	03	12/02/2024 14/02/2024 19/02/2024	Lecture and Discussion
	• "Interpreter of Maladies" –Jhumpa Lahari	03	21/02/2024 26/02/2024 04/03/2024	Lecture and Discussion
	• "Theft" - Katherine AnnePorter	03	06/03/2024 11/03/2024 13/03/2024	Lecture and Discussion Presentation by Students
	• Jungle Major" – Temsula Ao	03	18/03/2024 20/03/2024 25/03/2024	Lecture and Discussion **Display of Marks on Notice Board on 22/04/2024**
Unit 1V **Novel That Long Silence** **(15 Hours)**	• Introduction to Shashi Deshpande as a women writer dealing with middle-class women and their life	02	27/03/2024 01/04/2024 03/04/2024	Lecture and Discussion Presentation by Students
	• Introduction of Characters • Jaya, Mohan, Rahu and Rati, Kamat	02	08/04/2024 10/04/2024	Lecture and Discussion
	• Summary and Analysis	03	15/04/2024 22/04/2024 24/04/2024	Lecture and Discussion
	• Jaya as the protagonist of the novel • Her marriage, her silence, her relationship with Kamat	03	29/04/2024 03/05/2024 06/05/2024	Lecture and Discussion
	• Quest for female identity as one of the themes	03	13/05/2024 15/05/2024 20/05/2024	Lecture and Discussion

	• Women in Indian Patriarchal Society- Jaya as an example	02	22/05/2024 24/05/2024	Lecture and Discussion Presentation by Students
	Internal Assessment Assignment for C 2 For Unit III and Unit IV	**01 Week**	**06/05/2024 To 13/05/2024**	**Submission of Assignments on 13/05/2024**

Department: English
Title of the Paper: Generic English L2 Drama and Language Component
[Course Code – [22Eng 420] B.Com/BBA
Term Period: 12.02.2024 to 30.05.2024
Faculty Name: Geetha D, Smt. Hamsaveni, SushmaTotal
Hrs: 56 Hours (Hrs/week: 4)

Curriculum as prescribed by the Institution	**TOPIC**	**No. of Hours required to complete**	**Date**	**Method of Deployment of Syllabus**
UNIT-1 **Novel- The Man Eater of Malgudi by R K Narayan**	Receptive Skills: Reading and Listening Skills-Novel	26 hours	12/02/2024 to 13/05/2024	Lecture Discussion
	Introduction to Indian English Literature R K Narayan as one of the Doyens of IWE	02 hours	12/02/2024 17/02/2024	Lecture Discussion
	About the Novel- The Man Eater of Malgudi and **Characters** in the novel.	02 hours	19/2/2024 24/04/2024	Lecture Discussion
	Introduction to Natraj**.**	02 hours	26/02/2024 02/03/2024	Lecture Discussion
	Relation between Vasu and Natraj	02 hours	04/03/2024 09/03/2024	Lecture Discussion Presentation
	Visit to Mempi Hills	02 hours	11/03/2024 6/03/2024	Lecture Discussion
	Natraj and Vasu's Friendship	02 hours	18/03/2024 23/0320/24	Lecture Discussion
	Vasu's plan to kill Kumar the Elephant Rangi, the temple dancer	02 hours	25/03/2024 30/03/2024	Lecture Discussion
	Vasu files a complaint against Natraj stating he is troubling him in the matter of paying the rent and taking away his mental peacefulness.	02 hours	01/04/2024 0 6/04/2024	Lecture Discussion

	Natraj and his friends takes the support of Police to arrest Vasu.	02 hours	8/04/2024 , 13/04/2024	Lecture Discussion
	C-1 INTERNAL TEST	**01 hour**	**16/04/2024**	**16/04/2024 to 20/04/2024 Internal Assessment Test Conducted for 20 marks**
	Rangi was asked to stay awake by Vasu and kill mosquitoes.	02 hours	22/04/2024 27/04/2024	Lecture Discussion Presentation**Display of Test Markson Notice Board on 21/04/2024**
	The procession passes without any problem	02 hours	29/04/2024 4/05/2024	Lecture Discussion
	Death of Vasu and its symbolic significance	02 hours	06/05/2024 11/05/2024	Lecture Discussion
	Natraj and Shastri visit the press with new hopes	02 hours	13/05/2024 18/05/2024	Lecture Discussion
	Listening Skills	**05 hours**		
	1.Darkling Thrush- by Thomas Hardy	01 hour	15/02/2024	Lecture andwriting exercises, Class based activity
	2. Good- Bye Party for Pushpa T S- Nissim Ezekiel	01 hour	22/02/2024	Lecture &Discussion
	3. Snake – D H Lawrence	02 hours	29/02/2024 , 07/03/2024	Lecture &Discussion
	4. The Learned Astronomer- Walt Whitman	01 hour	14/03/2024	Lecture &Discussion
	Productive skills: Speaking and Writing Skills	**25 hours**		

SpeakingSkills	• Group Discussion • Public Speaking	06 hours	16/02/2024 23/02/2024 04/03/2024 11/03/2024 18/03/2024 22/03/2024	Explanation and writing exercises

WritingSkills	Technical Skills: • Copy Writing • Business Writing • Travel Writing • Article Writing	08 hours	21/03/2024 28/03/2024 04/04/2024 15/04/2024 25/04/2024 03/05/2024 07/05/2024 06/05/2024	Lecture and writing exercises, Class-based activity
	E-Correspondence and Content Writing Skills			
E-Mail- Casual and Professional	• Apology Letters • Appreciating Letters • Congratulation Letters	05 hours	05/04/2024 12/04/2024 24/04/2024 30/04/2024 06/05/2024	Lecture and writing exercises through worksheets
Social MediaContent Writing Skills	• Blog Writing • Podcast Writing • Writing on Instagram	06 hours	12/05/2024 16/04/2024 25/04/2024 02/05/2024 09/05/2024 16/05/2024	Lecture and writing exercises, Class-based activity
	C2-INTERNAL ASSESSMENT	**1 Week**	**05/05/2024 to 11/05/2024**	**Submission of Assignment 11/05/2025**

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Course Plan of Odd Semester 2023-24

Department: Environmental Science
Subject: Environmental Studies
[Course code: **22EVSF26]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Sunitha MH

Total Hrs: 45 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit 1 (15 hours)	**Chapter 1: Introduction to Environmental Studies:** • Multidisciplinary nature of environmental studies. • Scope and importance; Concept of sustainability andsustainable development.	**2** hours	11-09-2023 to 14-09-23	Syllabus + POs and Cos discussion+ Lecture
	Chapter 2: Ecosystems • What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, foodwebs and ecological succession. Case studies of the following ecosystems: *a)* Forest ecosystem *b)* Grassland ecosystem *c)* Desert ecosystem Aquatic ecosystems (ponds, streams, lakes, rivers,oceans, estuaries)	**6** hours	15-09-2023 to 26-09-23	Lecture+ slide show
	Chapter 3: Natural Resources: Renewable and Non-Renewable Resources • Land resources and land-use change; Land degradation,soil	**7** hours		Lecture+ Documentary view

	erosion and desertification. • Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations. • Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (International& Inter-state). • Energy resources: Renewable and non-renewable energysources, use of alternate energy sources, growing energy needs, case studies.		27-09-2023 to 11-10-23	
Unit 2 (15 hours)	**Chapter 4: Biodiversity and Conservation** • Levels of biological diversity: Genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hotspots. • India as a mega-biodiversity nation; Endangered and endemic species of India. • Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity • Ecosystem and biodiversity services: Ecological, economic,social, ethical, aesthetic and Informational value.	**8** hours	12-10-2023 to 25-10-23	Lecture +Slide show+ group discussion+ Interaction
	Chapter 5: Environmental Pollution • Environmental Pollution: Types, causes, effects and controls; Air, water, soil and noise pollution. • Nuclear hazards and human health risks. • Solid waste management, Control measures of urban and industrial waste. • Pollution case studies.	**7** hours	26-10-2023 to 10-11-23	Power point presentation+ Interactions+ discussion+ debate

Unit 1 and 2 C1	Chapter 1, 2,3 and 4	1 hour	15-11-2023 To 18-11-2023	C1 Internal Test
Unit 3 (15 hours)	**Chapter 6: Environmental Policies and Practices** • Climate change, global warming, ozone layer depletion,acid rain and impacts on human communities and agriculture. • Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Preventionand Control of Pollution) Act; Wildlife (Protection) Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD) • Nature reserves, tribal populations and rights, and humanwildlife conflicts in Indian context.	**7** hours	11-11-2023 to 25-11-23	Lecture+ power point presentation+ Interaction 24-11-2023 Display of C1 Internal Test marks on the notice board
	Chapter 7: Human Communities and the Environment • Human population growth: Impacts on environment, human health and welfare.	**6** hours	27-11-2023 to 9-12-23	Lecture +power point presentation+ Interaction +discussion
	• Resettlement and rehabilitation of project affectedpersons; case studies. • Disaster management: Floods, Earthquake, Cyclones and			30-11-2023 C2(chapter 5,6,7,8) - Assignments

	Landslides. • Environmental movements: Chipko, Silent valley, Bishnoisof Rajasthan. • Environmental ethics: Role of Indian and other religionsand cultures in environmental conservation. • Environmental communication and public awareness, case studies (e.g., CNG vehicles in cities).			8-12-23 Submission of C2-Assignments
	Chapter 8: Field work (Any two) • Visit to an area to document environmental assets: river/forest/flora/fauna, etc. • Visit to a local polluted site-urban/Rural/Industrial/ Agricultural. • Study of common plants, insects, birds, and basic principlesof identification. Study of simple ecosystems – pond, river, Delhi ridge, etc.	**2** hours	11-12-2023 to 16-12-23	Study Visit 11-12-2023 Display of C2 - Assignments marks on the notice board

Department: Environmental Science
Subject: Environmental Studies
[Course code: **22EVSF26]**
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Sunitha MH
Total Hrs: 45 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit 1 (15 hours)	**Chapter 1: Introduction to Environmental Studies:** • Multidisciplinary nature of environmental studies. • Scope and importance; Concept of sustainability andsustainable development.	**2**	12-02-2024 To 17-02-2024	Syllabus + POs and Cos discussion+ Lecture
	Chapter 2: Ecosystems • What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems: *a)* Forest ecosystem *b)* Grassland ecosystem *c)* Desert ecosystem Aquatic ecosystems (ponds, streams, lakes, rivers,oceans, estuaries)	**6**	19-02-2024 To 29-02-2024	Lecture+ slide show
	Chapter 3: Natural Resources: Renewable and Non-Renewable Resources • Land resources and land-use change; Land degradation,soil erosion and desertification. • Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribalpopulations. • Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (International& Inter-state). • Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.	**7**	01-03-2024 to 16-03-2024	Lecture+ Documentary view

Unit 2 (15 hours)	**Chapter 4: Biodiversity and Conservation** • Levels of biological diversity: Genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hotspots. • India as a mega-biodiversity nation; Endangered andendemic species of India. • Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity • Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.	**8**	18-03-2024 to 30-03-2024	Lecture +Slide show+ group discussion+ Interaction
	Chapter 5: Environmental Pollution • Environmental Pollution: Types, causes, effects and controls; Air, water, soil and noise pollution. • Nuclear hazards and human health risks. • Solid waste management, Control measures of urban andindustrial waste. • Pollution case studies.	**7**	1-04-2024 to 15-04-24	Power point presentation+ Interactions+ discussion+ debate
Unit1and 2 C1	Chapter 1, 2,3 and 4	1 hour	16-04-2024 to 20-04-2024	C1 Internal Test
Unit 3 (15 hours)	**Chapter 6: Environmental Policies and Practices** • Climate change, global	**7**		Lecture+ power point presentation+ Interaction

	warming, ozone layer depletion,acid rain and impacts on human communities and agriculture. • Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Preventionand Control of Pollution) Act; Wildlife (Protection) Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD). • Nature reserves, tribal populations and rights, and humanwildlife conflicts in Indian context.		22-04-2024 to 6-05-2024	25-04-2024 Display of C1 Internal Test marks on the notice board
	Chapter 7: Human Communities and the Environment • Human population growth: Impacts on environment,human health and welfare. • Resettlement and rehabilitation of project affected persons; case studies. • Disaster management: Floods, Earthquake, Cyclones andLandslides. • Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan. • Environmental ethics: Role of Indian and other religions and cultures in environmental conservation. • Environmental communication and public awareness, casestudies (e.g., CNG vehicles in cities).	**6**	7-05-2024 to 18-05-2024	Lecture +power point presentation+ Interaction +discussion 7-05-2024 C2(chapter 5,6,7,8) - Assignments 17-05-2024 Submission of C2-Assignments
	Chapter 8: Field work (Any two) • Visit to an area to	**2**		Study visit

	document environmental assets: river/forest/flora/fauna, etc. • Visit to a local polluted site- urban/Rural/Industrial/ Agricultural. • Study of common plants, insects, birds, and basic principlesof identification. Study of simple ecosystems – pond, river,Delhi ridge, etc.		20-05-2024 to 25-05-2024	20-05-2024 Display of C2 - Assignments marks on the notice board

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Department: Geography
Semester: Ist Sem
Title of the Paper: Principles of Geomorphology –
[Course Code -211144**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Siddaraju C S,
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 Geomorphology (14 hours)	a)Introduction to geography: physical and human geography	3 hours	11/09/2023, 13/09/2023, 14/09/2023	Lecture & PPT
	b)IntroductiontoGeomorphology:meaning,nature,development,andscope Principlesof Geomorphology	3hours	15/09/2023, 19/09/2023, 20/09/2023	Chalk and Black board
	c) Geological Time Scale	4 hours	21/09/2023,22/09/2023, 26/09/2023,27/09/2023.	Lecture & PPT
	d) Distribution of continents and oceans	4 hours	03/10/2023, 04/10/2023, 05/10/2023, 06/10/2023,	Lecture & PPT
UNIT –2 Systems and Cycles of the Solid Earth (14 hours)	a) Internal structure of the earth Alfred Wegener's continental drift,	3 hours	09/10/2023, 10/10/2023, 11/10/2023,	Lecture & PPT, Photos
	b) Theory of Isostacy: Views of Pratt and Airy	3hours	12/10/2023,16/10/2023, 17/10/2023	Lecture & PPT
	c)Convectionalcurrenttheoryandconceptofseafloor spreading	4hours	19/10/2023 ,20.10.2023, 25.10.2023 , 26.10.2023,	Lecture & PPT
	d)TheoryofPlateTectonics:plate boundaries, subduction,	4hours	27.10.2023,30.10.2023, 31.10.2023.02.11.2023,	Lecture & PPT, Photos
UNIT –3 The Dynamics of Earth(14 hours)	a)Earth'sMovements:Endogeneticand Exogeneticforces,	2 hours	03.11.2023, 04.11.2023,	Lecture & PPT
	b)SuddenandDiastrophic movements-Epeirogenetic and Orogenetic	2 hours	08.11.2023, 09.11.2023,	Lecture & PPT
	Internal Test- UNIT –1 UNIT –2	1 hour	16.112023	15.11.2023 to 18.11.2023 C1 Internal Test
	c)Movements-Process of folding and faulting	2 hours	10.11.2023, 20.11.2023,	Lecture

	d)Volcanicity and earthquake	2 hours	22.11.2023, 23.11.2023,	Lecture & PPT
	e)Rocks:Characteristics,types,importance,androckcycle	2 hours	24.11.2023, 25.11.2023	Lecture & PPT, Photos
	f)Weathering: meaning, types and controlling factors	2 hours	27.11.2023, 28.11.2023,	Lecture & PPT
	g)Mass Movement: meaning, controlling factors, types-landslides, rock-falls	1 hours	29.11.2023.	Lecture & PPT, Photos
Unit – 4Evolution of Landforms (14 hours)	a)Landforms:meaning,typesandfactorscontrollinglandformsdevelopment Slope development: concept andtypes	3 hours	01.12.2023, 04.12.2023, 05.12.2023,	Lecture & PPT, Photos
	b)Concept of Cycle of Erosion– W.M. Davis and W. Penck	3hours	0706.12.2023,. 12.2023, 08.12.2023,	Lecture & PPT
	c)AgentsofDenudation: River;drainagepatterns, Groundwater, Seawaves, Wind and Glaciers and resultant landforms.	8 hours	11.12.2023,13. 12.2023, 14.12.2023, 15.12.2023, 16.12.2023, 18.12.2023, 19.12.2023, 19.12.2023.	Lecture & PPT

Department: Geography
Semester: III rd Sem
Title of the Paper: Fundamentals of Human Geography-
[Course Code -221344**]**
Term Period:11.09.2023 to 16.12.2023
Faculty Names: Dr. Siddaraju C S
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 Introduction to Human Geography (14 hours)	1.1 Nature and scope, Development and Branches of Human Geography,	2 hours	11/09/2023 ,12/09/2023,	Lecture & PPT
	1.2 Themes in Geography: Location, Place, Human-Environment Interaction, Movement and Region.	2hours	13/09/2023 ,14/09/2023,	Chalk and Black board
	1.3 Man- Environment Relation: Environmental Determinism and Possiblism, Neo-Determinism (stop and go determinism)	4 hours	15/09/2023 ,16/09/2023, 19/09/2023 , 20/09/2023 ,	Lecture & PPT
	1.4 Approaches to Human geography: Exploration and Descriptive Approach, Regional Approach, Areal Differentiation Approach, Spatial	3 hours	21/09/2023 , 03/09/2023 , 07/09/2023	Lecture & PPT

	organization Approach		,	
	Modern Approaches: Welfare or Humanistic Approach, Radical Approach, Behavioral Approach, Post Modernism in geography.	3 hours	30/09/2023 ,03/10/2023, 04/10/2023	Lecture & PPT
UNIT –2 Cultural patterns and Processes (14 hours)	2.1 Concept of culture, Material and Non-Material Culture, Cultural traits and Cultural regions.	3 hours	05/10/2023 , 07/10/2023 , 09/10/2023 ,	Chalk and Black board
	2.2 Meaning and Definition of races, Classification of races, Main characteristics (traits) and Broad racial groups of the world and their distribution.	3hours	10/10/2023 , 12/10/2023 , 17/10/2023	Lecture & PPT
	2.3 Languages: Classification and Distribution of languages.	4hours	19/10/2023 ,21.10.2023 , 25.10.2023 , 26.10.2023	Lecture & PPT
	2.4 Religion: Types, Classification and Distribution of religions: Hinduism, Christianity, Islam and Buddhism.	4 hours	30.10.2023, 31.10.2023, 02.11.2023, 04.11.2023,	Lecture & PPT, Photos
UNIT –3 Population and Settlements (14 hours)	3.1 Distribution and Growth of Population; Factors affecting population Distribution.	3 hours	06.11.2023, 09.11.2023, 11.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	16.11.2023	15.11.2023 to 18.11.2023 C1 Internal Test
	3.2 Density of Population: Meaning and Types; Arithmetic Density, Physiological Density and Agricultural density, Regional Distribution of Density of Population; Carrying capacity and Sustainability	4 hours	20.11.2023, 21.11.2023, 22.11.2023, 23.11.2023,	Lecture & PPT
	3.3 Concept of Settlements, Origin and evolution of Human settlements, Factors of settlements, origin and distribution, types and pattern of settlements,	4hours	25.11.2023, 27.11.2023, 28.11.2023, 29.11.2023,	Lecture
	3.4 Rural and Urban settlements, Trends and Patterns of World Urbanization.	2 hours	02.12.2023, 04.12.2023,	Lecture & PPT
Unit – 4Economic Activities (14 hours)	4.1 Concept and Classification of Economic Activities; Factors affecting Economic Activities.	2 hours	06.12.2023, 07.12.2023,	Lecture & PPT, Photos
	4.2 Primary Economic Activities – Agriculture, Types: Primitive Subsistence, Intensive Subsistence, Plantation Agriculture, Extensive Commercial grain Cultivation, Mixed Farming, Dairy Farming.	4hours	09.12.2023, 11.12.2023, 12.12.2023, 13.12.2023,	Lecture & PPT

	4.3 Secondary Activities: Manufacturing, Classification- a. Based on size – Small Scale and Large scale. b. Based on Raw Material – Agro-based, Mineral based, Chemical Based and Forest based 4.3.1. Industrial Regions of the world.	6 hours	14.12.2023, 16.12.2023, 18.12.2023, 18.12.2023, 19.12.2023, 20.12.2023	Lecture & PPT
	4.4 Tertiary Activities: Types: Trade and Commerce, Retail Trading Services, Wholesale Trading. Transport and communications: Factors. Communication Services – Telecommunication.Services: Informal and Non formal sector. Information technology and service.	2 hours	21.12.2023, 21.12.2023.	Lecture & PPT

Department: Geography
Semester: Vth Sem
Title of the Paper: Population Resources andDynamics-
[Course Code -231544**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Siddaraju C S

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 (15 hours)	Introduction, Nature and Scope of Population Geography, Population Geography and Demography,	4 hours	11/09/2023 ,12/09/2023, 12/09/2023 ,13/09/2023,	Lecture & PPT
	Approaches to study population Geography, Sources of population data.	3 hours	15/09/2023 , 16/09/2023 , 19/09/2023 ,	Chalk and Black board
	World Population: Distribution-patterns, population growth, Density of population,.	5 hours	21/09/2023 , 22/09/2023 , 26/09/2023 , 30/09/2023 , 03/10/2023 ,	Lecture & PPT
	population determinants with comparison to India	3 hours	05/10/2023 , 06/10/2023 , 10/10/2023	Lecture & PPT

UNIT –2 (15 hours)	Demographic Change	2 hours	12/10/2023 , 16/10/2023 ,	Chalk and Black board
	Concepts of over, under & optimum population; Components of Population Change.	2hours	17/10/2023 , 19/10/2023	Lecture & PPT
	Fertility and Mortality: Concepts, measures of fertility and mortality,	3 hours	20/10/2023 , 25/10/2023 , 26/10/2023 ,	Lecture & PPT
	determinants and world patterns of fertility and mortality.	3 hours	27/10/2023 ,27/10/202 3, 30/10/2023	Lecture & PPT
	Demographic Attributes and Demographic Transition. Theories of Population Growth: T.R.Malthus and David Ricardo.	5 hours	31/10/2023 , 03.11.2023, 03.11.2023, 06.11.2023, 07.11.2023	Lecture & PPT
UNIT –3 (15 hours)	Migration, Meaning, types, causes, consequences.	4 hours	08.11.2023, 09.11.2023, 09.11.2023, 10.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	17.11.2023	15.11.2023- 8.11.2023 C1 Internal Test
	Theories of Migration: Theory of migration by Ravenstein and comprehensive theory by Lee.	4 hours	21.11.2023, 22.11.2023, 23.11.2023, 24.11.2023,	Lecture & PPT
	Population composition and characteristics- Age, Sex, rural-urban and occupational structure.	6 hours	24.11.2023 ,25.11.2023 , 27.11.2023, 28.11.2023, 01.12.2023, 01.12.2023,	Lecture & PPT
Unit – 4 (15 hours)	Population as Resource, World Population Resource Regions.	3 hours	04.12.2023, 05.12.2023, 07.12.2023,	Lecture & PPT,
	Social well-being and quality of life; population as a social capital.	3 hours	08.12.2023, 08.12.2023, 09.12.2023,	Lecture & PPT
	Contemporary Issues - Ageing of Population; Declining Sex Ratio,	3 hours	12.12.2023, 14.12.2023, 14.12.2023,	Lecture & PPT
	Population policies in developed and developing countries.	3 hours	15.12.2023, 15.12.2023, 16.12.2023,	Lecture & PPT
	Population Policies in India. Human Development Index (HDI)	3 hours	18.12.2023, 18.12.2023, 19.12.2023.	Lecture & PPT

Department: Geography
Semester: Vth Sem
Title of the Paper: Fundamentals of Remote Sensing –
[Course Code -231545**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Siddaraju C S

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 (15 hours)	Introduction to Remote Sensing	2 hours	11/09/2023 ,13/09/2023,	Lecture & PPT
	Definition and Components, History of Remote Sensing,	2 hours	15/09/2023 , 16/09/2023 ,	Chalk and Black board
	Electromagnetic Magnetic Spectrum,	3 hours	19/09/2023 ,20/09/2023, 20/09/2023 ,	Lecture & PPT
	Interaction of EMR with the atmosphere and with the surface feature, Atmospheric window, spectral	5 hours	23/09/2023 ,25/09/2023, 27/09/2023 , 0/09/2023, 03/10/2023 ,	Lecture & PPT
	reflectance of land covers (minerals, rocks, water, vegetation, and urban area).	3 hours	04/10/2023 , 04/10/2023 ,06/10/2023,	Lecture & PPT
UNIT –2 (15 hours)	Sensors & Platforms-Types of orbits-sun-synchronous and geosynchronous, Sources of energy,	3 hours	07/10/2023 , 08/10/2023 ,10/10/2023,	Chalk and Black board
	Classification of remote sensors - Active, Passive, Electromechanical and optical sensors.	3hours	11/10/2023 , 16/10/2023 , 17/10/2023	Lecture & PPT
	Resolution concept - Spectral, Radiometric, and temporal resolution.	2hours	20/10/2023 , 21/10/2023 ,	Lecture & PPT
	Platform types and characteristics Launch of space vehicles.	2hours	27/10/2023 , 30/10/2023 ,	Lecture & PPT
	Angular characteristics-FOV and IFOV, push broom and whiskbroom cameras,	2 hours	03.11.2023, 04.11.2023,	Lecture & PPT
	Panchromatic, multispectral, hyper spectral scanners, and geometric characteristics of the imageries.	3 hours	06.11.2023, 07.11.2023, 08.11.2023	Lecture & PPT, Photos

UNIT –3 (15 hours)	Aerial Photography, Elements, Types and interpretation of Aerial photography,	3 hours	08.11.2023, 10.11.2023, 11.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	17.11.2023	15.11.2023-8.11.2023 C1 Internal Test
	Principles, Classification of Aerial photographs based on Height and Tilt, Scales,	3 hours	21.11.2023, 22.11.2023, 24.11.2023,	Lecture & PPT
	Components of camera, film, Aerial platforms. Elements of Aerial photo	4hours	25.11.2023 ,27.11.2023 , 28.11.2023, 29.11.2023,	Lecture
	interpretation, Digital and Analog data, Image formats, Stereo pairs, Applications of Aerial Photography.	4 hours	01.12.2023, 02.12.2023, 04.12.2023, 05.12.2023,	Lecture & PPT
Unit – 4 (15 hours)	Applications of Remote Sensing	3 hours	06.12.2023, 08.12.2023, 09.12.2023,	Lecture & PPT, Photos
	Indian remote sensing Centers and their activities,	3 hours	11.12.2023, 12.12.2023, 13.12.2023,	Lecture & PPT
	New satellite programs of India. Different Satellites and their Application in Land, Resources, Meteorology, and Hydrology.	6 hours	15.12.2023, 15.12.2023, 16.12.2023, 18.12.2023, 18.12.2023, 19.12.2023,	Lecture & PPT Photos
	Ground truth verification, using Google Earth.	3 hours	20.12.2023, 20.12.2023, 21.12.2023	Lecture & PPT Photos

Department: Geography
Semester: Ist Sem
Title of the Paper: Principles of Geomorphology - **[**Course Code -211144**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Doddarasaiah G

Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 Geomorphology (14 hours)	a)Introduction to geography: physical and human geography	3 hours	11/09/2023 , 13/09/2023 , 14/09/2023	Lecture & PPT
	b)IntroductiontoGeomorphology:meaning,nature,development,andscope Principlesof Geomorphology	3hours	15/09/2023 , 19/09/2023 , 20/09/2023	Chalk and Black board
	c) Geological Time Scale	4 hours	21/09/2023 ,22/09/2023, 26/09/2023 ,27/09/2023.	Lecture & PPT

	d) Distribution of continents and oceans	4 hours	03/10/2023 , 04/10/2023 , 05/10/2023 , 06/10/2023 ,	Lecture & PPT
UNIT –2 **Systems and Cycles of the Solid Earth** (14 hours)	a) Internal structure of the earth Alfred Wegener's continental drift,	3 hours	09/10/2023 , 10/10/2023 , 11/10/2023 ,	Lecture & PPT, Photos
	b) Theory of Isostacy: Views of Pratt and Airy	3hours	12/10/2023 ,16/10/2023, 17/10/2023	Lecture & PPT
	c)Convectionalcurrenttheoryandconceptofseafloor spreading	4hours	19/10/2023 ,20.10.2023 , 25.10.2023 , 26.10.2023,	Lecture & PPT
	d)TheoryofPlateTectonics:plate boundaries, subduction,	4hours	27.10.2023, 30.10.2023, 31.10.2023. 02.11.2023,	Lecture & PPT, Photos
UNIT –3 **The Dynamics of Earth**(14 hours)	a)Earth'sMovements:Endogeneticand Exogeneticforces,	2 hours	03.11.2023, 04.11.2023,	Lecture & PPT
	b)SuddenandDiastrophic movements-Epeirogenetic and Orogenetic	2 hours	08.11.2023, 09.11.2023,	Lecture & PPT
	Internal Test- UNIT –1 UNIT –2	1 hour	16.112023	15.11.2023 to 18.11.2023 C1 Internal Test
	c)Movements-Process of folding and faulting	2 hours	10.11.2023, 20.11.2023,	Lecture
	d)Volcanicity and earthquake	2 hours	22.11.2023, 23.11.2023,	Lecture & PPT
	e)Rocks:Characteristics,types,importance,androckcycle	2 hours	24.11.2023, 25.11.2023	Lecture & PPT, Photos
	f)Weathering: meaning, types and controlling factors	2 hours	27.11.2023, 28.11.2023,	Lecture & PPT
	g)Mass Movement: meaning, controlling factors, types-landslides, rock-falls	1 hours	29.11.2023.	Lecture & PPT, Photos
Unit – 4Evolution of Landforms (14 hours)	a)Landforms:meaning,typesandfactorscontrollinglandformsdevelopment Slope development: concept andtypes	3 hours	01.12.2023, 04.12.2023, 05.12.2023,	Lecture & PPT, Photos
	b)Concept of Cycle of Erosion–W.M. Davis and W. Penck	3hours	0706.12.2023,.12.2023 , 08.12.2023,	Lecture & PPT
	c)AgentsofDenudation: River;drainagepatterns, Groundwater,	8 hours	11.12.2023, 13.12.2023,	Lecture & PPT

	Seawaves, Wind and Glaciers and resultant landforms.		14.12.2023, 15.12.2023, 16.12.2023, 18.12.2023, 19.12.2023, 19.12.2023.	

Department: Geography
Semester: III rd Sem
Title of the Paper: Fundamentals of Human Geography-**[**Course Code -221344**]**
Term Period:11.09.2023 to 16.12.2023
Faculty Names: Dr. Doddarasaiah G

Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 **Introduction to Human Geography** (14 hours)	1.1 Nature and scope, Development and Branches of Human Geography,	2 hours	11/09/2023 ,12/09/2023,	Lecture & PPT
	1.2 Themes in Geography: Location, Place, Human-Environment Interaction, Movement and Region.	2hours	13/09/2023 ,14/09/2023,	Chalk and Black board
	1.3 Man- Environment Relation: Environmental Determinism and Possiblism, Neo-Determinism (stop and go determinism)	4 hours	15/09/2023 ,16/09/2023, 19/09/2023 , 20/09/2023 ,	Lecture & PPT
	1.4 Approaches to Human geography: Exploration and Descriptive Approach, Regional Approach, Areal Differentiation Approach, Spatial organization Approach	3 hours	21/09/2023 , 03/09/2023 , 07/09/2023 ,	Lecture & PPT
	Modern Approaches: Welfare or Humanistic Approach, Radical Approach, Behavioral Approach, Post Modernism in geography.	3 hours	30/09/2023 ,03/10/2023, 04/10/2023	Lecture & PPT
UNIT –2 **Cultural patterns and Processes** (14 hours)	2.1 Concept of culture, Material and Non-Material Culture, Cultural traits and Cultural regions.	3 hours	05/10/2023 , 07/10/2023 , 09/10/2023 ,	Chalk and Black board
	2.2 Meaning and Definition of races, Classification of races, Main characteristics (traits) and Broad racial groups of the world and their distribution.	3hours	10/10/2023 , 12/10/2023 , 17/10/2023	Lecture & PPT
	2.3 Languages: Classification and Distribution of languages.	4hours	19/10/2023 ,21.10.2023 , 25.10.2023 ,	Lecture & PPT

			26.10.2023	
	2.4 Religion: Types, Classification and Distribution of religions: Hinduism, Christianity, Islam and Buddhism.	4 hours	30.10.2023, 31.10.2023, 02.11.2023, 04.11.2023,	Lecture & PPT, Photos
UNIT –3 Population and Settlements (14 hours)	3.1 Distribution and Growth of Population; Factors affecting population Distribution.	3 hours	06.11.2023, 09.11.2023, 11.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	16.11.2023	15.11.2023 to 18.11.2023 C1 Internal Test
	3.2 Density of Population: Meaning and Types; Arithmetic Density, Physiological Density and Agricultural density, Regional Distribution of Density of Population; Carrying capacity and Sustainability	4 hours	20.11.2023, 21.11.2023, 22.11.2023, 23.11.2023,	Lecture & PPT
	3.3 Concept of Settlements, Origin and evolution of Human settlements, Factors of settlements, origin and distribution, types and pattern of settlements,	4hours	25.11.2023, 27.11.2023, 28.11.2023, 29.11.2023,	Lecture
	3.4 Rural and Urban settlements, Trends and Patterns of World Urbanization.	2 hours	02.12.2023, 04.12.2023,	Lecture & PPT
Unit – 4Economic Activities (14 hours)	4.1 Concept and Classification of Economic Activities; Factors affecting Economic Activities.	2 hours	06.12.2023, 07.12.2023,	Lecture & PPT, Photos
	4.2 Primary Economic Activities – Agriculture, Types: Primitive Subsistence, Intensive Subsistence, Plantation Agriculture, Extensive Commercial grain Cultivation, Mixed Farming, Dairy Farming.	4hours	09.12.2023, 11.12.2023, 12.12.2023, 13.12.2023,	Lecture & PPT
	4.3 Secondary Activities: Manufacturing, Classification- a. Based on size – Small Scale and Large scale. b. Based on Raw Material – Agro-based, Mineral based, Chemical Based and Forest based 4.3.1. Industrial Regions of the world.	6 hours	14.12.2023, 16.12.2023, 18.12.2023, 18.12.2023, 19.12.2023, 20.12.2023	Lecture & PPT
	4.4 Tertiary Activities: Types: Trade and Commerce, Retail Trading Services, Wholesale Trading. Transport and communications: Factors. Communication Services – Telecommunication.Services: Informal and Non formal sector. Information technology and service.	2 hours	21.12.2023, 21.12.2023.	Lecture & PPT

Department: Geography
Semester: Vth Sem
Title of the Paper: Population Resources andDynamics
[Course Code -231544**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Doddarasaiah G

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 (15 hours)	Introduction, Nature and Scope of Population Geography, Population Geography and Demography,	4 hours	11/09/2023 ,12/09/2023, 12/09/2023 ,13/09/2023,	Lecture & PPT
	Approaches to study population Geography, Sources of population data.	3 hours	15/09/2023 , 16/09/2023 , 19/09/2023 ,	Chalk and Black board
	World Population: Distribution-patterns, population growth, Density of population,.	5 hours	21/09/2023 , 22/09/2023 , 26/09/2023 , 30/09/2023 , 03/10/2023 ,	Lecture & PPT
	population determinants with comparison to India	3 hours	05/10/2023 , 06/10/2023 , 10/10/2023	Lecture & PPT
UNIT –2 (15 hours)	Demographic Change	2 hours	12/10/2023 , 16/10/2023 ,	Chalk and Black board
	Concepts of over, under & optimum population; Components of Population Change.	2hours	17/10/2023 , 19/10/2023	Lecture & PPT
	Fertility and Mortality: Concepts, measures of fertility and mortality,	3 hours	20/10/2023 , 25/10/2023 , 26/10/2023 ,	Lecture & PPT
	determinants and world patterns of fertility and mortality.	3 hours	27/10/2023 ,27/10/2023, 30/10/2023	Lecture & PPT
	Demographic Attributes and Demographic Transition. Theories of Population Growth:	5 hours	31/10/2023 , 03.11.2023, 03.11.2023,	Lecture & PPT

	T.R.Malthus and David Ricardo.		06.11.2023, 07.11.2023	
UNIT –3 (15 hours)	Migration, Meaning, types, causes, consequences.	4 hours	08.11.2023, 09.11.2023, 09.11.2023, 10.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	17.11.2023	15.11.2023-8.11.2023 C1 Internal Test
	Theories of Migration: Theory of migration by Ravenstein and comprehensive theory by Lee.	4 hours	21.11.2023, 22.11.2023, 23.11.2023, 24.11.2023,	Lecture & PPT
	Population composition and characteristics- Age, Sex, rural-urban and occupational structure.	6 hours	24.11.2023 ,25.11.2023 , 27.11.2023, 28.11.2023, 01.12.2023, 01.12.2023,	Lecture & PPT
Unit – 4 (15 hours)	Population as Resource, World Population Resource Regions.	3 hours	04.12.2023, 05.12.2023, 07.12.2023,	Lecture & PPT,
	Social well-being and quality of life; population as a social capital.	3 hours	08.12.2023, 08.12.2023, 09.12.2023,	Lecture & PPT
	Contemporary Issues - Ageing of Population; Declining Sex Ratio,	3 hours	12.12.2023, 14.12.2023, 14.12.2023,	Lecture & PPT
	Population policies in developed and developing countries.	3 hours	15.12.2023, 15.12.2023, 16.12.2023,	Lecture & PPT
	Population Policies in India. Human Development Index (HDI)	3 hours	18.12.2023, 18.12.2023, 19.12.2023.	Lecture & PPT

Department: Geography
Semester: Vth Sem
Title of the Paper: Fundamentals of Remote Sensing –
[Course Code -231545**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Doddarasaiah G

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 (15 hours)	Introduction to Remote Sensing	2 hours	11/09/2023 ,13/09/2023,	Lecture & PPT
	Definition and Components, History of Remote Sensing,	2 hours	15/09/2023 , 16/09/2023 ,	Chalk and Black board
	Electromagnetic Magnetic Spectrum,	3 hours	19/09/2023 ,20/09/2023, 20/09/2023 ,	Lecture & PPT

	Interaction of EMR with the atmosphere and with the surface feature, Atmospheric window, spectral	5 hours	23/09/2023 ,25/09/2023, 27/09/2023 , 0/09/2023, 03/10/2023 ,	Lecture & PPT
	reflectance of land covers (minerals, rocks, water, vegetation, and urban area).	3 hours	04/10/2023 , 04/10/2023 ,06/10/2023,	Lecture & PPT
UNIT –2 (15 hours)	Sensors & Platforms-Types of orbits-sun-synchronous and geosynchronous, Sources of energy,	3 hours	07/10/2023 , 08/10/2023 ,10/10/2023,	Chalk and Black board
	Classification of remote sensors - Active, Passive, Electromechanical and optical sensors.	3hours	11/10/2023 , 16/10/2023 , 17/10/2023	Lecture & PPT
	Resolution concept - Spectral, Radiometric, and temporal resolution.	2hours	20/10/2023 , 21/10/2023 ,	Lecture & PPT
	Platform types and characteristics Launch of space vehicles.	2hours	27/10/2023 , 30/10/2023 ,	Lecture & PPT
	Angular characteristics-FOV and IFOV, push broom and whiskbroom cameras,	2 hours	03.11.2023, 04.11.2023,	Lecture & PPT
	Panchromatic, multispectral, hyper spectral scanners, and geometric characteristics of the imageries.	3 hours	06.11.2023, 07.11.2023, 08.11.2023	Lecture & PPT, Photos
UNIT –3 (15 hours)	Aerial Photography, Elements, Types and interpretation of Aerial photography,	3 hours	08.11.2023, 10.11.2023, 11.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	17.11.2023	15.11.2023-8.11.2023 C1 Internal Test
	Principles, Classification of Aerial photographs based on Height and Tilt, Scales,	3 hours	21.11.2023, 22.11.2023, 24.11.2023,	Lecture & PPT
	Components of camera, film, Aerial platforms. Elements of Aerial photo	4hours	25.11.2023 ,27.11.2023 , 28.11.2023, 29.11.2023,	Lecture
	interpretation, Digital and Analog data, Image formats, Stereo pairs, Applications of Aerial Photography.	4 hours	01.12.2023, 02.12.2023, 04.12.2023, 05.12.2023,	Lecture & PPT
Unit – 4 (15 hours)	Applications of Remote Sensing	3 hours	06.12.2023, 08.12.2023, 09.12.2023,	Lecture & PPT, Photos
	Indian remote sensing Centers and their activities,	3 hours	11.12.2023, 12.12.2023, 13.12.2023,	Lecture & PPT
	New satellite programs of India. Different Satellites and their Application in Land, Resources,	6 hours	15.12.2023, 15.12.2023,	Lecture & PPT Photos

	Meteorology, and Hydrology.		16.12.2023, 18.12.2023, 18.12.2023, 19.12.2023,	
	Ground truth verification, using Google Earth.	3 hours	20.12.2023, 20.12.2023, 21.12.2023	Lecture & PPT Photos

Department: Geography
Semester: Ist Sem
Title of the Paper: Principles of Geomorphology
[Course Code -211144**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Somashekara K K,
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 Geomorphology (14 hours)	a)Introduction to geography: physical and human geography	3 hours	11/09/2023, 13/09/2023, 14/09/2023	Lecture & PPT
	b)IntroductiontoGeomorphology:meaning,nature,development,andscope Principlesof Geomorphology	3hours	15/09/2023, 19/09/2023, 20/09/2023	Chalk and Black board
	c) Geological Time Scale	4 hours	21/09/2023 ,22/09/2023, 26/09/2023 ,27/09/2023.	Lecture & PPT
	d) Distribution of continents and oceans	4 hours	03/10/2023, 04/10/2023, 05/10/2023, 06/10/2023,	Lecture & PPT
UNIT –2 Systems and Cycles of the Solid Earth (14 hours)	a) Internal structure of the earth Alfred Wegener's continental drift,	3 hours	09/10/2023, 10/10/2023, 11/10/2023,	Lecture & PPT, Photos
	b) Theory of Isostacy: Views of Pratt and Airy	3hours	12/10/2023 ,16/10/2023, 17/10/2023	Lecture & PPT
	c)Convectionalcurrenttheoryandconceptofseafloor spreading	4hours	19/10/2023 ,20.10.2023, 25.10.2023, 26.10.2023,	Lecture & PPT
	d)TheoryofPlateTectonics:plate boundaries,	4hours	27.10.2023, 30.10.2023,	Lecture & PPT, Photos

	subduction,		31.10.2023. 02.11.2023,	
UNIT –3 **The Dynamics of Earth**(14 hours)	a)Earth'sMovements:Endogeneticand Exogeneticforces,	2 hours	03.11.2023, 04.11.2023,	Lecture & PPT
	b)SuddenandDiastrophic movements-Epeirogenetic and Orogenetic	2 hours	08.11.2023, 09.11.2023,	Lecture & PPT
	Internal Test- UNIT –1 UNIT –2	1 hour	16.112023	15.11.2023 to 18.11.2023 C1 Internal Test
	c)Movements-Process of folding and faulting	2 hours	10.11.2023, 20.11.2023,	Lecture
	d)Volcanicity and earthquake	2 hours	22.11.2023, 23.11.2023,	Lecture & PPT
	e)Rocks:Characteristics,types,importa nce,androckcycle	2 hours	24.11.2023, 25.11.2023	Lecture & PPT, Photos
	f)Weathering: meaning, types and controlling factors	2 hours	27.11.2023, 28.11.2023,	Lecture & PPT
	g)Mass Movement: meaning, controlling factors, types-landslides, rock-falls	1 hours	29.11.2023.	Lecture & PPT, Photos
Unit – **4Evolution of Landforms** (14 hours)	a)Landforms:meaning,typesandfactorsc ontrollinglandformsdevelopment Slope development: concept andtypes	3 hours	01.12.2023, 04.12.2023, 05.12.2023,	Lecture & PPT, Photos
	b)Concept of Cycle of Erosion–W.M. Davis and W. Penck	3hours	0706.12.20 23,.12.2023 , 08.12.2023,	Lecture & PPT
	c)AgentsofDenudation: River;drainagepatterns, Groundwater, Seawaves, Wind and Glaciers and resultant landforms.	8 hours	11.12.2023, 13.12.2023, 14.12.2023, 15.12.2023, 16.12.2023, 18.12.2023, 19.12.2023, 19.12.2023.	Lecture & PPT

Department: Geography
Semester: III rd Sem
Title of the Paper: Fundamentals of Human Geography
[Course Code -221344**]**
Term Period:11.09.2023 to 16.12.2023
Faculty Names: Dr. Somashekara K K,
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 **Introduction to Human Geography** (14 hours)	1.1 Nature and scope, Development and Branches of Human Geography,	2 hours	11/09/2023 ,12/09/202 3,	Lecture & PPT
	1.2 Themes in Geography: Location, Place, Human-Environment Interaction, Movement and Region.	2hours	13/09/2023 ,14/09/202 3,	Chalk and Black board

	1.3 Man- Environment Relation: Environmental Determinism and Possiblism, Neo-Determinism (stop and go determinism)	4 hours	15/09/2023 ,16/09/2023, 19/09/2023 , 20/09/2023 ,	Lecture & PPT
	1.4 Approaches to Human geography: Exploration and Descriptive Approach, Regional Approach, Areal Differentiation Approach, Spatial organization Approach	3 hours	21/09/2023 , 03/09/2023 , 07/09/2023 ,	Lecture & PPT
	Modern Approaches: Welfare or Humanistic Approach, Radical Approach, Behavioral Approach, Post Modernism in geography.	3 hours	30/09/2023 ,03/10/2023, 04/10/2023	Lecture & PPT
UNIT –2 **Cultural patterns and Processes** (14 hours)	2.1 Concept of culture, Material and Non-Material Culture, Cultural traits and Cultural regions.	3 hours	05/10/2023 , 07/10/2023 , 09/10/2023 ,	Chalk and Black board
	2.2 Meaning and Definition of races, Classification of races, Main characteristics (traits) and Broad racial groups of the world and their distribution.	3hours	10/10/2023 , 12/10/2023 , 17/10/2023	Lecture & PPT
	2.3 Languages: Classification and Distribution of languages.	4hours	19/10/2023 ,21.10.2023 , 25.10.2023 , 26.10.2023	Lecture & PPT
	2.4 Religion: Types, Classification and Distribution of religions: Hinduism, Christianity, Islam and Buddhism.	4 hours	30.10.2023, 31.10.2023, 02.11.2023, 04.11.2023,	Lecture & PPT, Photos
UNIT –3 **Population and Settlements** (14 hours)	3.1 Distribution and Growth of Population; Factors affecting population Distribution.	3 hours	06.11.2023, 09.11.2023, 11.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	16.11.2023	15.11.2023 to 18.11.2023 C1 Internal Test
	3.2 Density of Population: Meaning and Types; Arithmetic Density, Physiological Density and Agricultural density, Regional Distribution of Density of Population; Carrying capacity and Sustainability	4 hours	20.11.2023, 21.11.2023, 22.11.2023, 23.11.2023,	Lecture & PPT
	3.3 Concept of Settlements, Origin and evolution of Human settlements, Factors of settlements, origin and distribution, types and pattern of settlements,	4hours	25.11.2023, 27.11.2023, 28.11.2023, 29.11.2023,	Lecture
	3.4 Rural and Urban settlements, Trends and Patterns of World Urbanization.	2 hours	02.12.2023, 04.12.2023,	Lecture & PPT

Unit – 4Economic Activities (14 hours)	4.1 Concept and Classification of Economic Activities; Factors affecting Economic Activities.	2 hours	06.12.2023, 07.12.2023,	Lecture & PPT, Photos
	4.2 Primary Economic Activities – Agriculture, Types: Primitive Subsistence, Intensive Subsistence, Plantation Agriculture, Extensive Commercial grain Cultivation, Mixed Farming, Dairy Farming.	4hours	09.12.2023, 11.12.2023, 12.12.2023, 13.12.2023,	Lecture & PPT
	4.3 Secondary Activities: Manufacturing, Classification- a. Based on size – Small Scale and Large scale. b. Based on Raw Material – Agro-based, Mineral based, Chemical Based and Forest based 4.3.1. Industrial Regions of the world.	6 hours	14.12.2023, 16.12.2023, 18.12.2023, 18.12.2023, 19.12.2023, 20.12.2023	Lecture & PPT
	4.4 Tertiary Activities: Types: Trade and Commerce, Retail Trading Services, Wholesale Trading. Transport and communications: Factors. Communication Services – Telecommunication.Services: Informal and Non formal sector. Information technology and service.	2 hours	21.12.2023, 21.12.2023.	Lecture & PPT

Department: Geography
Semester: Vth Sem
Title of the Paper: Population Resources andDynamics- [Course Code -231544**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Somashekara K K

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 (15 hours)	Introduction, Nature and Scope of Population Geography, Population Geography and Demography,	4 hours	11/09/2023, 12/09/2023, 12/09/2023, 13/09/2023,	Lecture & PPT
	Approaches to study population Geography, Sources of population data.	3 hours	15/09/2023, 16/09/2023, 19/09/2023,	Chalk and Black board
	World Population: Distribution-patterns, population growth, Density of population,.	5 hours	21/09/2023, 22/09/2023, 26/09/2023, 30/09/2023, 03/10/2023,	Lecture & PPT
	population determinants with comparison to India	3 hours	05/10/2023, 06/10/2023, 10/10/2023	Lecture & PPT
UNIT –2 (15 hours)	Demographic Change	2 hours	12/10/2023, 16/10/2023,	Chalk and Black board

	Concepts of over, under & optimum population; Components of Population Change.	2hours	17/10/2023, 19/10/2023	Lecture & PPT
	Fertility and Mortality: Concepts, measures of fertility and mortality,	3 hours	20/10/2023, 25/10/2023, 26/10/2023,	Lecture & PPT
	determinants and world patterns of fertility and mortality.	3 hours	27/10/2023, 27/10/2023, 30/10/2023	Lecture & PPT
	Demographic Attributes and Demographic Transition. Theories of Population Growth: T.R.Malthus and David Ricardo.	5 hours	31/10/2023, 03.11.2023, 03.11.2023, 06.11.2023, 07.11.2023	Lecture & PPT
UNIT –3 (15 hours)	Migration, Meaning, types, causes, consequences.	4 hours	08.11.2023, 09.11.2023, 09.11.2023, 10.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	17.11.2023	15.11.2023-8.11.2023 C1 Internal Test
	Theories of Migration: Theory of migration by Ravenstein and comprehensive theory by Lee.	4 hours	21.11.2023, 22.11.2023, 23.11.2023, 24.11.2023,	Lecture & PPT
	Population composition and characteristics- Age, Sex, rural-urban and occupational structure.	6 hours	24.11.2023 ,25.11.2023, 27.11.2023, 28.11.2023, 01.12.2023, 01.12.2023,	Lecture & PPT
Unit – 4 (15 hours)	Population as Resource, World Population Resource Regions.	3 hours	04.12.2023, 05.12.2023, 07.12.2023,	Lecture & PPT,
	Social well-being and quality of life; population as a social capital.	3 hours	08.12.2023, 08.12.2023, 09.12.2023,	Lecture & PPT
	Contemporary Issues - Ageing of Population; Declining Sex Ratio,	3 hours	12.12.2023, 14.12.2023, 14.12.2023,	Lecture & PPT
	Population policies in developed and developing countries.	3 hours	15.12.2023, 15.12.2023, 16.12.2023,	Lecture & PPT
	Population Policies in India. Human Development Index (HDI)	3 hours	18.12.2023, 18.12.2023, 19.12.2023.	Lecture & PPT

Department: Geography
Semester: Vth Sem
Title of the Paper: Fundamentals of Remote Sensing - [Course Code -231545**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Somashekara K K

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 (15 hours)	Introduction to Remote Sensing	2 hours	11/09/2023, 13/09/2023,	Lecture & PPT
	Definition and Components, History of Remote Sensing,	2 hours	15/09/2023, 16/09/2023,	Chalk and Black board

	Electromagnetic Magnetic Spectrum,	3 hours	19/09/2023, 20/09/2023, 20/09/2023,	Lecture & PPT
	Interaction of EMR with the atmosphere and with the surface feature, Atmospheric window, spectral	5 hours	23/09/2023, 25/09/2023, 27/09/2023, 0/09/2023, 03/10/2023,	Lecture & PPT
	reflectance of land covers (minerals, rocks, water, vegetation, and urban area).	3 hours	04/10/2023, 04/10/2023, 06/10/2023,	Lecture & PPT
UNIT –2 (15 hours)	Sensors & Platforms-Types of orbits-sun-synchronous and geosynchronous, Sources of energy,	3 hours	07/10/2023, 08/10/2023, 10/10/2023,	Chalk and Black board
	Classification of remote sensors - Active, Passive, Electromechanical and optical sensors.	3hours	11/10/2023, 16/10/2023, 17/10/2023	Lecture & PPT
	Resolution concept - Spectral, Radiometric, and temporal resolution.	2hours	20/10/2023, 21/10/2023,	Lecture & PPT
	Platform types and characteristics Launch of space vehicles.	2hours	27/10/2023, 30/10/2023,	Lecture & PPT
	Angular characteristics-FOV and IFOV, push broom and whiskbroom cameras,	2 hours	03.11.2023, 04.11.2023,	Lecture & PPT
	Panchromatic, multispectral, hyper spectral scanners, and geometric characteristics of the imageries.	3 hours	06.11.2023, 07.11.2023, 08.11.2023	Lecture & PPT, Photos
UNIT –3 (15 hours)	Aerial Photography, Elements, Types and interpretation of Aerial photography,	3 hours	08.11.2023, 10.11.2023, 11.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	17.11.2023	15.11.2023- 8.11.2023 C1 Internal Test
	Principles, Classification of Aerial photographs based on Height and Tilt, Scales,	3 hours	21.11.2023, 22.11.2023, 24.11.2023,	Lecture & PPT
	Components of camera, film, Aerial platforms. Elements of Aerial photo	4hours	25.11.2023 ,27.11.2023, 28.11.2023, 29.11.2023,	Lecture
	interpretation, Digital and Analog data, Image formats, Stereo pairs, Applications of Aerial Photography.	4 hours	01.12.2023, 02.12.2023, 04.12.2023, 05.12.2023,	Lecture & PPT
Unit – 4 (15 hours)	Applications of Remote Sensing	3 hours	06.12.2023, 08.12.2023, 09.12.2023,	Lecture & PPT, Photos
	Indian remote sensing Centers and their activities,	3 hours	11.12.2023, 12.12.2023, 13.12.2023,	Lecture & PPT
	New satellite programs of India. Different Satellites and their Application in Land, Resources, Meteorology, and Hydrology.	6 hours	15.12.2023, 15.12.2023, 16.12.2023, 18.12.2023, 18.12.2023, 19.12.2023,	Lecture & PPT Photos
	Ground truth verification, using Google Earth.	3 hours	20.12.2023, 20.12.2023, 21.12.2023	Lecture & PPT Photos

Course Plan of Even Semester 2023-24

Department: Geography
Semester: Ist Sem-OE
Title of the: Introduction to Physical Geography- **[**Course Code -21OEGEO101**]-Open Elective**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Somashekara K K,
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 Geomorphology (10 hours)	Origin, Shape and Size of the Earth,	3 hours	11/09/2023, 13/09/2023, 16/09/2023,	Lecture & PPT
	MovementoftheEarth-RotationandRevolution,Effectsofthemovementof Earth,	3hours	20/09/2023, 23/09/2023, 25/09/2023,	Lecture & PPT
	Coordinates -Latitude, Longitude and Time.	2 hours	27/09/2023, 30/09/2023,	Lecture & PPT
	Structure of the Earth,	3 hours	04/10/2023, 07/10/2023,	Lecture & PPT
UNIT –2 Systems and Cycles of the Solid Earth (11 hours)	Rocks - types, significance,	3 hours	09.10.2023, 11/10/2023, 16/10/2023,	Lecture & PPT, Photos
	Weathering –types.	3hours	18/10/2023, 21.10.2023, 25.10.2023,	Lecture & PPT
	AgentsofDenudation-River,Glacier,WindandUnderGroundwater.	3hours	28/10/2023, 0/10/2023,04.11.2023,	Lecture & PPT
	Volcanicity, Earthquakes andTsunamis	2 hours	06.11.2023, 08.11.2023,	Lecture & PPT, Photos
UNIT –3 The Dynamics of Earth(10 hours)	Structure and Composition of Atmosphere,	2 hours	11.11.2023, 13.11.2023	Lecture & PPT
	Internal Test- UNIT –1 UNIT –2	1 hour	16.11.2023	15.11.2023 to 18.11.2023 C1 Internal Test
	Weather and Climate.	1 hours	20.11.2023,	Lecture & PPT
	AtmosphericTemperature,HeatBudgetoftheatmosphere	2 hours	22.11.2023, 25.11.2023,	Lecture
	Atmospheric Pressure,	2 hours	27.11.2023, 29.11.2023.	Lecture & PPT
	Winds andPrecipitation	2 hours	02.12.2023, 04.12.2023,	Lecture & PPT, Photos
Unit –4Evolution of Landforms (11 hours)	DistributionofLandandSea,	1 hours	06.12.2023,	Lecture & PPT, Photos
	SubmarineReliefoftheOcean,	2 hours	09.12.2023, 11.12.2023,	Lecture & PPT
	Temperature and salinity of SeaWater.	2 hours	13.12.2023, 16.12.2023,	Lecture & PPT
	Ocean Tides, Waves and Deposits,	1 hours	18.12.2023,	Lecture & PPT, Photos
	Ocean currents - Atlantic, Pacific and	2 hours	18.12.2023,	Lecture & PPT,

	Indian Oceans		19.12.2023,	Photos
	Marine Resources: Biotic, mineral and energy resources	2 hours	20.12.2023, 20.12.2023.	Lecture & PPT

Course Plan of Even Semester 2023-24

Department: Geography
Semester: Ist Sem-OE
Title of the: Geography of India-
[Course Code -22OEGEO301**]-Open Elective**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Somashekara K K
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 Physical Basis (12 hours)	1.1 Location, Size and Extent, Political Divisions	3 hours	12/09/2023, 14/09/2023, 15/09/2023,	Lecture & PPT
	1.2 Relief Features-Northern Mountai Northern Great Plain, The Peninsular Plateau a Coastal Plain and Islands	3hours	19/09/2023, 21/09/2023, 22/09/2023	Lecture & PPT
	1.3 Climate: Seasons – Summer Season, Sou West Monsoon, Retreating Monsoon Seas Winter Season,	2 hours	26/09/2023, 29/09/2023	Lecture & PPT
	1.4 Drainage system- Rivers of North India, Rivers of South India,	2 hours	03/10/2023, 05/10/2023	
	1.5 Vegetation - Types and Distribution- Afforestation programs	2 hours	06/10/2023, 10/10/2023,	Lecture & PPT
UNIT –2Irrigation and Agriculture (10 hours)	2.1 Irrigation: Need for Irrigation and Types	2 hours	12/10/2023, 13/10/2023,	Lecture & PPT, Photos
	2.2 Soils- Types and Distribution, Issues and conservation	2hours	17/10/2023, 19/10/2023,	Lecture & PPT
	2.3Agriculture: Significance and Types- Intensive and Extensive Farming, Subsistence and Mixed Farming	2 hours	20.10.2023, 26.10.2023,	
	2.5Major Crops- Production and Distribution: Rice, Wheat, Cotton , Sugar cane and Tea, Development of Agriculture- Green Revolution	4hours	27.10.2023, 31.10.2023. 02.11.2023, 03.11.2023,	Lecture & PPT, Photos
UNIT –3 Minerals, Power and Industries (10 hours)	3.1Mineral and Power Resources-Types and Significance	1 hours	07.11.2023,	Lecture & PPT
	Internal Test- UNIT –1 UNIT –2	1 hour	16.11.2023	15.11.2023 - 18.11.2023 C1 Internal Test
	3.2Production and Distribution: Iron Ore,Manganese	1 hours	10.11.2023,	Lecture & PPT
	3.3Production and Distribution: Coal,	2 hours	21.11.2023, 23.11.2023,	Lecture

	Petroleum, Hydro Electricity			
	3.4Major industries- Iron and Steel, Cotton textile, Sugar.	2 hours	24.11.2023, 28.11.2023.	Lecture & PPT
	3.5Major industrial regions of India	2 hours	01.12.2023, 02.11.2023	
	3.6Special Economic Zones	1 hours	04.12.2023,	Lecture & PPT, Photos
Unit – 4Transport, Communication & Human PopulationEvolution of Landforms (10 hours)	4.1Roadways, Railways, Airways and Waterways.	2 hours	05.12.2023, 07.12.2023,	Lecture & PPT, Photos
	4.2Important Ports: Calcutta, Chennai, Mumbai and New Mangalore.	2 hours	08.12.2023, 12.12.2023,	Lecture & PPT
	4.3Indian SpaceProgramme (Indian Communication Satellites)	1 hours	14.12.2023,	Lecture & PPT
	4.4Growth of Population	1 hours	15.12.2023,	Lecture & PPT
	4.5Distribution and Density of Population	2 hours	16.12.2023, 18.12.2023,	Lecture & PPT
	4.6Population Composition – Sex Ratio, Literacy, Population Issues	2 hours	19.12.2023, 20.12.2023,.	Lecture & PPT

Department: Geography
Semester: Ist Sem
Title of the Paper: Principles of Geomorphology –
[Course Code -211144**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Ramya R

Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 Geomorphology (14 hours)	a)Introduction to geography: physical and human geography	3 hours	11/09/2023, 13/09/2023, 14/09/2023	Lecture & PPT
	b)IntroductiontoGeomorphology:meaning,nature,development,andscope Principlesof Geomorphology	3hours	15/09/2023, 19/09/2023, 20/09/2023	Chalk and Black board
	c) Geological Time Scale	4 hours	21/09/2023, 22/09/2023, 26/09/2023, 27/09/2023.	Lecture & PPT
	d) Distribution of continents and oceans	4 hours	03/10/2023, 04/10/2023, 05/10/2023, 06/10/2023,	Lecture & PPT
UNIT –2 Systems and Cycles of the Solid Earth (14 hours)	a) Internal structure of the earth Alfred Wegener's continental drift,	3 hours	09/10/2023, 10/10/2023, 11/10/2023,	Lecture & PPT, Photos
	b) Theory of Isostacy: Views of Pratt and Airy	3hours	12/10/2023, 16/10/2023, 17/10/2023	Lecture & PPT
	c)Convectionalcurrenttheoryandconceptofseafloor	4hours	19/10/2023 ,20.10.2023,	Lecture & PPT

	spreading		25.10.2023 , 26.10.2023,	
	d)TheoryofPlateTectonics:plate boundaries, subduction,	4hours	27.10.2023, 30.10.2023, 31.10.2023. 02.11.2023,	Lecture & PPT, Photos
UNIT –3 The Dynamics of Earth(14 hours)	a)Earth'sMovements:Endogeneticand Exogeneticforces,	2 hours	03.11.2023, 04.11.2023,	Lecture & PPT
	b)SuddenandDiastrophic movements-Epeirogenetic and Orogenetic	2 hours	08.11.2023, 09.11.2023,	Lecture & PPT
	Internal Test- UNIT –1 UNIT –2	1 hour	16.112023	15.11.2023 to 18.11.2023 C1 Internal Test
	c)Movements-Process of folding and faulting	2 hours	10.11.2023, 20.11.2023,	Lecture
	d)Volcanicity and earthquake	2 hours	22.11.2023, 23.11.2023,	Lecture & PPT
	e)Rocks:Characteristics,types,importance,androckcycle	2 hours	24.11.2023, 25.11.2023	Lecture & PPT, Photos
	f)Weathering: meaning, types and controlling factors	2 hours	27.11.2023, 28.11.2023,	Lecture & PPT
	g)Mass Movement: meaning, controlling factors, types-landslides, rock-falls	1 hours	29.11.2023.	Lecture & PPT, Photos
Unit – 4Evolution of Landforms (14 hours)	a)Landforms:meaning,typesandfactorscontrollinglandformsdevelopment Slope development: concept andtypes	3 hours	01.12.2023, 04.12.2023, 05.12.2023,	Lecture & PPT, Photos
	b)Concept of Cycle of Erosion–W.M. Davis and W. Penck	3hours	0706.12.2023,.12.2023, 08.12.2023,	Lecture & PPT
	c)AgentsofDenudation: River;drainagepatterns, Groundwater, Seawaves, Wind and Glaciers and resultant landforms.	8 hours	11.12.2023, 13.12.2023, 14.12.2023, 15.12.2023, 16.12.2023, 18.12.2023, 19.12.2023, 19.12.2023.	Lecture & PPT

Department: Geography
Semester: III rd Sem
Title of the Paper: Fundamentals of Human Geography-
[Course Code -221344**]**
Term Period:11.09.2023 to 16.12.2023
Faculty Names: Dr. Ramya R

Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 Introduction	1.1 Nature and scope, Development and Branches of Human Geography,	2 hours	11/09/2023, 12/09/2023,	Lecture & PPT

to Human Geography (14 hours)	1.2 Themes in Geography: Location, Place, Human-Environment Interaction, Movement and Region.	2hours	13/09/2023, 14/09/2023,	Chalk and Black board
	1.3 Man- Environment Relation: Environmental Determinism and Possiblism, Neo-Determinism (stop and go determinism)	4 hours	15/09/2023, 16/09/2023, 19/09/2023, 20/09/2023,	Lecture & PPT
	1.4 Approaches to Human geography: Exploration and Descriptive Approach, Regional Approach, Areal Differentiation Approach, Spatial organization Approach	3 hours	21/09/2023, 03/09/2023, 07/09/2023,	Lecture & PPT
	Modern Approaches: Welfare or Humanistic Approach, Radical Approach, Behavioral Approach, Post Modernism in geography.	3 hours	30/09/2023, 03/10/2023, 04/10/2023	Lecture & PPT
UNIT –2 Cultural patterns and Processes (14 hours)	2.1 Concept of culture, Material and Non-Material Culture, Cultural traits and Cultural regions.	3 hours	05/10/2023, 07/10/2023, 09/10/2023,	Chalk and Black board
	2.2 Meaning and Definition of races, Classification of races, Main characteristics (traits) and Broad racial groups of the world and their distribution.	3hours	10/10/2023, 12/10/2023, 17/10/2023	Lecture & PPT
	2.3 Languages: Classification and Distribution of languages.	4hours	19/10/2023 ,21.10.2023, 25.10.2023 , 26.10.2023	Lecture & PPT
	2.4 Religion: Types, Classification and Distribution of religions: Hinduism, Christianity, Islam and Buddhism.	4 hours	30.10.2023, 31.10.2023, 02.11.2023, 04.11.2023,	Lecture & PPT, Photos
UNIT –3 Population and Settlements (14 hours)	3.1 Distribution and Growth of Population; Factors affecting population Distribution.	3 hours	06.11.2023, 09.11.2023, 11.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	16.11.2023	15.11.2023 to 18.11.2023 C1 Internal Test
	3.2 Density of Population: Meaning and Types; Arithmetic Density, Physiological Density and Agricultural density, Regional Distribution of Density of Population; Carrying capacity and Sustainability	4 hours	20.11.2023, 21.11.2023, 22.11.2023, 23.11.2023,	Lecture & PPT
	3.3 Concept of Settlements, Origin and evolution of Human settlements, Factors of settlements, origin and distribution, types and pattern of settlements,	4hours	25.11.2023, 27.11.2023, 28.11.2023, 29.11.2023,	Lecture
	3.4 Rural and Urban settlements, Trends and Patterns of World Urbanization.	2 hours	02.12.2023, 04.12.2023,	Lecture & PPT
Unit – 4Economic Activities	4.1 Concept and Classification of Economic Activities; Factors affecting Economic Activities.	2 hours	06.12.2023, 07.12.2023,	Lecture & PPT, Photos

(14 hours)	4.2 Primary Economic Activities – Agriculture, Types: Primitive Subsistence, Intensive Subsistence, Plantation Agriculture, Extensive Commercial grain Cultivation, Mixed Farming, Dairy Farming.	4hours	09.12.2023, 11.12.2023, 12.12.2023, 13.12.2023,	Lecture & PPT
	4.3 Secondary Activities: Manufacturing, Classification- a. Based on size – Small Scale and Large scale. b. Based on Raw Material – Agro-based, Mineral based, Chemical Based and Forest based 4.3.1. Industrial Regions of the world.	6 hours	14.12.2023, 16.12.2023, 18.12.2023, 18.12.2023, 19.12.2023, 20.12.2023	Lecture & PPT
	4.4 Tertiary Activities: Types: Trade and Commerce, Retail Trading Services, Wholesale Trading. Transport and communications: Factors. Communication Services – Telecommunication.Services: Informal and Non formal sector. Information technology and service.	2 hours	21.12.2023, 21.12.2023.	Lecture & PPT

Department: Geography
Semester: Vth Sem
Title of the Paper: Population Resources andDynamics-
[Course Code -231544**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Ramya R

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 (15 hours)	Introduction, Nature and Scope of Population Geography, Population Geography and Demography,	4 hours	11/09/2023, 12/09/2023, 12/09/2023, 13/09/2023,	Lecture & PPT
	Approaches to study population Geography, Sources of population data.	3 hours	15/09/2023, 16/09/2023, 19/09/2023,	Chalk and Black board
	World Population: Distribution-patterns, population growth, Density of population,.	5 hours	21/09/2023, 22/09/2023, 26/09/2023, 30/09/2023, 03/10/2023,	Lecture & PPT
	population determinants with comparison to India	3 hours	05/10/2023, 06/10/2023, 10/10/2023	Lecture & PPT
UNIT –2 (15 hours)	Demographic Change	2 hours	12/10/2023, 16/10/2023,	Chalk and Black board
	Concepts of over, under & optimum population; Components of Population Change.	2hours	17/10/2023, 19/10/2023	Lecture & PPT

	Fertility and Mortality: Concepts, measures of fertility and mortality,	3 hours	20/10/2023, 25/10/2023, 26/10/2023,	Lecture & PPT
	determinants and world patterns of fertility and mortality.	3 hours	27/10/2023, 27/10/2023, 30/10/2023	Lecture & PPT
	Demographic Attributes and Demographic Transition. Theories of Population Growth: T.R.Malthus and David Ricardo.	5 hours	31/10/2023, 03.11.2023, 03.11.2023, 06.11.2023, 07.11.2023	Lecture & PPT
UNIT –3 (15 hours)	Migration, Meaning, types, causes, consequences.	4 hours	08.11.2023, 09.11.2023, 09.11.2023, 10.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	17.11.2023	15.11.2023-8.11.2023 C1 Internal Test
	Theories of Migration: Theory of migration by Ravenstein and comprehensive theory by Lee.	4 hours	21.11.2023, 22.11.2023, 23.11.2023, 24.11.2023,	Lecture & PPT
	Population composition and characteristics- Age, Sex, rural-urban and occupational structure.	6 hours	24.11.2023 ,25.11.2023, 27.11.2023, 28.11.2023, 01.12.2023, 01.12.2023,	Lecture & PPT
Unit – 4 (15 hours)	Population as Resource, World Population Resource Regions.	3 hours	04.12.2023, 05.12.2023, 07.12.2023,	Lecture & PPT,
	Social well-being and quality of life; population as a social capital.	3 hours	08.12.2023, 08.12.2023, 09.12.2023,	Lecture & PPT
	Contemporary Issues - Ageing of Population; Declining Sex Ratio,	3 hours	12.12.2023, 14.12.2023, 14.12.2023,	Lecture & PPT
	Population policies in developed and developing countries.	3 hours	15.12.2023, 15.12.2023, 16.12.2023,	Lecture & PPT
	Population Policies in India. Human Development Index (HDI)	3 hours	18.12.2023, 18.12.2023, 19.12.2023.	Lecture & PPT

Department: Geography
Semester: Vth Sem
Title of the Paper: Fundamentals of Remote Sensing
[Course Code -231545**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Ramya R

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 (15 hours)	Introduction to Remote Sensing	2 hours	11/09/2023, 13/09/2023,	Lecture & PPT
	Definition and Components, History of Remote Sensing,	2 hours	15/09/2023, 16/09/2023,	Chalk and Black board
	Electromagnetic Magnetic Spectrum,	3 hours	19/09/2023, 20/09/2023,	Lecture & PPT

			20/09/2023,	
	Interaction of EMR with the atmosphere and with the surface feature, Atmospheric window, spectral	5 hours	23/09/2023, 25/09/2023, 27/09/2023, 0/09/2023, 03/10/2023,	Lecture & PPT
	reflectance of land covers (minerals, rocks, water, vegetation, and urban area).	3 hours	04/10/2023, 04/10/2023, 06/10/2023,	Lecture & PPT
UNIT –2 (15 hours)	Sensors & Platforms-Types of orbits-sun-synchronous and geosynchronous, Sources of energy,	3 hours	07/10/2023, 08/10/2023, 10/10/2023,	Chalk and Black board
	Classification of remote sensors - Active, Passive, Electromechanical and optical sensors.	3hours	11/10/2023, 16/10/2023, 17/10/2023	Lecture & PPT
	Resolution concept - Spectral, Radiometric, and temporal resolution.	2hours	20/10/2023, 21/10/2023,	Lecture & PPT
	Platform types and characteristics Launch of space vehicles.	2hours	27/10/2023, 30/10/2023,	Lecture & PPT
	Angular characteristics-FOV and IFOV, push broom and whiskbroom cameras,	2 hours	03.11.2023, 04.11.2023,	Lecture & PPT
	Panchromatic, multispectral, hyper spectral scanners, and geometric characteristics of the imageries.	3 hours	06.11.2023, 07.11.2023, 08.11.2023	Lecture & PPT, Photos
UNIT –3 (15 hours)	Aerial Photography, Elements, Types and interpretation of Aerial photography,	3 hours	08.11.2023, 10.11.2023, 11.11.2023,	Lecture & PPT
Internal Test	UNIT –1 UNIT –2	1 hour	17.11.2023	15.11.2023-8.11.2023 C1 Internal Test
	Principles, Classification of Aerial photographs based on Height and Tilt, Scales,	3 hours	21.11.2023, 22.11.2023, 24.11.2023,	Lecture & PPT
	Components of camera, film, Aerial platforms. Elements of Aerial photo	4hours	25.11.2023 ,27.11.2023, 28.11.2023, 29.11.2023,	Lecture
	interpretation, Digital and Analog data, Image formats, Stereo pairs, Applications of Aerial Photography.	4 hours	01.12.2023, 02.12.2023, 04.12.2023, 05.12.2023,	Lecture & PPT
Unit – 4 (15 hours)	Applications of Remote Sensing	3 hours	06.12.2023, 08.12.2023, 09.12.2023,	Lecture & PPT, Photos
	Indian remote sensing Centers and their activities,	3 hours	11.12.2023, 12.12.2023, 13.12.2023,	Lecture & PPT
	New satellite programs of India. Different Satellites and their Application in Land, Resources, Meteorology, and Hydrology.	6 hours	15.12.2023, 15.12.2023, 16.12.2023, 18.12.2023, 18.12.2023, 19.12.2023,	Lecture & PPT Photos
	Ground truth verification, using Google Earth.	3 hours	20.12.2023, 20.12.2023, 21.12.2023	Lecture & PPT Photos

Department: Geography
Semester: Ist Sem-OE
Title of the: Introduction to Physical Geography-
[Course Code -21OEGEO101**]-Open Elective**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Ramya R

Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 Geomorphology (10 hours)	Origin, Shape and Size of the Earth,	3 hours	11/09/2023, 13/09/2023, 16/09/2023,	Lecture & PPT
	MovementoftheEarth-RotationandRevolution,Effectsofthemovementof Earth,	3hours	20/09/2023, 23/09/2023, 25/09/2023,	Lecture & PPT
	Coordinates -Latitude, Longitude and Time.	2 hours	27/09/2023, 30/09/2023,	Lecture & PPT
	Structure of the Earth,	3 hours	04/10/2023, 07/10/2023,	Lecture & PPT
UNIT –2 Systems and Cycles of the Solid Earth (11 hours)	Rocks - types, significance,	3 hours	09.10.2023, 11/10/2023, 16/10/2023,	Lecture & PPT, Photos
	Weathering –types.	3hours	18/10/2023, 21.10.2023, 25.10.2023,	Lecture & PPT
	AgentsofDenudation-River,Glacier,WindandUnderGroundwater.	3hours	28/10/2023, 0/10/2023,04.11.2023,	Lecture & PPT
	Volcanicity, Earthquakes andTsunamis	2 hours	06.11.2023, 08.11.2023,	Lecture & PPT, Photos
UNIT –3 The Dynamics of Earth(10 hours)	Structure and Composition of Atmosphere,	2 hours	11.11.2023, 13.11.2023	Lecture & PPT
	Internal Test- UNIT –1 UNIT –2	1 hour	16.11.2023	15.11.2023 to 18.11.2023 C1 Internal Test
	Weather and Climate.	1 hours	20.11.2023,	Lecture & PPT
	AtmosphericTemperature,HeatBudgetofthe atmosphere	2 hours	22.11.2023, 25.11.2023,	Lecture
	Atmospheric Pressure,	2 hours	27.11.2023, 29.11.2023.	Lecture & PPT
	Winds andPrecipitation	2 hours	02.12.2023, 04.12.2023,	Lecture & PPT, Photos
Unit –4Evolution of Landforms (11 hours)	DistributionofLandandSea,	1 hours	06.12.2023,	Lecture & PPT, Photos
	SubmarineReliefoftheOcean,	2 hours	09.12.2023, 11.12.2023,	Lecture & PPT
	Temperature and salinity of SeaWater.	2 hours	13.12.2023, 16.12.2023,	Lecture & PPT
	Ocean Tides, Waves and Deposits,	1 hours	18.12.2023,	Lecture & PPT, Photos
	Ocean currents - Atlantic, Pacific and Indian Oceans	2 hours	18.12.2023, 19.12.2023,	Lecture & PPT, Photos
	Marine Resources: Biotic, mineral and energy resources	2 hours	20.12.2023, 20.12.2023.	Lecture & PPT

Department: Geography
Semester: Ist Sem-OE
Title of the: Geography of India
[Course Code -22OEGEO301**]-Open Elective**
Term Period: 11.09.2023 to 16.12.2023
Faculty Names: Dr. Ramya R

Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 Physical Basis (12 hours)	1.1 Location, Size and Extent, Political Divisions	3 hours	12/09/2023, 14/09/2023, 15/09/2023,	Lecture & PPT
	1.2 Relief Features-Northern Mountai Northern Great Plain, The Peninsular Plateau and Coas Plain and Islands	3hours	19/09/2023, 21/09/2023, 22/09/2023	Lecture & PPT
	1.3 Climate: Seasons – Summer Season, Sou West Monsoon, Retreating Monsoon Seas Winter Season,	2 hours	26/09/2023, 29/09/2023	Lecture & PPT
	1.4 Drainage system- Rivers of North India, Rivers of South India,	2 hours	03/10/2023, 05/10/2023	
	1.5 Vegetation - Types and Distribution- Afforestation programs	2 hours	06/10/2023, 10/10/2023,	Lecture & PPT
UNIT – 2Irrigation and Agriculture (10 hours)	2.1 Irrigation: Need for Irrigation and Types	2 hours	12/10/2023, 13/10/2023,	Lecture & PPT, Photos
	2.2 Soils- Types and Distribution, Issues and conservation	2hours	17/10/2023, 19/10/2023,	Lecture & PPT
	2.3Agriculture: Significance and Types- Intensive and Extensive Farming, Subsistence and Mixed Farming	2 hours	20.10.2023, 26.10.2023,	
	2.5Major Crops- Production and Distribution: Rice, Wheat, Cotton , Sugar cane and Tea, Development of Agriculture- Green Revolution	4hours	27.10.2023, 31.10.2023. 02.11.2023, 03.11.2023,	Lecture & PPT, Photos
UNIT –3 Minerals, Power and Industries (10 hours)	3.1Mineral and Power Resources-Types and Significance	1 hours	07.11.2023,	Lecture & PPT
	Internal Test- UNIT –1 UNIT –2	1 hour	16.11.2023	15.11.2023 - 18.11.2023 C1 Internal Test
	3.2Production and Distribution: Iron Ore,Manganese	1 hours	10.11.2023,	Lecture & PPT
	3.3Production and Distribution: Coal, Petroleum, Hydro Electricity	2 hours	21.11.2023, 23.11.2023,	Lecture
	3.4Major industries- Iron and Steel, Cotton textile, Sugar.	2 hours	24.11.2023, 28.11.2023.	Lecture & PPT
	3.5Major industrial regions of India	2 hours	01.12.2023, 02.11.2023	

	3.6Special Economic Zones	1 hours	04.12.2023,	Lecture & PPT, Photos
Unit – 4Transport, Communication & Human PopulationEvolution of Landforms (10 hours)	4.1Roadways, Railways, Airways and Waterways.	2 hours	05.12.2023, 07.12.2023,	Lecture & PPT, Photos
	4.2Important Ports: Calcutta, Chennai, Mumbai and New Mangalore.	2 hours	08.12.2023, 12.12.2023,	Lecture & PPT
	4.3Indian SpaceProgramme (Indian Communication Satellites)	1 hours	14.12.2023,	Lecture & PPT
	4.4Growth of Population	1 hours	15.12.2023,	Lecture & PPT
	4.5Distribution and Density of Population	2 hours	16.12.2023, 18.12.2023,	Lecture & PPT
	4.6Population Composition – Sex Ratio, Literacy, Population Issues	2 hours	19.12.2023, 20.12.2023,.	Lecture & PPT

Department:Geography
Semester: IIndSem
Title of the Paper: Introduction to Climatology
[Course Code -211244**]**
Term Period: 12.02.2024 to 25.05.2024
Faculty Names: Dr. Siddaraju C S
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT –1 Composition and Structure of theAtmosphere (14 hours)	Nature and Scope of Climatology, Atmospheric Sciences	2 hours	12.02.24,14.02.24	Lecture & PPT, Videos along with Photos
	Climatology and Meteorology	2hours	14.02.24,16.02.24	Chalk and Black board
	OriginandstructureoftheAtmosphere:Troposphere, Stratosphere,Mesosphere, Ionosphere, Exosphere and theircharacteristics	6 hours	19.02.24, 21.02.24, 21.02.24, 23.02.24, 26.02.24, 28.02.24	Lecture & PPT, Videos along with Photos
	Composition of the atmosphere	3 hours	28.02.24, 28.02.24 01.03.24	Lecture & PPT
	Weather and Climate.	3 hours	04.03.24 ,06.03.24 06.03.24	Lecture & PPT
UNIT –2 Atmospheric Temperature (14 hours)	Isolation: Definition, Mechanism, Solar Constant.	1 hours	11.03.24	Chalk and Black board
	FactorsaffectingtheIsolation:Angleofincidence,lengthoftheday,Sunspots, Distance between the earth and the sun, effect of theatmosphere.	3hours	13.03.24. 13.03.24 15.03.24	Lecture & PPT
	Heatingandcoolingprocessoftheatmosphere-Radiation,Conduction, convection, andadvection.	3hours	18.03.24, 20.03.24, 20.03.24,	Lecture & PPT, Videos along with Photos
	Temperature:meaningandInfluencingFactorsonthe Distributionof Temperature Distributionofthetemperature:Vertical,Horizontal,andInversionoftemperature.	3 hours	20.03.24, 22.03.24 01.04.24	Lecture & PPT, Photos
	Global Energy Budget: Incoming shortwave solar radiation, Outgoing	2 hours	03.04.24, 03.04.24	Lecture & PPT

	Long wave			
	Terrestrial radiation, Albedo. Net Radiation and Latitudinal Heat Balances.	1 hour	05.04.24	Lecture & PPT
UNIT –3 Atmospheric Pressure and Winds (14 hours)	AtmosphericPressure:Influencingfactorsonatmospheric pressure.	2 hours	08.04.24, 10.04.24	Lecture & PPT
	VerticalandHorizontal DistributionoftheatmosphericpressureandPressure Belts,PressureGradient.	3 hours	10.04.24, 12.04.24 15.04.24,	Lecture & PPT Videos along with Photos,
Internal Test	UNIT –1 UNIT –2	1 hour	16.04.2024	16.04.2024 to 20.04.2024 C1 Internal Test
	Tri-cellular-Hadley,Ferrell'sandPolarCells.	2 hours	22.04.24, 24.02.24	Lecture
	Winds:influencingfactors,Types-planetary,seasonal,localwind Variable winds-Cyclo andanti-cyclones.	5 hours	24.04.24, 26.04.24, 29.04.24, 03.05.24, 06.05.24, 08.05.24	Lecture & PPT, Videos along with Photos
	Air-MassesandFronts:Definition,Nature,SourceRegions, Classification.	2 hours	08.05.24, 08.05.24,	Lecture & PPT
Unit – 4 Atmospheric Moisture (14 hours)	Humidity: Sources, influencing factors and types-Absolute, Relative and Specific.	4 hours	13.05.24, 15.05.24, 15.05.24, 17.05.24,	Lecture & PPT, Videos along with Photos
	Hydrologicalcycle:processofevaporation,condensation.	3 hours	20.05.24, 20.05.24, 22.05.24	Videos along with Photos
	Cloudsanditstypes Precipitation and itsforms.	4 hours	22.05.24, 24.05.24, 27.05.24, 27.05.24	Lecture & PPT, Photos
	Climate Change: Causes and consequences, recent issues-floods, drought,	3 hours	29.05.24, 29.05.24, 31.05.24	Videos along with Photos

Department: Geography
Semester: IVthSem
Title of the Paper: India: Resources and Sustainability
[Course Code -221444**]**
Term Period: 12.02.2024 to 25.05.2024
Faculty Names: Dr.Siddaraju C S

Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1Physical Setting:	1.1.Location, Size and Extent. Major Physiographic Regions-Northern Mountains, Northern Great Plains, Peninsular Plateau and	3 hours	12.02.24, 13.02.24, 14.02.24	Lecture & PPT, Videos along with Photos

(14 hours)	Coastal Plains and Islands and their Characteristics;			
	1.2.Climate: Seasonal Weather Characteristics, Climatic Zones. Mechanism and Characteristics of Indian Monsoons.	2hours	17.02.24, 19.02.24	Lecture & PPT
	1.3.Tropical Cyclones and Western Disturbances. 1.4.Floods and Droughts	2 hours	20.02.24, 21.02.24,	Lecture & PPT, Videos along with Photos
	1.5.Drainage System.	3 hours	24.02.24, 26.02.24 27.02.24	Lecture & PPT
	1.6.Soil: Types, Erosion and Conservation.	2 hours	28.02.24, 02.03.24	Lecture & PPT
	1.7.Vegetation: Types, Distribution, Afforestation programs, National Parks, Wildlife Sanctuaries, and Biosphere reserves.	2 hours	04.03.24, 05.03.24	Lecture & PPT, Videos along with Photos
UNIT –2 Water and Agricultural Resources: (14 hours)	2.1.Water resources of India, Surface and Groundwater, Water Demand and Utilization.	2 hours	06.03.24, 09.03.24	Chalk and Black board
	2.2.Irrigation: Sources, Types and Intensity. Issues and Challenges: Water Resources Scarcity, Water Conservation and Management.	3hours	11.03.24. 12.03.24 13.03.24	Lecture & PPT
	2.3.Watershed Management, Rainwater Harvesting, Recycle and Reuse of water. Interlinking of Rivers,	2hours	16.03.24, 18.03.24,	Lecture & PPT, Videos along with Photos
	National Water Policies, National Water Mission, JalashaktiAbhiyaan. Command Area Development and Water Management. Central Water Commission and Water Tribunal and their role.	2 hours	19.03.24, 20.03.24,	Lecture & PPT, Photos
	2.5.Agriculture: Land Use and Cropping Pattern – Meaning and Concepts, Land Use and Cropping Patten in India, Agro-climatic Regions,	3 hours	23.03.24, 25.03.24, 26.03.24	Lecture & PPT
	2.5.1Green Revolution – Causes and Effects, Hunger Index and Malnutrition; Food security and right to food to achieve Zero hunger and Good Health and Wellbeing.	2 hour	27.03.24, 30.03.24	Lecture & PPT
UNIT –3 Industries, Transportation &Communication(14 hours)	3.1Locational factors of industries, Major Industrial Regions and their characteristics	3 hours	01.04.24, 02.04.24, 03.04.24	Lecture & PPT
	3.2. Classification of Industries: Agro-based, Mineral-based, Forest-based and Animal-based industries.	3 hours	06.04.24, 08.04.24 10.04.24,	Lecture & PPT
	3.3.Special Economic Zones: Industrial / Economic Corridor.	2 hours	13.04.24, 15.02.24	Lecture
Internal Test	UNIT –1 UNIT –2	1 hour	18.04.2024	16.04.2024 to 20.04.2024 C1 Internal Test
	3.4. Transport& Communication: Significance, Growth and Development– Road ways, Railways, Waterways, Airways and Pipeline Networks and their Complementary and Competition.	5 hours	22.04.24, 23.04.24, 24.04.24, 27.04.24, 29.04.24	Lecture & PPT, Videos along with Photos
	3.5.Communication: Means of Communication	2 hours	30.04.24,	Lecture & PPT

	and their Significance		04.05.24,	
Unit – 4 Human Resources (14 hours)	4.1. Growth, Distribution and Density of Population.	4 hours	06.05.24, 07.05.24, 08.05.24, 11.05.24,	Lecture & PPT
	4.2. Composition of Population: Age, Sex, Rural-Urban Population Composition.	3 hours	13.05.24, 14.05.24, 15.05.24	Lecture & PPT, with Photos
	4.3. Migration: Meaning, Factors, Types, Causes and Consequences.	4 hours	18.05.24, 20.05.24, 21.05.24, 22.05.24	Lecture & PPT, Photos
	4.4.Human Development in India:Measures, Levels of Development based on HDI	3 hours	25.05.24, 27.05.24, 28.05.24	Lecture & PPT, Photos

Department: Geography
Semester: VIthSem
Title of the Paper: Environmental Geography –
[Course Code -231644**]**
Term Period: 12.02.2024 to 25.05.2024
Faculty Names: Dr.Siddaraju C S

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT -1 Introduction to Environment Geography (14 hours)	Nature and Interdisciplinary Aspect of Environmental Geography.	2 hours	12.02.24, 13.02.24,	Lecture & PPT
	Definition and meaning of environment. Habitat.	2hours	15.02.24, 16.02.24,	Lecture & PPT
	Ecological ApproachesEcological Niche.	2 hours	17.02.24, 19.02.24,	Lecture & PPT, Videos along with Photos
	Biosphere and Biodiversity; bio-diversity and sustainable development.	3 hours	20.02.24, 22.02.24 23.02.24	Lecture & PPT, Videos along with Photos
	Biomes – major Biomes of the world.	3hours	26.02.24, 27.02.24, 29.2.24	Lecture & PPT, Videos along with Photos
	Man and Environmental Relationships.	2 hours	01.03.24, 04.03.24	Lecture & PPT
UNIT-2 Ecosystem (14 hours)	Structure and Functioning of Ecosystem.	2 hours	05.03.24, 07.03.24	Videos along with Photos
	Pond as an Ecosystem, ecosystem management and conservation.	3hours	11.03.24. 12.03.24 14.03.24	Lecture & PPT
	Principle of ecology; human ecological adaptation	2hours	15.03.24, 18.03.24,	Lecture & PPT

	ıence of man on ecology and environment.	2 hours	19.03.24, 21.03.24,	Lecture & PPT, Photos
	Global and regional ecological change & imbalance.	2 hours	22.03.24, 25.03.24,	Lecture & PPT
	Food Chains, Food Webs, Food Pyramid.	3 hour	26.03.24, 28.03.24, 01.04.24	Lecture & PPT, Videos along with Photos
UNIT –3 Man-Induced Changes in Environment	Environmental Pollution, i.e., Air, Water, Noise; Solid Waste with special reference to India. Environmental Hazards, i.e., earth as Warehouses	5 hours	02.04.24, 04.04.24, 05.04.24, 08.04.24, 11.04.24	Lecture & PPT, Videos along with Photos
	Flood, Famines, Land Slides, Avalanches, Forest Fires	2 hours	12.04.24, 15.04.24	Lecture & PPT Videos along with Photos
Internal Test	UNIT –1 UNIT –2	1 hour	17.04.2024	16.04.2024 to 20.04.2024 C1 Internal Test
	Impact of Green Revolution and Extinction of Species. Man-Made	3 hours	12.04.24, 15.04.24 25.04.24	Lecture
	Ecosystem - Urban, Ecotourism, National Parks and Sanctuaries.	2 hours	26.04.24, 29.04.24,	Lecture & PPT
	Depletion of Ozone, Green House Effect and Acid Rain.	2 hours	30.04.24, 02.05.24,	Lecture & PPT
UNIT -4 Principles of Environmental Management: (14 hours)	Environmental Policy of India, (post-2000 AD). Environment Impact Assessment (EIA). Global Summits & Agencies of Environment Conservation.	4 hours	03.05.24 06.05.24, 07.05.24, 09.05.24,	Lecture & PPT
	Environmental degradation, management and conservation. Problems of Deforestation and conservation measures.	4 hours	13.05.24, 14.05.24, 16.05.24, 17.05.24,	Lecture & PPT, with Photos
	Environmental policy; environmental hazards and remedial measures.	3 hours	20.05.24, 21.05.24, 23.05.24,	Lecture & PPT, Photos
	Environmental Education and Legislation.	3 hours	24.05.24, 27.05.24, 28.05.24	Lecture & PPT, Photos

Department: Geography
Semester: VIthSem
Title of the Paper: Fundamentals of Geographic Information Systems –
[Course Code **-:**231645**]**
Term Period: 12.02.2024 to 25.05.2024
Faculty Names: Dr.Siddaraju C S

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT -1 Introduction (14 hours)	Definition, scope of GIS in digital world	5 hours	12.02.24, 13.02.24, 14.02.24, 17.02.24, 19.02.24,	Lecture & PPT
	Components, functionalities,	3hours	20.02.24, 21.02.24, 24.02.24,	Lecture & PPT
	merits and demerits, global market.	3 hours	26.02.24, 27.02.24, 28.02.24,	Lecture & PPT
	Interdisciplinary domains and its integration with GIS.	4 hours	02.03.24, 04.03.24 05.03.24, 06.03.24	Lecture & PPT
UNIT-2 Geodesy and Spatial Mathematics (14 hours)	Meaning, scope of geodesy,	2 hours	09.03.24, 11.03.24	Lecture & PPT
	Geographical coordinates, latitude, longitudes; Datum: WGS-84, vs NAD-32.	5hours	12.03.24. 13.03.24 16.03.24, 18.03.24, 19.03.24	Lecture & PPT
	UTM; Aerial Distance measurement	3hours	20.03.24, 23.03.24, 25.03.24	Lecture & PPT
	Geographic and projected coordinates,	2 hours	26.03.24, 27.03.24,	Lecture & PPT Photos
	Area,Perimeter, length by coordinates and various international measures.	3 hours	30.03.24, 01.04.24, 02.04.24	Lecture & PPT
UNIT –3 Data and Scale	Spatial Data and its structures; Sources and Types of data collection.	5 hours	03.04.24, 06.04.24, 08.04.24, 10.04.24,	Lecture & PPT, Videos along with Photos

			31.04.24	
	Data errors and relationships.	3 hours	15.04.24, 16.04.24, 17.04.24	Lecture & PPT Videos along with Photos
Internal Test	UNIT –1 UNIT –2	1 hour	18.04.2024	16.04.2024 to 20.04.2024 C1 Internal Test
	Large Scale vs Small Scale; Generalization;	3 hours	20.04.24, 22.04.24 23.04.24	Lecture
	Precision and accuracy of data..	4 hours	24.04.24, 27.04.24, 29.04.24, 30.04.24	Lecture & PPT
UNIT -4 Geo-processing & Visualization (14 hours)	Spatial and Non-Spatial Queries; Proximity analysis,	4 hours	04.05.24, 06.05.24, 07.05.24, 08.05.24,	Lecture & PPT
	Preparation of Terrain and Surface models.	3 hours	11.05.24, 13.05.24, 14.05.24	Lecture & PPT, with Photos
	Hotspot and density mapping.	3 hours	15.05.24, 18.05.24, 20.05.24,	Lecture & PPT, Photos
	Types of maps, thematic maps and its types, relief maps, flow maps and cartograms.	3 hours	21.05.24, 22.05.24, 25.05.24	Lecture & PPT, Photos
	Tabulations: Graphs and Pivot tables.	2 hours	27.05.24, 28.05.24	Lecture & PPT, Photos

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Course Plan of Odd Semester 2023-24

Department : HINDI
Title of the Paper : Hindi Kahani aur Vyakaran [Course Code – 21HIN106]Term Period : 11.09.2023 to 16.12.2023
Faculty Name : PARAMESHWAR HEGDETotal Hrs: 64 Hours (4 Hrs/Week)

Curriculum as prescribedby the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit I, and IV (16 hours)	INTRODUCTION TO SUBJECT	2 hours	11-09-2023 to 16-09-2023	POs and Course Outcomes of the units discussed
	Discussed about Types of Kahani	2		
	KAHANI-PAREEKSHA-PREMCHAND Moral of the Story	3 hours	19-09-23 to 23-09-23	Reading.Writing by students and Lecturing
	BASICS OF GRAMMAR-STANDRED ALPHABITS OF WRITING HINDI Types of Alphabits-Swara,-types	1 hours		Chalk and Black board
	KAHANI-PAREEKSHA-PREMCHAND Moral of the Story Mavali-MohanRakesh- Moral of the Story	3 hours	25-09-23 to 30-09-23	Reading.Writing by students and Lecturing
	Swara,-types, Vyanjana,Type	01 hours		Chalk and Black board
	Mavali-Mohan Rakesh- Moral of theStory	3 hours	03-10-23 to	Reading.Writing by students and Lecturing

	Ek Bachhi ki Keemat- Dharmaveerbharathi		07-10-23	Chalk and Black board
	Shabdhavichar-	1 hours		
Unit II, and IV (16 hours)	Ek Bachhi ki Keemat- Dharmaveerbharathi	**3 hours**	09-10-23 to 11-10-23	Reading.Writing by students and Lecturing
	Shabdhavichar-	**1 hours**		Chalk and Black board
	Albam-Sudarshan with Moral	**3 hours**	12-10-23 to 13 -10-23	Reading.Writing by students and Lecturing
	Sangya- Defination and Types	**1 hours**		Chalk and Black board
	BolnevaliOurat –Mamatha kaliya	**3 hours**	16-10-23 to 21-10-23	Reading.Writing by students and Lecturing
	Sarvanam- Defination and Types	**1 hours**		Chalk and Black board
	Pani our Pul-Maheep Singh	**3 hours**	25-10-23 to 27-10-23	Reading.Writing by students and Lecturing
	Sarvanam- Defination and Types	**1hours**		Chalk and Black board
Unit-III and IV (16 hours)	ChifkiDawat-BhimshmaSahani	**3 hours**	30-10-23 to 04-11-23	Reading.Writing by students and Lecturing
	Sarvanam- Defination and Types	1 hours		Chalk and Black board
	No bar-Jayaprakash Kardam	**3** Hours	06-11-23 to 11-11-23	Reading.Writing by students and Lecturing
	Ling- Defination and Types, Identifying Pulling to streeling	1 hours		Chalk and Black board

	Gender in Hindi			
	Ling- Parivarthan	3 hours	13-11-2023 to 14-11-2023	Chalk and Black board
Unit-I & IV		5 hours	15-11-2023 To 18-11-2023	C1 Internal Test
Unit III andIV (16 hours)	No bar-Jayaprakash Kardam-withMoral	**2** hours	20-11-23 to 25-11-23	Reading.Writing by students and Lecturing
	Kriya- Defination and Types	1 hours		Internal Test marks 22-11-23 Display of C1 on the notice board
	Kriya-Sanrachanake Karan kriya bhed	4 hours	27-11-23 to 02-12-23	Chalk and Black board
	Kal -Defination and Types Writing Annotations, Special Featuresof Lessons	4 hours	04-12-23 to 09-12-23	Chalk and Black board
Unit I,II,III&IV	**Revision Classes**	5 hours	11-12-23 to 16-12-23	. Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			16.12.2023	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

Department : HINDI
Title of the Paper : Hindi Kahani aur Vyakaran
[Course Code – 21HIN206]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : PARAMESHWAR HEGDE

Total Hrs: 64 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit I, and IV (16 hours)	INTRODUCTION TO SUBJECT	2 hours	11-09-2023 to 16-09-23	POs and Course Outcomes of the units discussed
	Discussed about Types of Kahani	2		
	KAHANI-Buddu Ka Kanta- Chandradhar Sharma "Guleri"	3 hours	19-09-23 to 23-09-23	Reading.Writing by students and Lecturing
	BASICS OF GRAMMAR-STANDREDALPHABITS OF WRITING HINDI Types of Alphabits-Swara,-types	1 hours		Chalk and Black board
	KAHANI-Buddu Ka Kanta- Chandradhar Sharma "Guleri"	3 hours	25-09-23 to 30-09-23	Reading.Writing by students and Lecturing
	Types of Alphabits-Swara,Vyanjana	01 hours		Chalk and Black board
	Puraskar-Jayashanker Prasad	3 hours	03-10-23 to 07-10-23	Reading.Writing by students and Lecturing
	Shabdhavichar and Types	1 hours		Chalk and Black board
Unit II, and IV (16 hours)	Pajeb-Jainendra	**3 hours**	09-10-23 to 11-10-23	Reading.Writing by students and Lecturing
	Shabdhavichar and Types	**1 hours**		Chalk and Black board
	Parada-Yeshpal with Moral	**3 hours**	12-10-23 to 13 -10-23	Reading.Writing by students and Lecturing
	Ling- Defination and Types, Identifying Pulling to streelingGender in Hindi.	**1 hours**		Chalk and Black board
	Vapasi-Usha Priyamvada	**3 hours**	16-10-23 to	Reading.Writing by students and Lecturing
	Ling- Conversion of Words-Pullingto streeling	**1 hours**	21-10-23	Chalk and Black board

	Poos Ki Rat-Premchand	**3 hours**	25-10-23 to 27-10-23	Reading.Writing by students and Lecturing
	Sarvanam- Defination and Types	**1hours**		Chalk and Black board
Unit-III and IV (16 hours)	Taee-Vishwambarnath Koushik	**3 hours**	30-10-23 to 04-11-23	Reading.Writing by students and Lecturing
	Sarvanam- Defination and Types	1 hours		Chalk and Black board
	Taee-Vishwambarnath Koushik Panchaparameshwar-Rangheyaraghv	**3** Hours	06-11-23 to 11-11-23	Reading.Writing by students and Lecturing
	Sangya- Defination and Types.	1 hours		Chalk and Black board
	Ling- Parivarthan	3 hours	13-11-2023 to 14-11-2023	Chalk and Black board
Unit-I & IV		5 hours	15-11-2023 To 18-11-2023	C1 Internal Test
Unit III and IV (16 hours)	Panchaparameshwar-Rangheyaraghv	**2** hours	20-11-23 to 25-11-23	Reading.Writing by students and Lecturing
	Kriya- Defination and Types.	1 hours		Internal Test marks 22-11-23 Display of C1 on the notice board
	Kriya-Sanrachanake Karan kriyabhed	4 hours	27-11-23 to 02-12-23	Chalk and Black board
	Kal -Defination and Types Writing Annotations. SpecialFeatures of Lessons	4 hours	04-12-23 to 09-12-23	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	5 hours	11-12-23 to 16-12-23	. Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			16.12.2023	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

Department : HINDI
Title of the Paper : HINDI KAVITHA AND SARAKARI PATRA AND PARIBHASHIK
[CourseCode – 22HIN306]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : PARAMESHWAR HEGDE
Total Hrs: 64 Hours (4 Hrs/Week)

Curriculum asprescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I,II and IV (16 hours)	INTRODUCTION TO SUBJECT	1 hours	11-09-2023 to 16-09-23	POs and Course Outcomes of the units discussed
	KAVITHA and SARAKARI PATRA AND PARIBHASHIKSHABDHAVALI	3		
	Vaha Todati Pattar-suryakantTripathi Nirala	3 hours	19-09-23 to 23-09-23	Reading.Writing by students and Lecturing
	Prastavana,Importance of GoernmentLetters.	1 hours		Chalk and Black board
	Vaha todati pattar-suryakant TripathiNirala. Bapu-Sumitrananadan pantIntroduction	3 hours	25-09-23 to 30-09-23	Reading.Writing by students and Lecturing
	Gunalakshana of Government Letters	01 hours		Chalk and Black board
	Bapu-Sumitrananadan pant	3 hours	03-10-23 to 07-10-23	Reading.Writing by students and Lecturing
	Sarakaripatra Swaroop	1 hours		Chalk and Black board
Unit I,II and IV (16 hours)	Bharat kiShreshtata-MaithilisharanaGupt-Introduction and Explain	**3 hours**	09-10-23 to 11-10-23	Reading.Writing by students and Lecturing
	Types of Letters and Samanyasarakari Patra and SamanyaSarakari Patra Type -1	**1 hours**		Chalk and Black board
	Bharat kiShreshtata-MaithilisharanaGupt	**3 hours**	12-10-23 to 13 -10-23	Reading.Writing by students and Lecturing
	Samanya Sarakari Patra Type -2 KaryalaiJnapan-patra Prastavana.	**1 hours**		Chalk and Black board
	Path kePahechan-Harivansh raibachan Pret ka bayan-Nagarjun	**3 hours**	16-10-23 to 21-10-23	Reading.Writing by students and Lecturing
	KaryalaiJnapan-patra. Type -1	**1 hours**		Chalk and Black board
	Path kePahechan-Harivansh raibachan	**3 hours**	25-10-23 to 27-10-23	Reading.Writing by students and Lecturing
	Pari patra Explination-Type 1	**1 hours**		Chalk and Black board

Unit-II,III and IV(16 hours)	Jansiki Rani-Subhadra KumariChouhan	**3 hours**	30-10-23 to 04-11-23	Reading.Writing by students and Lecturing
	Pari Patra-Type -2	1 hours		Chalk and Black board
	Jansiki Rani-Subhadra KumariChouhan YahaDharati Us Kisanki-KedarnathAgrval	**3** Hours	06-11-23 to 11-11-23	Reading.Writing by students and Lecturing
	Press Vijnapti Press Note withExample	1 hours		Chalk and Black board
	Geet Pharosh-Bhavani Prasad Mishra	2 hours	13-11-2023 to 14-11-2023	Reading.Writing by students and Lecturing
Unit-I & IV		5 hours	15-11-2023 To 18-11-2023	C1 Internal Test
Unit III and IV (16 hours)	Geet Pharosh- Explanation BhavaniPrasad Mishra-Explanation	3 hours	20-11-23 to 25-11-23	Reading.Writing by students and Lecturing
	Press Note with Example	1 hours		Internal Test marks 22-11-23 Display of C1 on the notice board
	Pret Ka Bayan-Nagarjun withExplanation	4 hours	27-11-23 to 02-12-23	Chalk and Black board
	Pret Ka Bayan-Nagarjun-Explanation Paribhashikshabdavali	4 hours	04-12-23 to 09-12-23	Chalk and Black board
Unit I,II,III &IV	**Revision Classes**	5 hours	11-12-23 to 16-12-23	. Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			16.12.2023	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

Department : HINDI
Title of the Paper : HINDI DRAMA AND SANCHARMADYAM AND HINDI
[Course Code –22HIN406]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : PARAMESHWAR HEGDE
Total Hrs: 64 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I,II and IV (16 hours)	INTRODUCTION TO SUBJECT	1 hours	11-09-2023 to 16-09-23	POs and Course Outcomes of the units discussed
	Drama and SANCHARMADYAM ME HINDI DRAMA-KONARK-Reality-JAGDEESHCHANDRA MATHUR	3		
	Historically Konark Kahani Chapter I	3 hours	19-09-23 to 23-09-23	Reading.Writing by students and Lecturing
	Deffination and Scope ofJansancharMadyam Types of Jansancharmadyam using inIndia.Types of Ghatak	1 hours		Chalk and Black board
	Chapter I	3 hours	25-09-23 to 30-09-23	Reading.Writing by students and Lecturing
	Jansanchar madyam ke Prakar-withExplanation	01 hours		Chalk and Black board
	Chapter I	3 hours	03-10-23 to 07-10-23	Reading.Writing by students and Lecturing
	Jansanchar madyam ke Prakar-withExplanation	1 hours		Chalk and Black board
Unit I,II and IV (16 hours)	Chapter I	**3 hours**	09-10-23 to 11-10-23	Reading.Writing by students and Lecturing
	Jansanchar madyam ke Uddesh,Visheshata	**1 hours**		Chalk and Black board
	Chapter I	**3 hours**	12-10-23 to 13 -10-23	Reading.Writing by students and Lecturing
	Jansancharmadyam me Hindi kaPrayog	**1 hours**		Chalk and Black board
	Chapter II	**3 hours**	16-10-23 to 21-10-23	Reading.Writing by students and Lecturing
	Jansancharmadyam me Hindi kaPrayog	**1 hours**		Chalk and Black board
	Chapter II	**3 hours**	25-10-23 to 27-10-23	Reading.Writing by students and Lecturing
	Jansancharmadyam me Hindi kaPrayog	**1 hours**		Chalk and Black board
	Chapter II	**3 hours**	30-10-23	Reading.Writing by students and Lecturing

Unit-II,III and IV (16 hours)	Jansancharmadyam me Hindi kaPrayog	1 hours	to 04-11-23	Chalk and Black board
	Chapter III	**3** Hours	06-11-23 to 11-11-23	Reading.Writing by students and Lecturing
	Jansancharmadyam me Hindi kaPrayog	1 hours		Chalk and Black board
	Chapter III	2 hours	13-11-2023 to 14-11-2023	Reading.Writing by students and Lecturing
Unit-I,II & IV		5 hours	15-11-2023 To 18-11-2023	C1 Internal Test
Unit III and IV (16 hours)	Chapter III	3 hours	20-11-23 to 25-11-23	Reading.Writing by students and Lecturing
	Jansancharmadyam me Hindi kaPrayog	1 hours		Internal Test marks 22-11-23 Display of C1 on the notice board
	Chapter III	4 hours	27-11-23 to 02-12-23	Chalk and Black board
	Types of One word Questions onJansanchar Madyam	4 hours	04-12-23 to 09-12-23	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	5 hours	11-12-23 to 16-12-23	. Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			16.12.2023	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

Department : HINDI
Title of the Paper : HINDI GADYA AND VYAVAHARIK HINDI
[Course Code – 21HIN107]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : PARAMESHWAR HEGDE
Total Hrs: 64 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
	INTRODUCTION TO SUBJECT	1 hours		

Unit I,II and IV (16 hours)	HINDI GADYA-TYPES OF GADYA IN HINDI LITERATURE and Vyavaharik Hindi with Exampleand Explanation.	3	12.02.2024 to 17.02.2024	POs and Course Outcomes of the units discussed
	Kahani-Namak Ka Daroga-Premchand	3 hours	19.02.2024 to 24.02.2024	Reading.Writing by students and Lecturing
	Common Letters of Government Letters regarding Personal Resons	1 hours		Chalk and Black board
	Nibhand- 2 Vijnapan Yug- Mohan Rakeshg	3 hours	26.02.2024 to 02.03.2024	Reading.Writing by students and Lecturing
	Prastavana and Guna Lakshana	01 hours		Chalk and Black board
	Nakhoon Kyno Bhadhate Hani-HajariPrasada Dwivedi	3 hours	04.03.2024 to 09.03.2024	Reading.Writing by students and Lecturing
	Types of Vyvasaik Letters andSwaroop.	1 hours		Chalk and Black board
Unit I,II and IV (16 hours)	Nakhoon Kyno Bhadhate Hani-HajariPrasada Dwivedi Vaha Chini Bhayi- Mahadevi Verma	**3 hours**	11.03.2024 to 16.03.2024	Reading.Writing by students and Lecturing
	Letter regarding Enquiry- Type-1	**1 hours**		Chalk and Black board
	Vaha Chini Bhayi- Mahadevi VermaGirmeti yon ke Desh Me- Pratibha Mudliyar	**3 hours**	18.03.2024 to 23.03.2024	Reading.Writing by students and Lecturing
	Letter regarding Enquiry- Type-2 &3	**1 hours**		Chalk and Black board
	Girmeti yon ke Desh Me- PratibhaMudliyar	**3 hours**	25.03.2024 to 30.03.2024	Reading.Writing by students and Lecturing
	Bank Related Letters-3 Letters	**1 hours**		Chalk and Black board
	Madan Mohan Malveeya- MahatmaGandhi	**3 hours**	01.04.2024 to 06.04.2024	Reading.Writing by students and Lecturing
	Bank Related Letters-3 Letters	**1 hours**		Chalk and Black board
Unit-II,III and IV(16 hours)	Madan Mohan Malveeya- MahatmaGandhi Bhagat Ki Gat- Harishanker Parasayi	**3 hours**	08.04.2024 to 13.04.2024	Reading.Writing by students and Lecturing
	Paripatra-3 Types	1 hours		Chalk and Black board
	Bhagat Ki Gat- Harishanker Parasayi	2 hours	15.04.2024	Reading.Writing by students and Lecturing

Unit I II & IV		5 hours	16.04.2024 TO 20.04.2024	C1 Internal Test
Unit-II,III and IV(16 hours	Mahabharat Ki Ek Sanj-BharatBhushan Agrawal	**3** Hours	22.04.2024 to 27.04.2024	Reading.Writing by students and Lecturing
	Paripatra-3 Types	1 hours		Chalk and Black board
Unit III and IV (16 hours)	Mahabharat Ki Ek Sanj-BharatBhushan Agrawal	3 hours	29.04.2024 to 04.05.2024	Reading.Writing by students and Lecturing
	Paripatra-3 Types	1 hours		Internal Test marks 04.05.2024 Display of C1 on the notice board
	Mahabharat Ki Ek Sanj-BharatBhushan Agrawal	4 hours	06.05.2024 to 11.05.2024	Reading.Writing by students and Lecturing
	Bima Sambhandi Patra- types-3	4 hours	13.05.2024 to 18.05.2024	Chalk and Black board
Unit I,II,III &IV	**Revision Classes**	5 hours	20.05.2024 to 25.05.2024	Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			26.05.2024	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

Department : HINDI
Title of the Paper : HINDI KAVITA AND ANUVAD ABYAS
[Course Code – 21HIN207]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name:PARAMESHWARHEGDE
Total Hrs: 64 Hours (4 Hrs/Week)

Curriculum asprescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
	INTRODUCTION TO SUBJECT	1 hours	12.02.2024 to 17.02.2024	POs and Course Outcomes of the units discussed
	Kavitha and Anuvad Abhyas	3		
	Vaha Todati Pattar-suryakantTripathi Nirala	3 hours	19.02.2024 to 24.02.2024	Reading.Writing by students and Lecturing
Unit I,II and	Anuvad Shabha Ki Vyutpathi	1 hours		Chalk and Black board

IV (16 hours)	Vaha Todati Pattar-suryakantTripathi Nirala	3 hours	26.02.2024 to 02.03.2024	Reading.Writing by students and Lecturing
	Paribhasha- Indian and ForignExparts	01 hours		Chalk and Black board
	Bapu-Sumitrananadan pant	3 hours	04.03.2024 to 09.03.2024	Reading.Writing by students and Lecturing
	Anuvad keb Prakar	1 hours		Chalk and Black board
Unit I,II and IV (16 hours)	Bharat kiShreshtata-MaithilisharanaGupt-Introduction and Explain	**3 hours**	11.03.2024 to 16.03.2024	Reading.Writing by students and Lecturing
	Anuvad keb Prakar	**1 hours**		Chalk and Black board
	Bharat ki Shreshtata-MaithilisharanaGupt- Explain	**3 hours**	18.03.2024 to 23.03.2024	Reading.Writing by students and Lecturing
	Single Sentence Translations-Practice	**1 hours**		Chalk and Black board
	Path kePahechan-Harivansh raibachan	**3 hours**	25.03.2024 to 30.03.2024	Reading.Writing by students and Lecturing
	Single Sentence Translations-Practice	**1 hours**		Chalk and Black board
	Path kePahechan-Harivansh raibachan	**3 hours**	01.04.2024 to 06.04.2024	Reading.Writing by students and Lecturing
	Passage Translation- Practice	**1 hours**		Chalk and Black board
Unit-II,III and IV(16 hours)	Jansiki Rani-Subhadra KumariChouhan	**3 hours**	08.04.2024 to 13.04.2024	Reading.Writing by students and Lecturing
	Passage Translation- Practice	1 hours		Chalk and Black board
	Jansiki Rani-Subhadra KumariChouhan	2 hours	15.04.2024	Reading.Writing by students and Lecturing
Unit I II & IV		5 hours	16.04.2024 TO 20.04.2024	C1 Internal Test
Unit-II,III and IV(16 hours	YahaDharati Us Kisanki-KedarnathAgrval	**3** Hours	22.04.2024 to 27.04.2024	Reading.Writing by students and Lecturing
	Passage Translation- Practice	1 hours		Chalk and Black board
	Geet Pharosh-Bhavani Prasad Mishra	3 hours		Reading.Writing by students and Lecturing

Unit III and IV (16 hours)	Passage Translation- Practice	1 hours	29.04.2024 to 04.05.2024	Internal Test marks 04.05.2024 Display of C1 on the notice board
	Pret Ka Bayan-Nagarjun withExplanation	4 hours	06.05.2024 to 11.05.2024	Reading.Writing by students and Lecturing
	Types of One word Questions onTranslation Technical Word Translation - Practice	4 hours	13.05.2024 to 18.05.2024	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	5 hours	20.05.2024 to 25.05.2024	Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			26.05.2024	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

Department : HINDI
Title of the Paper : HINDI DRAMA AND SANCHARMADYAM AND HINDI
[Course Code –22HIN307]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : PARAMESHWAR HEGDE
Total Hrs: 64 Hours (4 Hrs/Week)

Curriculum asprescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit I,II and IV (16 hours)	INTRODUCTION TO SUBJECT	1 hours	12.02.2024 to 17.02.2024	POs and Course Outcomes of the units discussed
	Drama and SANCHARMADYAMME HINDI DRAMA-KONARK-JAGDEESHCHANDRA MATHUR	3		
	Deffination and Scope ofJansancharMadyam	3 hours	19.02.2024 to 24.02.2024	Reading.Writing by students and Lecturing
	Types of Jansancharmadyam using inIndia.Types of Ghatak	1 hours		Chalk and Black board
	Chapter I	3 hours	26.02.2024 to 02.03.2024	Reading.Writing by students and Lecturing
	JansancharmadyamkePrakar-withExplanation	01 hours		Chalk and Black board

	Chapter I	3 hours	04.03.2024 to 09.03.2024	Reading.Writing by students and Lecturing
	JansancharmadyamkePrakar-withExplanation	1 hours		Chalk and Black board
Unit I,II and IV (16 hours)	Chapter I	**3 hours**	11.03.2024 to 16.03.2024	Reading.Writing by students and Lecturing
	Jansanchar madyam ke Uddesh,Visheshata	**1 hours**		Chalk and Black board
	Chapter I	**3 hours**	18.03.2024 to 23.03.2024	Reading.Writing by students and Lecturing
	Jansancharmadyam me Hindi kaPrayog	**1 hours**		Chalk and Black board
	Chapter II	**3 hours**	25.03.2024 to 30.03.2024	Reading.Writing by students and Lecturing
	Jansancharmadyam me Hindi kaPrayog	**1 hours**		Chalk and Black board
	Chapter II	**3 hours**	01.04.2024 to 06.04.2024	Reading.Writing by students and Lecturing
	Jansancharmadyam me Hindi kaPrayog	**1 hours**		Chalk and Black board
Unit-II,III and IV(16 hours)	Chapter II	**3 hours**	08.04.2024 to 13.04.2024	Reading.Writing by students and Lecturing
	Jansancharmadyam me Hindi kaPrayog	1 hours		Chalk and Black board
	Chapter III	2 hours	15.04.2024	Reading.Writing by students and Lecturing
Unit I II & IV		5 hours	16.04.2024 TO 20.04.2024	C1 Internal Test
Unit-II,III and IV(16 hours	Chapter III	**3** Hours	22.04.2024 to 27.04.2024	Reading.Writing by students and Lecturing
	Jansancharmadyam me Hindi kaPrayog	1 hours		Chalk and Black board
Unit III and IV (16 hours)	Chapter III	3 hours	29.04.2024 to 04.05.2024	Reading.Writing by students and Lecturing
	Jansancharmadyam me Hindi kaPrayog	1 hours		Internal Test marks 04.05.2024 Display of C1 on the notice board
	Chapter III	4 hours	06.05.2024 to 11.05.2024	Chalk and Black board

	Types of One word Questions onJansanchar Madyam	4 hours	13.05.2024 to 18.05.2024	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	5 hours	20.05.2024 to 25.05.2024	. Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			26.05.2024	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

Department : HINDI
Title of the Paper : HINDI GADYA AND SARAKARI PATRA AND PARIBHASHIKSHBDHAVALI
[Course Code – 22HIN407]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : PARAMESHWAR HEGDE
Total Hrs: 64 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
Unit I,II and IV (16 hours)	INTRODUCTION TO SUBJECT	1 hours	12.02.2024 to 17.02.2024	POs and Course Outcomes of the units discussed
	GADYA AND Types of Gadya in hindi literatue and SARAKARI PATRA AND PARIBHASHIKSHABDHAVALI	3		
	Kahani-Namak Ka Daroga-byPermchand	3 hours	19.02.2024 to 24.02.2024	Reading.Writing by students and Lecturing
	Prastavana,Importance of GoernmentLetters.	1 hours		Chalk and Black board
	Kahani-Gangrin-Sachidanda Hiranand Vatsayana 'Ajneya'	3 hours	26.02.2024 to 02.03.2024	Reading.Writing by students and Lecturing
	Gunalakshana of Government Letters	01 hours		Chalk and Black board
	Khani-Gangrin- Sachidanda Hiranand Vatsayana 'Ajneya' Kahani-Rani Ma Ka Chabootara-Mannu Bhandri-Introduction	3 hours	04.03.2024 to 09.03.2024	Reading.Writing by students and Lecturing
	Sarakaripatra and Personal Patra kaSwaroop	1 hours		Chalk and Black board

Unit I,II and IV (16 hours)	Kahani-Rani Ma Ka Chabootara-Mannu Bhandri-	**3 hours**	11.03.2024 to 16.03.2024	Reading.Writing by students and Lecturing
	Types of Letters and Samanyasarakari Patra and SamanyaSarakari Patra Type -1	**1 hours**		Chalk and Black board
	Rekhachitra- Kalaya- Pro. Nagappa Yatra Vrattant- Janha Aakash Dikhayi Nahi Deta- Vishnu Prabhakar	**3 hours**	18.03.2024 to 23.03.2024	Reading.Writing by students and Lecturing
	Samanya Sarakari Patra Type -2 KaryalaiJnapan-patra- Prastavana	**1 hours**		Chalk and Black board
	Yatra Vrattant- Janha Aakash Dikhayi Nahi Deta-Vishnu PrabhakarSamsmaran-Yeshpal 'Bada Thos Aadmi- Amrathlal Nagar- Introduction	**3 hours**	25.03.2024 to 30.03.2024	Reading.Writing by students and Lecturing
	KaryalaiJnapan-patra. Type -1	**1 hours**		Chalk and Black board
	Samsmaran-Yeshpal 'Bada ThosAadmi- Amrathlal Nagar-	**3 hours**	01.04.2024 to 06.04.2024	Reading.Writing by students and Lecturing
	Pari patra Explination-Type 1	**1 hours**		Chalk and Black board
Unit-II,III and IV (16 hours)	Thatha Gat Dilhi Me-AmrathlalNagar-With Introduction	**3 hours**	08.04.2024 to 13.04.2024	Reading.Writing by students and Lecturing
	Pari Patra-Type -2	1 hours		Chalk and Black board
	Thatha Gat Dilhi Me-AmrathlalNagar-With explination	2 hours	15.04.2024	Reading.Writing by students and Lecturing
Unit I II & IV		5 hours	16.04.2024 TO 20.04.2024	C1 Internal Test
Unit-II,III and IV (16 hours	Mahabharat Ki Ek Sanjh-BharatBhushan Agrawal	**3** Hours	22.04.2024 to 27.04.2024	Reading.Writing by students and Lecturing
	Press Vijnapti Press Note withExample Prayog	1 hours		Chalk and Black board
Unit III and IV (16 hours)	Mahabharat Ki Ek Sanjh-BharatBhushan Agrawal	3 hours	29.04.2024 to 04.05.2024	Reading.Writing by students and Lecturing
	Press Note with Example	1 hours		Internal Test marks 04.05.2024 Display of C1 on the notice board
	Mahabharat Ki Ek Sanjh-BharatBhushan Agrawal Paribhashikshabdavali	4 hours	06.05.2024 to 11.05.2024	Reading.Writing by students and Lecturing Chalk and Black board

	Types of One word Questions on Sarakari Patra and Personal Letters.	4 hours	13.05.2024 to 18.05.2024	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	5 hours	20.05.2024 to 25.05.2024	. Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			26.05.2024	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

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Course Plan of Odd Semester 2023-24

Department: History – I Sem BA

Title of the Paper: Introduction to Ancient world civilizations (DSC-1)

[Course Code – 211129

Term Period: 11.09.2023 to16.12.2023

Faculty Name: Smt. Jayalakshmi N

Total Hrs: 42 Hours

Hrs/week: 3 Hours

Curriculum as prescribed by the Institution	Topics	No. of hours required to complete	Date	Method of deployment & Remarks
Introductory class	Explained briefly about Program Outcomes and Course outcomes	01 hr	11.09.2023	POs & COs of the BA Program explained briefly
Unit 1 - Mesopotamian, Egyptian , Chinese civilisation	**Chapter-1** : Mesopotamian civilisation Geographical Background - From Neolithic to Bronze Age - Bronze Age in Mesopotamia Sumerians – Race - Political History of the Sumerians - Kings and Governments of Sumer The Akkadians - Old Babylonian Empire - Hammurabi and his Code - The Kassite domination - Attacks from the Hittites - The New Babylonian Empire – King Nebuchadnezzar and the Days of Babylonian Glory - The Decline of Babylon The Assyrian Empire - The reforms of Tiglathpileser III - Decline of	04hrs	12.09.23 to 22.09.23	Lecture Method

	Assyrians -The decline of Mesopotamian civilization Social condition - Economic Condition -–Theocratic State - Cultural contributions of Mesopotamians - Religion - Law – Education - Language and Writing– Literature - Art and Architecture - Hanging Garden - Science and Mathematics – Astronomy - Development of Calendar – Medicine			
	Chapter-2 : Egyptian Civilization Egypt – The Gift of Nile - Cultural Transition from Neolithic to Bronze Age Political History of Egyptian Civilization - Intermediate Periods - The Archaic Period (3100-2700 BCE) - The Old Kingdom (2770 - 2180 BCE) - Middle Kingdom (2200-1630BCE) - New Kingdom (1630-1075 BCE) – The invasion of the Hyksos-The New Kingdom or the Period of Empire (1560-1087 BCE) - The downfall of Egypt Social Condition - Economic Condition – Agriculture – Industry – Trade – Cultural contributions of Egyptians - Writing and Literature – Games – Education - Religion- Akhenaton and his Monotheism - Art and Architecture	05 hrs.	25.09.23 to 06.10.23	Lecture method and Student interaction
	Chapter-3 : Chinese Civilization Early dynasties – The State – Decline of Ancient China – Economy and Society –Occupations – Art and Crafts – Ancestor Worship and Oracles – Script – Solar-Lunar Calendar - Literature	05 hrs	09.10.23 to 19.10.23	Lecture method and Book Review
Unit – II : Greek, Roman	**Chapter-4 : Greek Civilization** Geographical influences on the Greek - Aegean culture - The Early	04 hrs	20.10.23 to	Lecture method and ICT

Civilizations	Greek Civilizations - The Minoan Civilization - The Mycenaean Civilization - The Dark Age - The Archaic and Classical Period City-States - Polity – Socio-Economic Background - Class Conflict between Aristocracy and Peasantry: Process of Reforms - Transition to Democracy - Conflict with Persia: Delian League (478 BCE) - The Peloponnesian War (431-404 BCE) - The End of the Classical Period Social Conditions - Slavery in Ancient Greece: Economy and Society - Position of Women Economic Conditions – Agriculture – Crafts - Maritime Commerce – Taxation. Cultural contributions of Ancient Greece – Philosophy - Literature and Drama -Scientific Approach – Mathematics – Medicine - Astronomy – Religion – Olympic Games - Art and Architecture		30.10.23	
	Chapter-5 : Roman Civilization (Early Part) The Impact of Geography - The Earliest Inhabitants of Italy - Etruscans - Decline of Etruscans - The Greeks in Italy The founding of Rome City - Rome under Monarchy - The Assembly and the Senate - The Roman Republic - The Roman Expansion. Political Structure and Society during the Roman Republic - Effects of the Roman Expansion on commoners - Struggle between Patricians and Plebeians – The Assemblies - The Conflict of Orders – Patricians and Plebeians - Last	05 hrs	02.11.23 to 13.11.23	Lecture method and Interaction

	Hundred Years of the Republic - Anti-Rome upheavals - Professional Army and War Lords - Rise of Dictatorship in Rome – Julius Caesar			
	(Unit-1) C1 Test Dates – 15.11.2023 to 18.11.2023			
	Chapter-6 : Roman Principate and Empire Augustus Caesar and His Successors - The Third Century Crisis (235-284 CE) -Division of Roman Empire – Diocletian and Constantine - The decline of the Western Roman Empire Social Condition of the early Roman Empire - Social Structure of the Later Roman Empire - Status of Roman Women – Slavery - Economic Condition – Judicial System Cultural Contributions – Language – Philosophy and Literature - Religion in Ancient Rome - Judaism - Christianity - Art and Architecture - Sculpture - Painting- Coins and medals	05hrs	20.11.23 to 23.12.23	Lecture method and Chart Discussion
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of Submission- 1.12.2023				
Unit-III : Iranian, Early American and African Civilizations	**Chapter-7 : Iranian Civilization** Early History - Achaemenid Empire – Sassanid Empire – Economic and social Life – Religion – Art and Culture	04 hrs	24.11.23 to 01.12.23	(Internal Test Marks Displayed on the Dept. Notice Board on 29.11.23)
	Chapter-8 : Early American Civilizations Mayan Civilization – Astronomy – Calendar Making -The Aztecs -The Incas – The Olmec – Culture – Religion – Art - Decline.	05 hrs	06.12.23 to 11.12.23	Lecture method & ICT

	Chapter-9 : Early African Civilizations The Kingdom of Kush – Kingdoms of Nubia and Aksum – Sudanic Kingdoms –Civilizations of the Bantu Peoples – Kingdom of Kongo- Lunda Empire – Kingdom of Mwenemutepa – Coastal Regions of East Africa	05 hrs	14.12.23 to 16.12.23	Lecture method & Interaction
Extra classes engaged to complete portions from 18.12.23 to 23.12.23				

Department : History I SEM BA
Title of the Paper: History of Ancient India (DSC-2)
[Course Code –211130
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Mr. Nandeesh A R Total
Hrs: 42 Hours
Hrs/week: 3 Hours

Curriculum as prescribed by the Institution	Topics	No. of hours required to complete	Date	Method of deployment
Introductory class	Explained briefly about Program Outcomes and Course outcomes	1	11.09.23	POs & COs of the BA Program explained briefly

Unit-1:Pre Historic Culture to Nandas	Introduction Survey of Sources - Archaeological and literary sources Geographical Features and Natural Environment -The Geological Formation of India – Physical India since the Coming of Man – Climate – Natural Vegetation and Wildlife Chapter-1 : Pre Historic Cultures in India Early Man in India – Hominid Fossils – Paleolithic Ages – Earliest Stone Tools - The Homo Sapiens (Modern Man) in India – Mesolithic Cultures – New Developments in Technology and Economy –Rock Art – Neolithic Revolution and Neolithic Cultural Regional Patterns - Animal Domestication – Beginning of Food Production in India and the Evidence from Mehrgarh – Growth of Villages from Baluchistan to Western Uttar Pradesh and Gujarat - Important sites- Bhimbetka, Daimabad, Nevasa, Isampur, Adichanallur , Chandravalli	04 hrs	12.09.23 to 19.09.23	Lecture Method & ICT
	Chapter-2 : The Indus Civilisation Towards „Urban Revolution" – Origin and Chronology of the Indus Civilisation - Early Indus Cultures – Distribution and Morphological Features of Mature Harappan Settlements – Extent and Population – Agriculture and Subsistence –	04 hrs	20.09.23 to 27.09.23	Lecture method
	Craft Production – The Cities and Towns – Trade – Culture: Writing, Art, Religion– Social and Political Framework – Later Harappan Phase – End of the Indus Civilisation			

	Chapter-3 : The Vedic and Later Vedic Age Archaeological sources - Vedas as a Historical Source – Tribes and Wars – Lineage, Clan, tribe – Varna in the Rig Vedic Period – Religion: Sacrifices to the Gods – Coronation Rituals – Rajasuya and Ashwamedha - Later Vedic Age – The Emergence of Monarchy – Varna Hierarchy - Polity in Vedic Period -Gana-Samudaya- Sabha, Samiti and Vidata.	06 hrs	29.09.23 to 13.10.23	Lecture method
	Chapter-4 : The Age of Mahajanapadas to the Nandas Economic Background – Urbanisation – Political History - Mahajanapadas- Republican States and their functioning- Kosala – Political Conflicts and the Growth of the Magadhan Empire -The Nandas – Foregin Invasions on India – Persians and Macedonians - Alexander‟s Invasion The Religious Revolution - The Intellectual Ferment – Ajivikas – Jainism –Buddhism–Brahminism	04 hrs	17.10.23 to 25.10.23	Lecture method and Student interaction
Unit – II : The Age of Empire	**Chapter-5 : The Mauryan Empire.** Sources - Chandragupta Maurya - Ashoka – Ashoka‟sDhamma – Political Philosophy of Mauryans – Arthashastra of Kautilya – The Nature and Structure of the Mauryan Empire - Central and Provincial Administration - Revenue and Finance – Internal and Foreign Trade	05 hrs	26.10.23 to 08.11.23	Lecture method
	– Industries – Social Conditions – Ashoka‟s Inscriptions – Language – Literature – Art and Architecture			

	Chapter-6 : Post - Mauryan India: 200 BCE – 300 CE The Political History of North India – The Shungas – Kanvas - Indo-Greeks – The Shaka-Pahlavas or Scytho-Parthians –The Kushanas – Kanishka –Gandhara Art - The ShakaKshatrapas of Western India – The Shatavahana Empire in the Deccan	02 hrs	11.11.23 to 13.11.23	Lecture method and Student interaction
(Unit-1) C1 Test Dates – 15.11.2023 to 18.11.2023				
		03 hrs	20.11.23 To 29.11.23	(Internal Test Marks Displayed on the Dept. Notice Board on 29.11.2023) Lecture method
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of Submission: 28-11-2023				
	Chapter-7 : The Sangam Age The three Kingdoms - The Cheras, Cholas, and Pandyas – Sangam Polity – The Sangam Government – Central and Local Self Government	03 hrs	01.12.23 to 05.12.23	Lecture method & ICT
Unit-III : Guptas and their Successors	**Chapter-8 : The Guptas and Their Successors (CE 300–CE 750)** Rise of the Central Ganga Valley – Rise of the Gupta Dynasty - Chandragupta I - Samudragupta, - Chandragupta II – Administrative Structure -Central and Provincial Administration, Political Development in Deccan and North India: The Vakatakas and the Vardhanas – Harshavardhana- Polity and Administration - Central and	05 hrs	06.12.23 to 09.12.23	Lecture method & ICT

	Provincial Administration Political Development in South India: Pallavas – MahendraVarma, NarasimhaVarma – Cholas - Raja Rajachola, Rajendrachola, local self-government - Art and Architecture of Pallavas and Cholas Greater India- India and the World - Indian cultural influences on different parts of the World			
	Chapter-9 : The Rajputs Gurjara – Prathiharas - Chauhans– Solankis – Paramaras –Chandellas - Polity and Administration	06 hrs	11.12.23 to 16.12.23	Lecture method
Extra Classes engaged to complete portions from 18.12.23 to 23.12.23				

Department: History- I SEM - OE
Title of the Paper: Cultural Heritage of India (OE)
[Course Code – 21OEHIS101**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Mr. Nandeesha A R and Smt Jayalakshmi N
Total Hrs: 42 Hours
Hrs/week: 3 Hours

Curriculumas prescribed by the Institution	**Topics**	**No. of hours required to complete**	**Date**	**Method of deployment**
Introductory class	Explained briefly about course outcomes	01 hr	11.09.2023	COs of OE explained briefly
	Chapter-1 : Cultural Heritage Meaning – Definitions – Concepts – Characteristics – Types of Indian Cultural Heritage – Tangible and Intangible - Oral and Living Traditions – Significance of Cultural Heritage in Human Life – Cultural Zones of India	04 hrs	13.09.23 to 27.09.23	Lecture method andStudent interaction

Unit-1 : Introduction	**Chapter-2** : Fairs, Festivals, Rituals Ethnic Indian Cultural Construct – Significance and Historical background of Fairs, Festivals and Religious Rituals – Regional – Folk – Tribal – National – Monsoon Fairs - Animal Fairs – Jatres: Mylarlinga, Mudukutore, Suttur – Dasara, Baisaki, Deepavali, Onam, Nagarapanchami, Bangalore Karaga	05 hrs	30.09.23 to 09.10.23	Lecture method
	Chapter-3 : Pilgrimage Centres of India Kashi – Mathura– Rameshwara – Bodh Gaya– Shravanabelagola – BandeNavazDarga – Amrithsara – Velangani	05 hrs	11.10.23 to 25.10.23	Lecture method
Unit – II : Legends, Narratives and Cultural Ethos	**Chapter-4** : Meaning – Significance – Forms and Traditions of Legends Puranic Legends – Tradition of Cultural Heritage: Ramayana and Mahabharata – Ancient Fables of Ethical and Moral Values: Panchatantra and Jataka Stories-	05 hrs	30.10.23 to 08.11.23	Lecture method andICT
	MatnagaJataka			

	Chapter-5 : Traditional Performing Arts Indian Aesthetics – Important Sources: Bharata‟sNatyashastra, Nandikeshwara‟sAbhinayaDarpana - Srikumara‟sShilparatnaand - Kitab –i- Navaras by Ibrahim Adil Shah II – Indian Classical Dances: Bharatanatyam – Kathakali – Mohiniyattam – Kuchipudi – Odissi – Sattriya – Manipuri Dance Folk Dances and Theatre – Important Folk Dances: Lavani, Garba, Ghoomar, Changlo, Giddha, Kalbelia Theatre: Sanskrit Plays – Kutiyattam as a specimen of Oral and Intangible Cultural Heritage Oral Tradition and Performing Arts – Bhajan, ,Harikatha, Vedic Chants, Gurbani- Yakshagan, Bootaaradane – Puppetry	03 hrs	11.11.23 to 13.11.23	Lecture method
	(Unit-1) C1 Test Dates – 15.11.2023 to 18.11.2023			
	Chapter-6 : Indian Classical Music Sources - MatangaMuni‟sBrihaddeshi– Two Major Traditions: Hindustani and Carnatic Music -Tradition in Indian Music: Gharana System – Historically Important Personalities of Indian Classical Music: Amir Khusrow, Sarangdev, Tansen, Mohammad Shah "Rangeela", Purandaradasa and Kanakadasa– ,M.S. Subbulakshmi – Music Fusions: East and West	06 hrs	20.11.23 to 24.11.23	(Internal Test Marks Displayed on the Dept. Notice Board on 29.11.2023) Lecture method

	Chapter-7 : Indian Architecture The Beginnings – Indus Valley: Town Planning - Vedic Architecture – Mauryan Architecture: Characteristics, Palaces and Pillars – Stupa Architecture – Important Stupas – Rock Cut -Architecture: Caves and Temples – Temple Architecture: Nagara, Dravida and Vesara Styles– Mughal Architecture – Colonial Architecture	06 hrs	25.11.23 to 02.12.23	Lecture method
Unit-III : Architectureand Built Heritage	**Assignment 1 - (Unit-2) & Assignment 2- (Unit-3)Date of Submission: 02-12-2023**			
	Chapter-8 : Important Monuments of North India (Study of Historical and Cultural Sites through maps) Nalanda, Ajanta, Ellora, Prayaga, Dwaraka, Sun Temple -Konark, Khajuraho, Agra –TajMahal, Delhi – Red Fort,	04 hrs	04.12.23 to 09.12.23	Lecture method
	Chapter-9 : Important Monuments of South India Shore Temple (Mahabalipuram), Sannati, Aihole, Badami, Pattadakal, Hampi, Kanchi, Nagarjunakonda, Amaravati, Thiruvanantapuram	04 hrs	11.12.23 to 16.12.23	Lecture method
Extra classes Engaged to complete portions from 18.12.23 to 23.12.23				

Department: History III SEM BA
Title of the Paper: **History of Modern India** - (DSC-5)
[Course Code – 221329
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Mr. Nandeesh A R
Total Hrs: 42 Hours
Hrs/week: 3 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductory clas	Explained briefly about Course outcomes	01 hr	11.09.2023	COs of the DSCexplained briefly

s				
	Chapter-1 Advent of Europeans – Portuguese – Dutch – British – French –Carnatic wars. Foundation and Expansion of British Power in India – Battle of Plassey and Buxar - Robert clive – Dual Govt in Bengal – Anglo – Marata wars – Rise ofSikhs – Ranajith Singh & Anglo-Sikh wars.	03 Hours	12.09.23 to 15.09.23	Lecture method
	Chapter-2 Administrative Reforms of British's – The Regulating Act of 1773 –Pitt's India Act of 1784 – AdministrativeReforms of Lord Corn Wallies and Lord William Bentinck, Land Revenue Reforms – Zamindari – Ryatwari – Mahalwari System-Administrative Reforms of Lord Dolhousie.	03 Hours	19.09.23 to 22.09.23	Lecture method &ICT
	Chapter3 Renaissance of 19th CenturyIndia - Rajaram Mohan Roy – DayanandaSaraswathi – Ramakrishna Mission – Aligarh Movement.	05 Hours	26.09.23 to 04.10.23	Lecture method
	Chapter-4 The Revolt of 1857 – Nature,Causes and Result of the Revolt – Proclamation of QueenVictoria -1858	04 Hours	06.10.23 to 17 .10.23	Lecture method andStudent interaction
	Chapter-5 Introduction - Rise and Growth of Nationalism - Growth of Modern Political Ideas- Foundation of Indian National Congress – Moderates and their contributions – Gokhale – DadaBai Naoroji and Drain theory – S.N.Banerjee - Partition of Bengal (1905), Split of Surat (1907), Rise of Extremist – Balagangadhara Tilak – Lala Lajpat Roy – Bipin Chandrapal.	03 Hours	20.10.23 to 27 .10.23	Lecture method &ICT
	Chapter-6 The Age Gandhi - Non Cooperation Movement – Simon Commission (1927) – Dandimarch (1930) – Round Table Conferences and	07 Hours	31.10.23 to 13.11.23	Lecture method
	Dr. B.R.Ambedkar – Government of India Act of 1935			
	(Units-1,2,4) C1 Test Dates – 15.11.2023 to 18.11.2023			

	Chapter-7 The Age Gandhi - Non Cooperation Movement – Simon Commission (1927) – Dandimarch (1930) – Round Table Conferences and Dr. B.R.Ambedkar – Government of India Act of 1935.	06 Hours	21.11.23 to 01.12.23	(Internal Test Marks Displayed on the Dept. Notice Board on 29.11.2023) Lecture method
Assignment 1 - (Unit-3) & Assignment 2- (Unit-5) Date of Submission: 01-12-2023				
	Chapter-8 Rise of Socialism and Communalism-Muslim League – Hindu Mahasabha- Two Nations Theory.	06 Hours	05.12.23 to 12.12.23	Lecture method andStudent interaction
	Chapter-9 Rise of Revolutionary Nationalism – Bhagath Singh – Chandrashekar Azad – Subhash Chandra Bose and INA – Quit India Movement (1942) - Partition and Independence (1947).	04 Hours	13.12.23 to 16.12.23	Lecture method &ICT
Extra classes engaged to complete portions from 18.12.23 to 23.12.23				

Department : History III SEM BA
Title of the Paper : Rise of Modern West - (DSC-6)
[Course Code – 221330
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Dr. Sreedhara H Total
Hrs: 42 Hours
Hrs/week: 3 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Introductor yclass	Explained briefly about the Courseoutcomes	01 hr	11.09.2023	COs of the DSCexplained briefly
	Chapter-1 : Europe Expands and Divides The Overseas Discoveries and Conquests of Portugal and Spain	4 Hours	12.09.23 to 16.09.23	Lecture method
	Chapter-2 : Transition from feudalism to Capitalism Capitalism – Mercantilism and the Commercial Revolution	4 Hours	21.09.23 to 27.09.23	Lecture method& Maps Study

	Chapter-3 : Early Colonial Expansion and Overseas Trade Motives Beginning of the Era of Colonization –Mining and Plantation –African Slaves	4 Hours	29.09.23 to 07.10.23	Lecture method & Presentation
	Chapter-4 **: Renaissance and Reformation** Meaning of Renaissance – Spread of Renaissance – Renaissance of Art, Architecture – Music – Literature –Science – Reformations and Counter Reformation	4 Hours	09.10.23 to 16.10.23	Lecture method &LCT
	Chapter-5 : The New Absolute Monarchies Emergence of Nation States – Theories of Government – Divine Right of Kings – Absolutism in Various States – Spain – Portugal – England – France – Austria – Russia	5 Hours	17.10.23 To 26.10.23	Lecture method &Seminar
	Chapter-6 : Scientific Revolution and the Age of Enlightenment Emergence of Scientific View of the World – Promotion of Science – The work of Early Scientists – Growth of Chemistry, Geology and Biology. The Age of Enlightenment – Major Events of Enlightenment – Classism and Romanticism – Humanitarianism – Nationalism – Enlightened Despotism	5 Hours	27.10.23 to 04.11.23	Lecture method &Book Review
	Chapter-7 : The Growth of Liberalism and Democracy Basic Feature of Liberalism – Growth of Liberalism The Rise of Democracy – Democratic struggle in various countries public opinion and Polity	4 Hours	06.11.23 to 13.11.23	Lecture method &Discussion
(Unit-1) C1 Test Dates – 15.11.2023 to 18.11.2023				
	Chapter-8 : Industrial Revolution Scientific and Technological background to Industrialised Revolution – the Factory System – Stages and Effects of Industrial Revolution – Socialist Movement – Labour Movements	6 Hours	20.11.2023 to 02.12.2023	(Internal Test marks displayedon the notice board on 29.11.23) Lecture method &Chart Discussion
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of Submission: 23-11-2023				

	Chapter-9 : Consolidation of Large Nation States Unification of Italy – The Founding of the German Empire.	5 Hours	04.12.2023 to 16.12.2023	Lecture method &Maps Explanation
Extra Classes engaged to complete portions from 18.12.23 to 23.12.23				

Department : History-III SEM
Title of the Paper : Freedom Struggle in India (OE)
[Course Code – 22OEHIS301
Term Period : 11.09.2023 to 16.12.2023
Faculty Name :Dr. Sreedhara H and Smt Jayalakshmi N
Total Hrs: 42 Hours
Hrs/week: 3 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Introductoryclass	Explained briefly about Course outcomes	01 hr	11.09.2023	COs of OE explained briefly
Unit–1: (14Hrs)	**Chapter-1 : The Rise and Growth of National Consciousness** Factors Responsible for the Rise and Growth of Indian Nationalism	5hrs	12.09.2023 to 15.09.2023	Lecture method
	Chapter-2 : Emergence of Organized Nationalism Political Associations before Indian National Congress – Background to the birth of Indian National Congress – Formation of the Indian National Congress – Safety Valve Theory.	4hrs	19.09.2023to 23.09.2023	Lecture method and Student Interactions
	Chapter-3 : The Moderate Phase (1885-1905) The Programme and Policies of the Moderates – Dadabai Navaroji – Economic Critique of Imperialism – and Drain Theory.	4hrs	25.09.2023 to 05.10.2023	Lecture method
Unit -2: (13 Hrs)	**Chapter-4 : Growth of Extremist Nationalism (1905-1919)** The Surat Split- Causes for the Rise of the Extremists – Lal Bal Pal – The Partition of the Bengal – The Swadeshi and the Boycott –Home Rule Movement.	4hrs	09.10.2023 to 17.10.2023	Lecture method &ICT

	Chapter-5 : Emergence of Mahatma Gandhi in Indian Politics and his ideology Gandhi's Political Career in South Africa (1893-1914) – Gandhi's Entry into Indian Politics: Champaran, Ahmedabad and Kheda (1917-18)	4hrs	20.10.2023 To 31.10.2023	Lecture method
	Chapter-6 : Struggle for Swaraj Phase – I (1919-1927) The Montegue – Chelmsford Reforms – The Rowlatt Act – Jallianwala Bagh Massacre – The Khilafat and Non-Cooperation Movement (1919-1922) – The Swarajists – Swarajist Party.	5hrs	03.11.2023 To 13.11.2023	Lecture method and Student Interactions
C1 Test Dates – 15.11.2023 to 18.11.2023				
Unit-3: (15 Hrs)	**Chapter-7 : Rise and Growth of Communalism and Socialism in India** Factors Responsible for the Rsie and Growth of Communalism and Socialism in India and Muslim League -	5hrs	20.11.2023 to 29.11.2023	(Internal Test marks displayed onthe notice board on 29.11.23)
	Formation of the Hindu Mahasabha-Lucknow Pact (1916) –Growth of Socialist, Labour Ideals in Indian National.			Lecture method
	Chapter-8 : Struggle of Swaraj Phase – II (1927-1947) Simon Commission – Nehru Report – Lahore Session of the Congress – Declaration of Poorna Swaraj - Civil Disobedience Movement 1930-34 – Dandi March – Gandhi Irwin Pact – Round Table Conferences – Poona Pact and Ambedkar – Individual Satyagrah, 1940-41- Cripps Mission and Proposal Quit India Movement – Subash Chandra Bose and INA – Wavell Plan – Simla Conference- Cabinet Mission plan – Attlee's Declaration –Mountbatten Plan-The Indian Independence Act, of 1947.	5hrs	01.12.2023 to 06.12.2023	Lecture method and Student Interactions
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of submission: 08-12-2023				

	Chapter-9 : Other Important Freedom Fighters Surendranatha Banerji –V.D. Savarkar, Ambedkar, Vallabha Bhai Patel-Sarojini Naidu – Chandrashekhar Azad – Bhagat Singh– Madam Bhikaji Cama –Babu Jagajivanram– Udam Singh, Jawaharalal Nehru – Vallaba Bhai Patel – Kasturi Bai.	5hrs	08.12.2023 to 16.12.2023	Lecture method
Extra Classes engaged to complete portions from 18.12.2023 to 23.12.2023				

Department : History -V SEM

Title of the Paper : History of Karnataka (From 11th Century to 1761 CE) (DSC-9)

[Course Code – 231529

Term Period : 11.09.2023 to 16.12.2023

Faculty Name : Dr Sreedhara H

Total Hrs: 60 Hours-**Hrs/week:** 4 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment &Remarks
Introductory class	Explained briefly about the Course outcomes	01 Hr	11.09.2023	COs of the BA Program explained briefly
Unit–I Kalachuries, Seunas and Basaveshwara	Chapter 1: Introduction-Survey of the sources - Karnataka at the beginning of the 11th century and socio-political conditions. Chapter 2: Disintegration of Kalyani Chalukyas and the rise of Kalachuries and Seunas. Chapter 3: Basaveshwara and Veershaiva Movement - His Socio-Political Ideas and Social reforms.	15 Hours	12.09.2023 to 12.10.2023	Lecture Method & ICT

Unit-II Hoysalas, Vijayanagara Empire and Post-Vijayanagara	Chapter 4: Foundation of the Hoysala dynasty – Early Hoysalas – Vishnuvardhana-Ballala II- Ballala III- Downfall of theHoysalas - Hoysala state and society – cultural contributions. Chapter 5: Establishment of Vijayanagara Empire – Sources-origin – Sangamas - Harihara & Bukkaraya - Devaraya II & his achievements – Tuluvas - Krishnadevaraya and his achievements – Achyutharaya – Aliya Ramaraya – Disintegrationof Vijayanagara Empire - Administration, society, economyand cultural contributions of Vijayanagara Empire. Chapter 6: Talikote and after – causes for the battle of Talikote – Aravidu dynasty – Nayaks of Keladi – Shivappanayaka-Palegarsof Chitradurga – Madakarinayaka V-Yelahanka Nadu Prabhus– Kempegowda II-HariDasa	25 Hours	12.10.2023 to 05.11.2023	Lecture Method & ICT
	Movement - Kanakadasa and Purandaradasa			

Unit-III Bahmanis, Shahis and Early Wodeyars	Chapter 7: Foundation of the Bahmani state – Sources – origin – early rulers – Ala-ud-din – Muhammad Shan I – Mahamud Gawan – Downfall of Bahamnis - Administration - social life – economy - art and architecture – Sufi Movement – Syed Mohammadand Khwaja Bhande Nawaz Chapter 8: AdilShahis of Bijapur and BaridShais of Bidar – YusufAdilshahi and Qasim Barid Shahi – Contributions of Adil and Barid Shahis – downfall of Adilshahis and BaridShahis Chapter 9: Early Wodiyars – ChikkadevarajaWodiyar – Consolidation of his kingdom – Relations with Mughals andMarathas – Administration and Literary Contributions.	20 Hours	05.11.2023 to 28.11.2023	Lecture Method & Student interaction
(Module-1&2) C1 Test Dates – 15.11.2023 to 18.11.2023				
Assignment 1 - (Module-3) & Assignment 2- (Module-4) Date of Submission: 21-11-2023				
Extra Classes engaged to complete portions from 18.12.23 to 23.12.23				

Department: History -V SEM
Title of the Paper: India and its Neighbors (1947 to 2020)
[Course Code – 231530
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Dr Sreedhara H & Mr. Nandeesh
Total Hrs: 60 Hours
Hrs/week: 3 Hours

Curriculum as prescribedby the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment & Remarks
Introductoryclass	Explained briefly about the Course outcomes	01 hr	11.09.2023	COs of the DSC explained briefly

Unit–I Afghanistan , Pakistan and Bangladesh	Chapter No : 1 India and Afghanistan History of Indo-Afghan Relations- Its geo-strategic importance - Developmental partnership - Instability in Afghanistan – Taliban and Terrorism - Role of India's bilateral relation.	20 Hours	12.09.23 to 10.10.23	Lecture method & ICT
	Chapter 2: India and Pakistan Colonial Legacies - Two nation theory - India Pakistan Wars - Areas of conflict - Kashmir and Border issues - Nuclear Policy of India and Pakistan - Cross Border terrorism - water dispute - Bus diplomacy.			
	Chapter 3: India and Bangladesh Colonial Legacies - The role of India in Bangla Liberation War -Areas of Cooperation and Crisis- Border Issues - Water disputes: Teesta water issue and Ganga river.			
Unit–II Myanmar, Bhutan andNepal	Chapter 4: India and Myanmar India - Mynmar Relationship - Scope forcooperation between North East India & Myanmar - Rohingya issue - Insurgency in the North EasternStates.	20 Hours	10.10.23 to 23.11.23	Lecture method and Graphical representation
	Chapter 5: India and Bhutan Bhutan's Geographical Significance- Political Significance - India-Bhutan Friendship Treaty - Objection of Bhutan to India's MotorVehicle Agreement: Areas of Cooperation- Trade, Economic Assistance: Water Resources, Border Management: Educational			
	and Cultural Cooperation.			

	Chapter 6: India and Nepal Historic India Nepal relations - Post Independence India and Nepal: Economic Cooperation - The Issue of Water and Hydropower Cooperation.			
	(Module-1&2) C1 Test Dates – 15.11.2023 to 18.11.2023			
Unit-III Srilanka, Maldieves and Mauritius	Chapter 7: Historical Background of Indo -Sri Lanka Relations: Cultural Relations- Geographical and Strategic Importance -Issues – The Fishermen Issue- Ethnic problem in Sri Lanka – Tamil Eelam Movement - LTTE - Peace Process – IPKF.	20 Hours	23.11.23 to 15.12.23	(Internal Test marks displayed onthe notice board on 29.11.23) Lecture method and Graphical representa tion
	Chapter 8: India and Maldieves Background of India-Maldives Relations - Political and Cultural ties -Political relations -Bilateral Assistance- Tsunami Related Assistance- India Maldives Relations: Challenges.			
	Chapter 9: India and Mauritius India – Mauritius Bilateral Relations – Historical - Cultural – Trade – Foreign Direct Investment– Military Cooperation – Operation Lal Dora.			
Assignment 1 - (Module-3) & Assignment 2- (Module-4) Date of Submission: 01-12-2023				
Extra classes engaged to complete portions from 18.12.23 to 20.12.23Conducted revision classes on 21st & 22nd Dec 2023.				

Department : History - V SEM

Title of the Paper : Colonialism and Nationalism in Asia(DSC-11)

[Course Code – 231531

Term Period : 11.09.2023 to 16.12.2023

Faculty Name : Mr Nandeesh & Smt Jayalaxmi

Total Hrs: 60 Hours

Hrs/week: 4 Hours

Curriculum as prescribed by the	Topics	No. of Hours required to complete	Date	Method of Deployment & Remarks
Institution				
Introductory class	Explained briefly about the Course outcomes	01 Hr	11.09.2023	COs of the DSC explained briefly
Unit-I Indo-China and	Chapter 1: Historical Background – French Colonisation in Indo-China – Growth of Nationalism – The Communist Movement – Role of Ho Chih Minh in Vietnamese Struggle for independence .	20 Hours	12.09.2023 To 08.10.2023	Lecture Method &
	Chapter 2: Geneva Conference – Vietnam after 1954 – 1976.			

Indonesia	Chapter 3: Indonesia – Historical Background – Coming of Europeans - Dutch Colonisation – Growth of Nationalism in Indonesia – Early struggles against Dutch domination – Role of Dr. Sukarno – Japanese aggression of Indonesia (1942-45) – Final phase of freedom struggle – 1945-49 – Indonesia since 1949 – Bandung Conference – 1955			ICT
Unit-II Turkey & Iran	Chapter 4: Turkey – Historical Background – European Colonial interests and wrecking of the Ottoman Empire – Crimean War – Treaty of Sanstefano – Berlin Congress – Autocratic Rule of Abdul Hamid II –	20 Hours	10.10.2023 To 27.10.2023	Lecture Method & ICT
	Growth of Turkish Nationalism – Young Turk Movement.			
	Chapter 5: Turkey and Balkan Crisis – I World War – Treaty of Sevres and Laussane – Modernisation of Turkey – Musthafa Kemal Pasha – Kemalism – II World War.			
	Chapter 6: Iran – Coming of Europeans – Anglo Russian interests in Iran– The Tobacco Revolt of 1890-92 – Constitutional Revolution of 1906 – Shuster Incident – Iran and thefirst world war – the rise of modern State with Reza Shah Pehlavi (1925 –1941) – Mohammad Shahapur Rezashah Pehlavi – Oil crisis – Fall of Dr. Mussadeq.			

Unit III – Arabs and Israel	Chapter 7: European Colonial interests in Arabia – Growth of ArabNationalism – Wahabi Movement – Pan Islamic Movement – JamaluddinAfghani – Syrian Literary Renaissance – Young Arabs – Arabs and First World War.	20 Hours	27.10.2023 to 23.11.2023	Lecture Method & Student Interaction
	Chapter 8: Israel – Historical Background – Zionist movement – Dr. Chaim Weizman – Balfour Declaration – (1917) Migration of Jews – White Paper – (1939) – UnitedNations Plan – Creation of Israel - Arab – Israel Conflict – Arab League – Palestine Liberation Organization.			
	Chapter 9: Important Historical Places: Jakarta – Bandung – Hanoi - Constantinople – Ankara – Tehran -Tel Aviv - Jerusalem – Damascus – Madina–Beirut –Bhagdad –Mecca – Cairo.			
(Module-1&2) C1 Test Dates – 15.11.2023 to 18.11.2023				
Assignment 1 - (Module-3) & Assignment 2- (Module-4) Date of Submission: 08.12.2023				
Extra Classes engaged to complete portions from 18.12.23 to 23.12.23				

Department: History- II Sem BA
Title of the Paper: Introduction to Medieval World Civilizations
[Course Code – 211229]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr. Sreedhara H and Smt. Jayalakshmi N
Total Hrs: 42 Hours
Hrs/Week: 3 Hrs

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Introductory class	Explained briefly about the Course outcomes	01 hr	12.02.24	COs of the DSC explaine

				d briefly
Unit-1 : Arab and Persian	**Chapter-1 : Arab Civilization** Introduction - Geographical Background - Arab on the Eve of the rise of Islam - Birth of Islam – Origin and Spread of Islam - The Doctrines of Islam The Caliphate State / The Arab Empire - Rashidun Caliphs - The Umayyad Caliphate -The Abbasid Caliphate -The Fatimid Caliphate -The end of Arab Empire Arab contributions to Medieval World - Islamic Religious Traditions - Scholarship and Learning –Mathematics –Chemistry-Medicine-Paper and Bookmaking -Adab Literature –Philosophy -Art and Architecture	05 hrs	13.02.24 to 21.02.24	Lecture and Discussion method
	Chapter-2 : Persian Civilization (Iranian Civilization) Introduction – Early History - Muslim Conquest of Persia – During	04 hrs	22.02.24 to 01.03.24	Lecture method
	Muhammad‟s life -First invasion of Mesopotamia (633) -Second invasion of Mesopotamia (634 636) - Conquest of Mesopotamia (636–638) - Persian Raids in Mesopotamia (638–641) - Conquest of Persia (642–651) - Second and last Muslim invasion – Persian rebellion and reconquest, Persia under Muslim rule – Administration – Religion - Language of Persia – Urbanisation			
	Chapter-3 : Persian Civilization - Safavid Dynasty Shah Abbas the Great - Shah and his Achievements – Political - Shah and his Achievements - Cultural Persia‟s Contribution to Medieval World - Political Ideas and Institutions – State and Polity –The Third Force (Ghulam) - Emergence of a Clerical Aristocracy - Islamic Jurisprudence Persia„s Cultural Contributions - Fine Arts - Carpet Weaving – The Art of the Book Making – Ceramics – Literature – Architecture	03 hrs	04.03.24 to 11.03.24	Lecture andMap method

Unit – II : European Civilisations	**Chapter-4 : The Middle Ages in Europe (Political and Social Development)** Introduction - Successors Kingdoms to the Western Roman Empire –Germanic Foundations of Early Medieval Europe – Germanic Kingdoms in Western Europe Europe in the Early Middle Ages (Political and Economic Institutions of Medieval Europe) - The Rise of Frankish Empire - Merovingian Period – Carolingian Period - Charlemagne (768-814) - New States in Response to Invasions - Otto the Great (936-973) - The Holy Roman Empire	03 hrs	14.03.24 to 21.03.24	Lecture method
	Chapter-5 : The Age of Feudalism in Europe Origin or Development of Feudalism - Feudal Polity and Economy - Decline of Feudalism	03 hrs	22.03.24 to 01.04.24	Lecture method
	Chapter-6 : Religious Developments in Medieval Europe Saintly and Virgin Mary Cults - Monasticism in Europe - Organization of the Church and Growth of Papacy - Struggle between Secular and Spiritual Authority	06 hrs	04.04.24 to 15.04.24	Lecture andICT method
	(Unit-1) C1 Test Dates – 16.04.2024 to 20.04.2024			
Unit-III : The Middle Ages in Europe	**Chapter-7 : Byzantine Empire** Constantine (306-337 CE) – Justinian (482-565 CE) - Decline of Byzantine Empire - Achievements of the Byzantium Empire - Effective Diplomacy - Trade and Commerce – Agriculture – Religious Reforms - Revival of Greek Classical Literature - Architecture and Art	06 hrs	22.04.24 to 03.05.24	(Internal testMarks Displayed onDept. Notice Board on 26.4.24) Lecture method
	Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Dare of Submission: 29.4.2024			
	Chapter-8 : Crusades Introduction - The Crusades - Causes for the Crusades - Pope,,s call for Crusade – Crusades 1st to 9th - Crusades and Their Impact - Influences of Oriental Civilisation on Medieval Europe - Byzantine Influences of Medieval European Civilization - Islamic Influences on Medieval European Civilization	09 hrs	06.05.24 to 17.05.24	Lecture , Oral representation and ICT method
	Chapter-9 : Growth of Economy and Culture in Medieval Western Europe			

	Growth of European Towns - Growth of Middle Class - Early Medieval European Economy - The Economy of Western Europe in the High Middle Ages - The first Agricultural Revolution - Expansion of Trade and Commerce in Medieval Europe - Guild System Contributions of Medieval Europe - Intellectual and Cultural Life in Medieval Europe - Medieval European universities - Acquisition of classical and Islamic knowledge - Growth of Western Scientific and Speculative Thought – Scholasticism - Literature – Drama – Music - Art and Architecture	03 hrs	21.05.24 to 24.05.24	Lecture andICT method
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department : History II SEM
Title of the Pape : History of Medieval India (1206-1761)
[Course Code – 211230]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Mr. Nandeesh A R
Total Hrs: 42 Hours
Hrs/week: 3 Hrs

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductory Class	Explained briefly about the Course outcomes	01 hr	12.2.24	COs of the DSCexplained briefly
	Chapter-1 : Sources of Medieval Indian History Source - Literary, Foreign accounts and Archaeological sources.	02 hrs	13.2.24 to 16.2.24	Lecture and ICT method
	Chapter-2 : Advent of Arabs and Turks in Medieval India Political condition of India in the Beginning of 8th Century – Arab Invasion – Muhammud Bin Qasim – Rise of turks – Condition of India during the invasions of Muhammud of Ghazni and Ghori and their Impact – Tarain Wars	06 hrs	17.2.24 to 29.2.24	Lecture method

Unit-1 : Arab, Turks and Delhi Sultanate)	**Chapter-3 : Foundation of the Delhi sultanate** Qutubud din Aibak – Era of Balban – Early Life and accession, The Mongols and the problems of the North west – Theory of kingship, Achievements. Khalji dynasty – AlauddinKhalji – Conquests – Administrative measures – Price control and Market regulations. Mohammad bin Tughlaq - Experimentsand Reforms – Firoz Shah Tughlaq – Firoz's concept of benevolence and People's Welfare – Administrative reforms. The Later Tughlaqs – Decline of the Delhi Sultanate – Timur's invasion (1398 AD) – The Saiyyids and the Lodis – Babur's Invasion – First Battle of Panipat	04 hrs	02.03.24 to 12.03.24	Lecture and ICT method
	Chapter-4 : State-Polity, Society and Economy under the Delhi Sultanates Central and Provincial Administration – Economy – Tax policy Trade and industries – Society – Social manners and Customs – Slavery under the Delhi Sultans.	09 hrs	13.03.24 to 02.04.24	Lecture and ICT method
Unit – II : The Mughal Empire	**Chapter-5 : The Foundation of the Mughal Empire** Babar and Humayun – Revival of Afghan Power – Sher Shah Suri and his Successors – The Second Battle of Panipat and triumph of the Mughals – Hemu and Bairam Khan – Akbar's rise and consolidation of power – Conquests, Rajput Polilcy, Religious Policy – (Din-Ilahi) – Revenue Administration, Evolution of MansabdariSysem- Jagirdari Crisis – Jahangir, Shah Jahan and Aurangazeb – Military exploits, Religious Policy, Deccan policy – Revolts and reaction.	04 hrs	03.04.24 to 13.04.24	Lecture method& Student Interaction
(Module1 &2) C1 Test Dates – 16.04.2024 to 20.04.2024				

	Chapter-6 : Administration and Economy under the Mughals Mughal Administration –Central, Provincial, Local – Theory of Kingship – Mansabdari System – Jagirdari System – Sources of Revenue – Military – Judicial System – Mughal Nobility and Bureacracy – Deccan Policy of the Mughals – Development in Trade.	05 hrs	23.04.24 to 30.04.24	(Internal test Marks Displayedon Dept. Notice Board on 26.4.24) Lecture method& Student Interaction
Assignment 1 - (Module -2) & Assignment 2- (Module-3) Date of submission: 29.4.2024				
Unit-III : Bhaktiand Sufi Movements	**Chapter-7 : Society and Culture under the Mughals** uslim Nobles – Indian Muslims – Hindus – Condition of Women – Feudalistic Society – Religion and Celebration – Mughal Interaction with Europeans – development of Science, Literature, Art, Architecture and Painting.	03 hrs	04.05.24 to 08.05.24	Lecture and ICT method
	Chapter-8 : Bhakti and Sufi Movements in India The Bhakti Movement in South India and North India – Alvars – NayanarsBasavanna – Kabir – Ravi Das – Guru Nanak – Causes for the popularity of the Movement – Impact of	03 hrs	09.05.24 to 15.05.24	Lecture method
	the Bhakti Movement – Chapter-9 : The Marathas The Sufi Movement – shaikNizamudinAuliya – SalimChisti			
	Chapter-9 : The Marathas Rise of Maratha Power under Shivaji – Swarajya and Peshwas – Third Battle of Panipat 1761	06 hrs	16.05.24 to 25.05.24	Lecture and ICT method
Extra classes engaged to complete portions from 27.05.2024 up to 31.05.2024				

Department: History- II Sem-OE
Title of the Paper: Cultural Heritage of Karnataka
[Course Code – 21OEHIS201]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Mr. Nandeesha A R and Smt. Jayalakshmi N
Total Hrs: 42 Hours
Hrs/week: 3 Hrs

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Introductor yclass	Explained briefly Course outcomes of theDSC	01hr	12.02.24	COs of the DSC explaine

				d briefly
Unit-1 : Introduction	**Chapter-1 : Cultural Heritage** Meaning – Definitions – Concepts – Characteristics – Types of Indian Cultural Heritage – Tangible and Intangible – Oral and Living Traditions – Significance of Cultural Heritage in Human Life – Cultural Zones of Karnataka	04 hrs	13.02.24 to 21.02.24	Lecture method
	Chapter-2 : Fairs, Festivals, Rituals Ethnic Indian Cultural Construct – Significance and Historical background of Fairs, Festivals and Religious Rituals – Regional –Folk – Tribal – monsoon Fairs – Animal Fairs – Jatres: Mylarlinga, Mudukutore, Suttur – Dasara, Deepavali, Nagarapanchami, BangaloreKaraga.	04 hrs	24.02.24 to 02.03.24	Lecture method& ICT
	Chapter-3 : Piligrimage Centres of Karnataka Nanjangudu, MalemahadeshwaraBetta, Dharmasthala, Shravanabelagola, Karkala, Moodabidare, KukkeSubramanya, Horanadu.	06 hrs	04.03.24 to 18.03.24	Lecture method & student interaction
Unit – II : Legends, Narratives and Cultural Ethos	**Chapter-4 : Meaning – Significance – Forms and Traditions of Legends** Puranic Legends –Traditions of Cultural Heritage : Ramayana and Mahabharatha – Ancient Fables of Ethical and Moral Values: Panchatantra and Vaddakatha, MylaraKavya, JunjappaKavya, Malemahadeshwara Mahatma Etc.	04 hrs	20.03.24 to 27.03.24	Lecture method
	Chapter-5 : Traditional Performing Arts-Dravidian aesthetic Important Course: Matanga Mani's Brihaddeshi and others.	05 hrs	01.04.24 to 15.04.24	Lecture method & student interaction
	(Unit-1)C1 Test Dates – 16.04.2024 to 20.04.2024			
	Chapter-6 Folk Dances and Theatre – Important Folk Dances Lavani, Kolata, Doddata etc.	05 hrs	22.04.24 to 29.04.24	(Internal testMarks Displayed onDept. Notice Board on 26.4.24) Lecture method

Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of Submission:29.4.2024				
Unit-III : Architecture and Built Heritage	**Chapter-7 : Karnataka Architecture** The Beginnings – Influence of Mauryan Art and Architecture – Inscriptions– Introduction of Stupa Architecture – Important Stupas – Rock Cut Architecture: Caves and Temples – Temple Architecture : Nagara, Dravida and Vesara Styles – Islamic Architecture – Colonial Architecture.	05 hrs	04.05.24 to 11.05.24	Lecture method & Chart
	Chapter-8 : Important Monuments of North Karnataka (Study of Historical and Cultural sites through maps) Sannati, Badami, Ihole, Pattadakallu, Hampi, Keladi etc.	05 hrs	13.05.24 to 17.05.24	Lecture andICT method
	Chapter-9 : Important Monuments of South Karnataka Rajaghatta, Halebidu, Beluru, Somanathapura, Talakadu, Shravanabelagola, Nandi etc.	04 hrs	18.05.24 to 25.05.24	Lecture andICT method
Engaged extra classes to complete portions from 27.05.24 to 31.05.24				

Department : History - IV SEM
Title of the Paper : : History of Karnataka
[Course Code – 221429]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr. Sreedhara H
Total Hrs: 42 Hours
Hrs/week: 3 Hrs

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductory class	Course Out comes of the DSC explainedbriefly	01hr	12.02.24	COs of the DSC explained briefly
	Chapter-1 : Survey of Sources – Pre Historic Culture – Stages –Important Sites – Brahmagiri, Sanganakallu – T.Narasipura – Proto Historic Culture – Sannati – Rajaghatta.	07 hrs	13.02.24 to 28.02.24	Lecture Method with Maps representation

Unit–1: Introduction	**Chapter-2 : The Maurya's in Karnataka –** Ashoka – Mauryan influences on Polity of Karnataka – Inscriptions – Royal Edicts**.**	07 hrs	29.02.24 to 15.03.24	Lecture Method with Maps representation
	Chapter-3 : The Satavahanas – Gautamiputra Satakarni – Polity and Administration	05 hrs	16.03.24 To 22.03.24	Lecture Method with Chart representation
Unit -2: Rise of Karnataka	**Chapter-4 : The Kadambas of Banavasi** Mayuravarma and Kakusthavarma – Polity – Administration –Land Grant Policy	05 hrs	28.03.24 To 06.04.24	Lecture Method with Chart representation
	Chapter-5 : The Gangas of Talakadu Konganivarma – Durvineeta – Sri Purusha – Chavundaraya –Polity – Administration – Land Grant Policy	05 hrs	12.04.24 To 15.04.24	Lecture Method with Source representation
(Unit-1)C1 Test Dates – 16.04.2024 to 20.04.2024				
Unit - 3: The ages of Empires	**Chapter-6 : The Chalukyas of Badami** Pulakeshi-II, Vikramaditya-II, Polity – Administration – Land Grant Policy	05 hrs	25.04.24 To 04.05.24	(Internal testMarks Displayed onDept. Notice Board on 26.4.24) Lecture Method with Graphical representation
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of submission: 30.4.2024				
	Chapter-7 : The Rastrakutas Krishna-I, Govinda-III, Amoghavarsha Nrupatunga – Expansion Policy – Polity and Administration	04 hrs	06.05.24 To 12.05.24	Lecture Method with Maps representation
	Chapter-8 : The Chalukyas of Kalyana Tailapa –II, Vikramaditya-VI, Someshwara-III, Polity – Administration	04 hrs	13.05.24 To 17.05.24	Lecture Method with Source representation

	Chapter-9 : Minor Dynasties of Anglent Karnataka The Punnatas –The Nolambas – The Banas	04 hrs	18.05.24 To 27.05.24	Lecture Method with Chart representation
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department: History - IV Sem BA
Title of the Paper: History of Modern Europe
[Course Code – 221430]
Term Period:12.02.2024 to 25.05.2024
Faculty Name: Mr. Nandeesha A R Total
Hrs: 42 Hours
Hrs/week: 3 Hrs

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductory class	Course Out comes of the DSC explained briefly	01hr	12.02.24	COs of the DSC explained briefly
Unit–1	**Chapter-1 : The German Empire from 1871-1914** German Constitution – Domestic and Foreign Policies of Bismark and William Kaiser II	4 hrs	13.02.24 to 20.02.24	Lecture Method
	Chapter-2 : III Republic of France Domestic and Foreign Policies of France Colonialism and Imperialism in Asia and Africa in the 19th and 20th Century	4 hrs	21.02.24 to 28.02.24	Lecture Method
	Chapter-3 : Eastern Question : Interests of Various Powers in Bolkan States **Stages:** 1. Serbian Independence to Treaty of Paris 2. Paris Treaty to Treaty of Berlin 3. Berlin Treaty of Bucharest 4. Congress of Berlin 5. Balkan Crisis and Wars – Causes – Failures- Consequences – Results	4 hrs	04.03.24 to 11.03.24	Lecture Method &ICT representation

Unit -2:	**Chapter-4 : International Diplomacy Before the First World War** Power Block and Alliances: Expansion of European Empires from 1870-1914 - Three Emperors League– Relations between England and France – Anglo- Russian Alliance of 1907.	5 hrs	12.03.24 to 20.03.24	Lecture Method& Maps Presentation
	Chapter-5 : First World War Causes – Course – Results – The Paris Peace Conference and the Treaty of Paris –Treaty of Versailles – Fourteen Points of Woodrow Wilson.	4 hrs	25.03.24 to 01.04.24	Lecture Method &PPT
	Chapter-6 : League of Nations The assembly – The Council – Organisations – Achievements and Failures	5 hrs	02.04.24 to 15.04.24	Lecture Method &ICT
(Unit-1) C1 Test Dates – 16.04.2024 to 20.04.2024				
Unit -3:	**Chapter-7 : Rise of Totalitarianism in Europe** Russian Revolution, 1917 – Causes and Its results, Rise of Totalitarianism in Russia under Leninand and Stalin.	5 hrs	22.04.24 to 29.04.24	(Internal testMarks Displayed onDept. Notice Board on 26.4.24) Lecture Method & Calculation
Assignment 1 - (Unit-2) & Assignment 2- (Unit-3) Date of submission: 30.4.2024				
	Chapter-8 : Failure of Welmar Republic and Rise of Nazism in Germany Adolf Hitler – Home and Foreign Policies – Formation of the Greater Germany – Fascism in Italy – Benito Mussoloni – Home and Foreign Policies	6 hrs	06.05.24 to 15.05.24	Lecture Method , Calculation &ICT
	Chapter-9 : Quest for Security and Read to Second World War International Issues leading to Second World War – Causes – Course – Results and Treaties Formation of UNO – its Organisation – Achievements ans Failures.	5 hrs	20.05.24 to 25.05.24	Lecture Method , Calculation &ICT
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department : History - IV SEM
Title of the Paper : Freedom Movement in Karnataka
[Course Code – 22OEHIS401]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr. Sreedhara H and Smt. Jayalakshmi N
Total Hrs: 42 Hours
Hrs/week: 3 Hrs

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Introductory class	Course Out comes of the DSC explained briefly	01hr	12.02.24	COs of the DSC explained briefly
Unit–1	**Chapter-1** : The disintegration of Karnataka and absorption of Karnataka areas into Madras, Bombay Provinces and Hyderabad State – Economic Background to Karnataka National Movement.	6 hrs	13.02.24 to 20.02.24	Lecture Method
	Chapter-2 : Armed Resistances against the British Rule in Karnataka Rani of Kittur (1824) – Sangolli Rayann (1829-30) – Nagar Revolt (1830-31) Resistance in Kodagu.	4 hrs	21.02.24 to 28.02.24	Lecture Method
	Chapter-3 : The Impact of the Rebellion of 1857 on Karnataka Against anti – Arms Act – Bedas of Halagali – 1857 – Venkatappa Nayaka of Surapura – Baba Saheb of Naragunda – Bhimarao of Mundaragi –Effects of the Struggle.	5 hrs	04.03.24 to 11.03.24	Lecture Method & Seminar
Unit -2	**Chapter-4** : The National Movement in Bombay Karnataka Rise of Nationalism in Karnataka – Early activities – Influence of Balagangadhar Tilak – The response to Swadeshi Movement – Home Rule Movement – Influence of Mahatma Gandhi- Non Cooperation Movement – Belgaum Congress Session of 1924 – Civil Disobedience Movement.	2hrs	12.03.24 to 20.03.24	Lecture Method

	Chapter-5 : The National Movement in Hyderabad Karnataka Early activities – The response to Swadeshi and Non-Cooperation Movement- Influence of Mahatma Gandhi and Swamy Ramananda Theertha – Razakar Movement	2 hrs	25.03.24 to 01.04.24	Lecture Method & Seminar
	Chapter-6 : National Movement in Princely Mysore Early activities – Influence of Tilak and the Response to Swadeshi Movement – Establishment of Indian National Congress in Mysore – Civil Disobedience Movement – Forest Satyagraha and No Tax campaign	7 hrs	02.04.24 to 15.04.24	Lecture Method &Student Interaction
	(Unit-1)C1 Test Dates – 16.04.2024 to 20.04.2024			
Unit -3:	**Chapter-7** : Foundation of Mysore Congress Shivapura Congress Session – Vidhurashwatha Tragedy –Quit India Movement – Esuru Tragedy – Mysore Chalo Movement	6 hrs	22.04.24 to 29.04.24	(Internal testMarks Displayed onDept. Notice Board on 26.4.24) Lecture Method &Student Interaction
Assignment 1 - (Unit-2) & Assignment 2- (Unit- 3) Date of Submission: 30.4.2024				
	Chapter-8 : Congress Constructive Programmers in Karnataka Propogation of Khadi – Rejuvenation of Village Industries –Removal of Untouchability – Prohibition of Liquor.	4 hrs	06.05.24 to 15.05.24	Lecture Method &ICT
	Chapter-9 : Prominent Freedom Fighters of Karnataka Hardikar Manjappa – Ganghadhara Rao Deshpande – Kamala Devi Chattopadhyaya – Tagaduru Ramachandra Rao – Nijalingappa S. – T.Siddalingaiah – K.C.Reddy – Yashodhara Dasappa – Aluru Venkataraya.	6 hrs	20.05.24 to 25.05.24	Lecture Method &ICT
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department : History - VI SEM

Title of the Paper: History of Karnataka (From 1761-1956) (DSC-12)

[Course Code – 231629

Term Period : 12.02.2024 to 25.05.2024

Faculty Name : Dr Sreedhara H and Mr Nandeesh

Total Hrs: 60 Hours

Hrs/week : 4 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Introductory class	Explained briefly about Course outcomes	01 Hr	12.02.24	COs of the DSC explained briefly
Unit–I Introduction	Chapter 1 :Introduction – Survey of the sources – Rise and fall of Haider Ali and Tipu Sultan – Early life of Haider Ali and Tipu Sultan – Anglo-Mysore wars and their effects – Fall of Tipu Sultan – Modernization of administration and economy – Cultural contribution of Haidar Ali and Tipu Sultan.	20 Hrs	13.02.24 to 22.03.24	Lecture Method, ICT & Graphical representation
	Chapter 2: Treaty of 1799 and Role of Rani Lakshmamanni – Confronting Colonialism – Mysore under KrishnarajaWadiyar III.			
	Chapter 3: Commissioners' rule in Mysore – Mark Cubbon and Bowring in Mysore – Their reforms – Restoration in Mysore – Attempts towards modernization in Mysore.			
	Chapter 4: Colonialism in Mysore – Indirect rule in Mysore and Coorg as protectorates.			

Unit–II Colonialism in Karnataka	Chapter 5: Colonialism in Hyderabad Karnataka - Territories under colonial rule -Hyderabad Karnataka under the Nizams – Mahaboob Ali Khan – His socio-political reforms.	20 Hrs	23.03.24 to 25.04.24	Lecture , Graphical representation and ICT method
	Chapter 6: Territories under colonial rule – British Karnataka - Bombay Karnataka.			
(Module 1&2) C1 Test Dates – 16.04.2024 to 20.04.2024				
Unit-III Nationalism in Karnataka	Chapter 7: Impact of the rebellion of 1857 on Karnataka - Bedas of Halagali against anti-arms Act – Venkatappa Nayaka of Surapura – Babasahebof Naragunda – Bhimaraoof Mundaragi – effects of the struggle.	20 Hrs	26.04.24 to 20.05.24	(Internal test Marks Displayed on Dept. Notice Board on 26.4.24) Lecture Method, ICT & Graphical representation
	Chapter 8: Rise of nationalism and awakening in Mysore, Hyderabad Karnataka and Bombay Karnataka – Influence of Tilak and Gandhi – Response to swadeshi and non-cooperation movements in Karnataka – Belgaum congress session (1924) - Satygraha campaigns in Karnataka (1930-34) – Quit India movement in			
	Karnataka. Accession of Karnataka territories into Indian Union – 1947-48.			

	Chapter 9: Unification movement in Karnataka – factors – views of different committees (Dhar, JVP, and SRC) - contributions of various Kannada organizations – Role of Kannada literature and journalism – Formation of Karnataka – 1956.			
Assignment 1 - (Module-3) & Assignment 2- (Module-4) Date of Submission: 02.05.2024				
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department: History-VI Sem BA
Title of the Paper:Regional History - Modern Mysore (1881-1947) (DSC-13)
[Course Code – 231630
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr Sreedhara H and Mr Nandeesh
Total Hrs: 60 Hours
Hrs/week : 4 hours

Curriculum as prescribedby the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment & Remarks
Introductory Class	Explained briefly about Course outcomes	01 Hr	12.02.24	COs of the DSC explained briefly
Unit–I Archaeologi cal Sites	Chapter 1: Introduction to Modern Mysore – Survey of Literature – The Rendition Act of 1881 and its main provisions -A Progressive monarch : Chamaraja Wodeyar X (1881-1894) –Dewan Rangacharlu – Administrative Reforms – Development of Education – Establishment of Representative Assembly– Railway – Famines and their impact	20 Hours	13.02.24 to 21.03.24	Lecture method & ICT
	Chapter 2: Dewan SheshadriIyer — Development of Agriculture and Industries – Railway- Social Reforms – Infant			

	Marriage Prevention Regulation – Development of Education – Introduction of Mysore Civil Service Exams			
	Chapter 3: Vanivilasa Sannidhana – Regency Rule (1894 -1902) – Shivanasamudra Hydro Electric Power Plant – VanivilasaSagara (Marikanive Project).			
	Chapter 4: Rajarshi Nalvadi Krishnaraja Wodeyar (1902 -40) –Nalvadi's vision of Modern Mysore – Development of Education – Establishment of University of Mysore -Nalvadiand Social Justice – Leslie Miller Committee – Introduction of Reservation for Non-Brahmins – Construction of KRS dam.	20 Hours	22.03.24 to 20.04.24	Lecture method and Student interaction
	Chapter 5: Dewan Sir M Vishweshwaraiah (1912-18) – Developmental Policies and Modernization Programmes – Industrialization -Progress in Agriculture, Education, Railway, Health and Sanitation.			
	Chapter 6: DewanMirza Ismail (1926 - 1941) – Developmental Policies – Administrative Reforms – Constitutional Reforms – Growth ofLocal Bodies – Progress in Agriculture, Industries, Electricity - Trade and Commerce – Education – Health and Sanitation – Brindavan Garden.			
	(Module-1&2)C1 Test Dates – 16.04.2024 to 20.04.2024			
	Chapter 7: Jayachamaraja Wodeyar (1940-47) –His Contribution to Literature and Music – Dewans N. Madhavarao (1940-46) and			Lecture method and ICT

	ArcotRamaswamyModaliyar (1946-49) – Indian National Movement and Indian Union.	20 Hours	22.04.24 to 22.05.24	(Internal test Marks Displayed on Dept. Notice Board on 26.4.24)
	Chapter 8: Regionalism, Casteism and Communalism in Modern Mysore – Mysore - Madrasi Brahmin Conflict – Caste Consciousness and Caste Associations - Non-Brahmin Movement – Depressed Classes Movement – Communal Disturbances and the role of Muslim League.			
	Chapter 9: Nationalism in Modern Mysore — Nationalism during Pre- Gandhian Era –Swadeshi Movement –Non Co-Operation Movement – Belgaum Congress – Civil Disobedience Movement – Forest Satyagrahas – Establishment MysoreCongress – Shivapura Congress Session – Vidhurashwatha Tragedy –Quit IndiaMovement – The Esur Tragedy – Mysore Chalo Movement.			
Assignment 1 - (Module- 3) & Assignment 2- (Module-4) Date of submission: 02.05.2024				
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Department : History- VI SEM

Title of the Paper: **History of China and Japan (DSC-14)**

[Course Code -231631

Term Period : 12.02.2024 to 25.05.2024

Faculty Name : Smt Jayalaxmi

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment & Remarks
Introductory Class	Explained briefly about the course outcomes	01 Hr	12.02.24	COs of the DSC explained briefly
Unit–I Imperialism and china during the 19th century	Chapter 1:Chinese feudalism:Gentry, bureaucracy and peasantry, the Confucian value system: Sino centrism; the canton commercial system.	20 Hours	13.02.24 to 19.03.24	Lecture method & ICT
	Chapter 2: The Transformation of China into an informal colony; the opium wars;the unequal treaties; the scramble for concessions; finance imperialism; The open door policy.			
	Chapter3:Agrarian and popular Movement: Taiping and yi Ho Tuan: Attempts at self-Strengthening (Tzu-Chiang): Reforms of 1860-95;1890 and Boxar Rebellion of 1900.			
Unit-II The Emergence of Nationalism and Communism in China	Chapter 4:The Revolution of 1911: causes, nature and significance the local compositionof the Revolution; Sun Yat-Sen and his contributions. The formation of the Republic; Yuan Shihkai; May Fourth Movement of 1919: nature and significance.	20 Hours	21.03.24 to 23.04.24	Lecture method and Student interaction
	Chapter5: Formation of CCP; (China Communist Party) and the Kuomintang (Nationalist Party KMT); The First united Front.			
	Chapter6:The Communist movement in China: the Jiangxi period and the rise of Mao Tse Tung and communist China.			
	(Module-1&2) C1 Test Dates – 16.04.2024 to 20.04.2024			
	Chapter 7: Japan in 19th Century - Transition			

Unit–III Japan	from feudalism to capitalism; Western Contact - The Perry Mission; Meiji Restoration: its nature and significance; Political Reorganization; Military Reforms; Social, Cultural and educational & Economic reforms; Meiji Constitution.	20 Hours	23.04.24 to 20.05.24	(Internal test Marks Displayed on Dept. Notice Board on 26.4.24) Lecture method and ICT
	Chapter 8 : Japanese Imperialism : (a) China (b) Manchuria (C) Korea.			
	Chapter9:Democracy and Militarism/Fascism: Popular / People's Rights Movement, Nature of Political Parties: Rise of Militarism - Nature and Significance, Second world war; American Occupation; Post-war changes in Japan.			
Assignment 1 - (Module-3) & Assignment 2- (Module-4) Date of Submission: 02.05.2024				
Extra classes engaged to complete portions from 27.05.24 to 31.05.24				

Mahajana Education Society (R)
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Course Plan of Odd Semester 2023-24

Department: Journalism and Mass Communication
Title of the Paper: Introduction to Journalism (Theory)
[Course Code – 211158**]Term Period: 11.09.2023 to 16.12.2023**
Faculty Name: Swarna and Swathy H J
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit I (14 hours)	Lesson plan and introduction	1 hour	11/09/23	POs and Course Outcomes of the units discussed
	Definition of Journalism	1 hour	15/09/23	Lecture
	Meaning of Journalism	1 hour	21/09/23	Lecture
	Nature of Journalism	1 hour	22/09/23	Lecture
	Scope of Journalism	1 hour	29/09/23	Lecture
	Functions and Principles of Journalism	1 hour	06/10/2023	Lecture
	Types of Journalism- Magazine, Business, Environment, Sports, Moffussil, Citizen Journalism	1 hour	13/10/2023	Lecture
	Mojo	1 hour	20/10/2023	Lecture
	Introduction to Mass Media	1 hour	27/10/2023	Lecture
	Types of Mass Media	1 hour	03/11/2023	Lecture
	Traditional	1 hour	10/11/2023	Lecture
	Folk Media	1 hour	24/11/2023	Lecture
	Print Media	1 hour	01/12/2023	Lecture
	Electronic Media	1 hour	08/12/2023	Lecture
	New Media	1 hour	15/12/2023	Lecture

	Revision	1 hour	16/12/2023	Lecture
Unit-I & Unit – II	C1 Internal test	3 Hour	15.11.2023 to 18.11.2023	C1 Internal Test
Unit II (14 hours)	Brief History of Journalism	1 hour	13/09/2023	Lecture
	Development of Indian Journalism	1 hour	20/09/2023	Lecture
	James Augustus Hickey	1 hour	25/09/2023	Lecture
	James Silk Buckingham	1 hour	27/09/2023	Lecture
	Raja Ram Mohan Roy	1 hour	04/10/2023	Lecture
	C2 Internal Test Unit-II & Unit – IV	01 Week	10-12-23 to 15-12-23	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	Bal Gangadhar Tilak	1 hour	09/10/2023	Lecture
	Mahatma Gandhi	1 hour	11/10/2023	Lecture
	Dr B R Ambedkar	1 hour	16/10/2023	Lecture
	Annie Besant	1 hour	18/10/2023	Lecture
	The Hindu	1 hour	25/10/2023	Lecture
	Times of India	1 hour	06/11/2023	Lecture
	The Tribune	1 hour	08/11/2023	Lecture
	Amrit Bazar Patrika	1 hour	13/11/2023	Lecture
	The Statesman	1 hour	20/11/2023	Lecture
Unit III (14 hours)	Introduction to Kannada Journalism	1 hour	22/11/2023	Lecture
	Origin of Kannada Journalism	1 hour	23/11/2023	Lecture
	Growth of Kannada Journalism	1 hour	27/11/2023	Lecture
	Development of Kannada Journalism	1 hour	29/12/2023	Lecture

	Hermann Moegling	1 hour	01/12/2023	Lecture
	M Venkatakrishnaiah	1 hour	02/12/2023	Lecture
	DV Gundappa	1 hour	04/12/2023	Lecture
	Mohare Hanumantha Rao	1 hour	06/12/2023	Lecture
	PR Ramaiah	1 hour	11/12/2023	Lecture
	H K Veeranna Gowda	1 hour	13/12/2023	Lecture
	Nanjanagudu Thirumalamba	1 hour	14/12/2023	Lecture
	Kalyanamma	1 hour	15/12/2023	Lecture
	Revision	1 hour	16/12/2023	Lecture
Unit IV (14 hours)	Qualifications of Journalists	1 hour	16/09/2023	Lecture
	Responsibilities of Journalists	1 hour	23/09/2023	Lecture
	Code of Ethics	1 hour	30/09/2023	Lecture
	Press in Democracy	1 hour	07/10/2023	Lecture
	Continued lecture about Press in Democracy	1 hour	17/10/2023	Lecture
	Introduction to Theories of Press	1 hour	21/10/2023	Lecture
	Authoritarian Theory	1 hour	04/11/2023	Lecture
	Libertarian Theory	1 hour	11/11/2023	Lecture
	Social Responsibility Theory	1 hour	18/11/2023	Lecture
	Soviet Media Theory	1 hour	25/11/2023	Lecture
	Development Media Theory	1 hour	28/11/2023	Lecture
	Continued lecture about Development Theory	1 hour	02/12/2023	Lecture
	Democratic Participation Theory	1 hour	09/12/2023	Lecture
	Revision lecture	1 hour	16/12/2023	Display of C2 Internal Test marks on the notice board

Department: Journalism and Mass Communication
Title of the Paper: Introduction to Journalism (practical)
[Course Code -211158**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Swarna
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	**Experiments**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
1. Letters to the Editor-Publish 2letters in any of the Regional/Local or National Dailies. 2. Make a comparative analysisof any two regional/National newspapers 3. Compare any two Magazines	**Experiment 1 to 3**	**03 / week**	**11/09/2023 to 17/10/2023**	**Practice write a letters to the editor and Analysis of Newspaper**
C1 Practical Internal test	**Experiment 1-3**	1 Hour	06-11-23	C1 Practical Internal Test
4.Analyze the contribution of anyjournalistic personality from Unit-II & III 5. Analyze a News channel of your choice (regional/national)	**Experiment 4-5**	**03 / week**	**20/10/2023 to 04/12/2023**	**Discuss about Journalistic Personality And Watching News Channels and Analysis**
C2 Practical Internal test	**Experiment 1-5**	1 Hour	09/11/2023	C2 Practical Internal Test

Department: Journalism and Mass Communication
Title of the Paper: Computer Applications for Media (Theory)
[Course Code-211258]Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Swathy H J and Swarna
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hour required to complete**	**Date**	**Method of Deployment and Remarks**
	Lesson plan and introduction	1 hour	12/02/2024	POs and Course Outcomes of the units discussed

Unit I (14 hours)	Introduction to Computers	1 hour	16/02/2024	Lecture and ICT teaching
	Basic Hardware	1 hour	23/02/2024	Lecture and ICT teaching
	Discuss about Input and Output devices	1 hour	01/03/2024	Lecture and ICT teaching
	Computer and Newspaper Production	1 hour	15/03/2024	Lecture and ICT teaching
	Introduction to Software's	1 hour	22/03/2024	Lecture and ICT teaching
	Software's for Newspaper Production	1 hour	28/03/2024	Lecture and ICT teaching
	Internet	1 hour	05/04/2024	Lecture and ICT teaching
	DTP-Desktop Publishing	1 hour	12/04/2024	Lecture and ICT teaching
	PageMaker	1 hour	26/04/2024	Lecture and ICT teaching
	Adobe Indesign	1 hour	03/05/2024	Lecture and ICT teaching
	Baraha	1 hour	16/05/2024	Lecture and ICT teaching
	Nudi	1 hour	17/05/2024	Lecture and ICT teaching
	Revision Lecture	1 hour	21/05/2024	Lecture and ICT teaching
Unit-I & Unit – II	C1 Internal test	3 Hour	16.04.2024 to 20.04.2024	C1 Internal Test
	Introduction to MS Office	1 hour	12/02/2024	Lecture and ICT teaching
	Word	1 hour	14/02/2024	Lecture and ICT teaching
	Power Point	1 hour	19/02/2024	Lecture and ICT teaching
	Excel	1 hour	21/02/2024	Lecture and ICT teaching
	C2 Internal Test (Unit III and IV)			C2 Internal

		01 Week	01/05/2024 To 07/05/2024	Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
Unit II (14 hours)	Creating Charts	1 hour	26/02/2024	Lecture and teaching ICT
	Graphs	1 hour	28/02/2024	Lecture and teaching ICT
	Tables	1 hour	04/03/2024	Lecture and teaching ICT
	Uses of Computers in Reporting	1 hour	06/03/2024	Lecture and teaching ICT
	Uses of Computers in Editing	1 hour	11/03/2024	Lecture and teaching ICT
	Editing News and Newspaper	1 hour	13/03/2024	Lecture and teaching ICT
	Pagination	1 hour	18/03/2024	Lecture and teaching ICT
	Printing	1 hour	20/03/2024	Lecture and teaching ICT
	Presentation	1 hour	21/03/2024	Lecture and teaching ICT
	Revision Lecture	1 hour	22/03/2024	Lecture and teaching ICT
Unit III (14 hours)	Introduction to Web Journalism	1 hour	25/03/2024	Lecture and teaching ICT
	Techniques of Web Writing	1 hour	27/03/2024	Lecture and teaching ICT
	Continued Lecture about Techniques of Web Writing	1 hour	1/04/2024	Lecture and teaching ICT
	Illustrations	1 hour	03/04/2024	Lecture and teaching ICT
	Web Designing	1 hour	08/04/2024	Lecture and teaching ICT
	Language	1 hour	10/04/2024	Lecture and teaching ICT
	Presentation in Webs	1 hour	15/04/202	Lecture and ICT

			4	teaching
	Multimedia	1 hour	23/04/2024	Lecture and ICT teaching
	Discuss about Internals Marks	1 hour	24/04/2024	Display of C1 Internal Test marks on the notice board
	Web Radio	1 hour	29/04/2024	Lecture and ICT teaching
	Web Television	1 hour	06/05/2024	Lecture and ICT teaching
	Websites	1 hour	08/05/2024	Lecture and ICT teaching
	Web Portals	1 hour	13/05/2024	Lecture and ICT teaching
	Revision class	1 hour	22/05/2024	Lecture and ICT teaching
Unit IV (14 hours)	Introduction to New Media	1 hour	17/02/2024	Lecture and ICT teaching
	Definition of New Media	1 hour	24/02/2024	Lecture and ICT teaching
	Characteristics of New Media	1 hour	02/03/2024	Lecture and ICT teaching
	Types of New Media	1 hour	09/03/2024	Lecture and ICT teaching
	Websites	1 hour	16/03/2024	Lecture and ICT teaching
	Blogs	1 hour	23/03/2024	Lecture and ICT teaching
	Vlogs	1 hour	30/03/2024	Lecture and ICT teaching
	Email	1 hour	06/04/2023	Lecture and ICT teaching
	Social Media Netqorks	1 hour	13/04/2023	Lecture and ICT teaching
	OTT Platforms	1 hour	22/04/2023	Lecture and ICT teaching
	Types, Techniques & Softwares for Blogging	1 hour	27/04/2023	Lecture and ICT teaching
	Types, Techniques & Softwares for Vlogging	1 hour	04/05/2023	Lecture and ICT teaching
	Discuss about Internal Marks	1 hour	11/05/2023	Display of C2 Internal Test marks on the notice

				board
	Cyber Crime	1 hour	18/05/2023	Lecture and ICT teaching
	Web Glossary	1 hour	25/05/2023	Lecture and ICT teaching

Department: Journalism and Mass Communication
Title of the Paper: Computer Applications for Media (Practical)
[Course Code-211258]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Swathy H J
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	**Experiments**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
1. Create a blog/vlog on topic ofyour choice 2. Compare any two news/sportsportal of your choice 3. A Review on any recent OTTcontent of your choice	**Experiment 1 to 3**	**04 / week**	**12/02/2024 to 19/03/2024**	**Write and Create blog/vlog and write analysis on web portals**
C1 Practical Internal test	**Experiment 1 to 3**	1 Hour	01.04.2024 To 08.04.2024	C1 Practical Internal Test
4. Present two recent case studies on Cyber Crime 5. Prepare a lab journal of 2 pages (A3 size)	**Experiment 4 to 5**	**04 / week**	**02/04/2024 to 14/05/2024**	**Search Cyber Crime cases and Prepare a lab Journal**
C2 Practical Internal test	**Experiment 8-14**	1 Hour	01/05/2024 To 08.05.2024	C2 Practical Internal Test

Department: Journalism and Mass Communication
Title of the Paper: News Reporting and Analysis (Theory)
[Course Code-221358]
Term Period :11.09.2023 to 16.12.2023
Faculty Name: Swathy H J and Swarna
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topic s	No. of Hours required to complete	Date	Method of Deployment andRemarks
	Lesson plan discussion	1 hour	11/09/2023	POs and Course Outcomes of theunits discussed
	Introduction to News and Reporting	1 hour	16/09/2023	Lecture
	Definitions, Nature, Concepts of News	1 hour	23/09/2023	Lecture
	Elements and Values of News	1 hour	25/09/2023	Lecture
	Types of Sources	1 hour	30/09/2023	Lecture
	Hard News and Soft News	1 hour	07/10/2023	Lecture
	Sources of News	1 hour	09/10/2023	Lecture
	News agencies and Internet as aNews Source	1 hour	12/10/2023	Lecture
	Techniques of News gathering	1 hour	16/10/2023	Lecture
	Wire Service and News Flow	1 hour	18/10/2023	Lecture
Unit I (14 hours)	Structure and Components ofNews Story	1 hour	21/10/2023	Lecture
	News Writing Skills	1 hour	25/10/2023	Lecture
	Inverted pyramid style in News writing	1 hour	26/10/2023	Lecture
	Leads and Types of Leads in News Story	1 hour	30/10/2023	Lecture
	Revision Lecture	1 hour	31/10/2023	Lecture
Unit-I & Unit – II	C1 Internal test	3 Hour	15.11.2023 to 18.11.2023	C1 Internal Test
	Reporting Process	1 hour	04/11/2023	Lecture
	Principles of Reporting	1 hour	06/11/2023	Lecture
	Functions of Reporting	1 hour	09/11/2023	Lecture
	Qualities and Responsibilities ofa Reporter	1 hour	13/11/2023	Lecture

Unit II (14 hours)	Professional norms and Ethics	1 hour	20/11/2023	Lecture
	C2 Internal Test Unit-II &Unit – IV	01 Week	10-12-23 to 15-12-23	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	Cultivation of News Sources	1 hour	25/11/2023	Display of C1 Internal Test marks on the notice board
	Techniques of Reporting	1 hour	27/11/2023	Lecture
	Investigative Reporting	1 hour	02/12/2023	Lecture
	Interpretative Reporting	1 hour	05/12/2023	Lecture
	In-depth and Narrative Reporting	1 hour	06/12/2023	Lecture
	Types Reporting: Civic, Political,Crime Reporting	1 hour	09/12/2023	Lecture
	Business, Sports and CourtReporting	1 hour	11/12/2023	Lecture
	International, weather Reporting	1 hour	14/12/2023	Lecture
	Mofussil and Beat	1 hour	16/12/2023	Lecture
Unit III **(14 hours)**	Types of News Events: Speeches,Seminars	1 hour	15/09/2023	Lecture
	Conferences, Press Conferences	1 hour	22/09/2023	Lecture
	Demonstrations, Rallies and Agitations	1 hour	26//09/2023	Lecture
	Reporting Government alCommunications	1 hour	29/09/2023	Lecture
	Reporting Non-GovernmentalCommunications	1 hour	06/10/2023	Lecture
	Covering Communal riots and Crimes	1 hour	13/10/2023	Lecture
	Interviewing: Principles ofInterview	1 hour	25/10/2023	Lecture
	Importance of Interview	1 hour	27/10/2023	Lecture

	Techniques of Interviews	1 hour	03/11/2023	Lecture
	Types of News Interviews	1 hour	10/11/2023	Lecture
	Difference Between Print,Television and Radio Interviews	1 hour	24/11/2023	Lecture
	Continued Difference Between Print, Television and RadioInterviews	1 hour	01/12/2023	Lecture
	Continued Difference Between Print, Television and RadioInterviews	1 hour	08/12/2023	Lecture
	Revision Lecture	1 hour	15/12/2023	Lecture
Unit IV **(14 hours)**	Introduction to Specialized Reporting	1 hour	12/09/2023	Lecture
	Legislative Reporting	1 hour	19/09/2023	Lecture
	Science and Technology	1 hour	26/09/2023	Lecture
	Defence Reporting	1 hour	03/10/2023	Lecture
	Human Rights	1 hour	10/10/2023	Lecture
	Women and Children	1 hour	17/10/2023	Lecture
	Health Reporting	1 hour	19/10/2023	Lecture
	Sports Reporting	1 hour	26/10/2023	Lecture
	Tourism Reporting	1 hour	31/10/2023	Lecture
	Education Reporting	1 hour	07/11/2023	Lecture
	Financial Reporting	1 hour	21/11/2023	Lecture
	Agriculture Reporting	1 hour	28/11/2023	Lecture
	Life Style	1 hour	05/12/2023	Lecture
	Cinema	1 hour	12/12/2023	Lecture
	Culture	1 hour	13/12/2023	Lecture
	Discuss about Internals marks	1 hour	15/12/2023	Display of C2 Internal Test markson the

				notice board
	Revision Lecture	1 hour	16/12/2023	Lecture

Department: Journalism and Mass Communication
Title of the Paper: News Reporting and Analysis (Practical)
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Swathy H J
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	**Experiments**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
1. Preparing the Events News Reports-5 (Events are held in your college/Campus/University) 2. Collect Five different lead types from different newspapers-05 3. Revise and rewrite specialnews stories-05	**Experiment 1 to 3**	**03 / week**	**11/09/2023 to 17/10/2023**	**Practical experiments and demonstration experiments**
C1 Practical Internal test	**Experiment 1 to 3**	1 Hour	08.11.2023 To 20.11.2023	C1 Practical Internal Test
4. Pick a Common lead news story appeared in 2 differentnewspaper and analyse 5. Preparation of Press notes andPress release-02 6. Press Conference Reports-02 7. Photographs and Captions-05	**Experiment 4 to 7**	**03 / week**	**20/10/2023 to 04/12/2023**	**Practical experiments and demonstration experiments**
C2 Practical Internal test	**Experiment 4 to 7**	1 Hour	27/11/2023 To 29.11.2023	C2 Practical Internal Test

Department: Journalism and Mass Communication
Title of the Paper: News Processing and Editing (Theory)
[Course Code-221458]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Swarna and Swathy H J
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment andRemarks
Unit I (14 hours)	Lesson plan and introduction	1 hour	12/02/2024	POs and Course Outcomes of the units discussed
	Introduction to Editing	1 hour	17/02/2024	Lecture
	Definition of Editing	1 hour	24/02/2024	Lecture
	Importance of Editing	1 hour	02/03/2024	Lecture
	Principles of Editing	1 hour	09/03/2024	Lecture
	Functions of Editing	1 hour	16/03/2024	Lecture
	Techniques of Editing	1 hour	23/03/2024	Lecture
	Types of Editing	1 hour	30/03/2024	Lecture
	Editing in the age of convergence	1 hour	06/04/2024	Lecture
	Software application for editing	1 hour	13/04/2024	Lecture
	Importance of design in print media	1 hour	27/04/2024	Lecture
	Visualizing a page	1 hour	04/05/2024	Lecture
	Types of design	1 hour	11/05/2024	Lecture
	Designing special supplements	1 hour	18/05/2024	Lecture
	Data and Information graphics	1 hour	25/05/2024	Lecture
Unit-I & Unit – II	C1 Internal test	3 Hour	16.04.2024 to 20.04.2024	C1 Internal Test
Unit II (14 hours)	Introduction to Technique of Editing	1 hour	12/02/2024	Lecture
	Editorial Page	1 hour	15/02/2024	Lecture
	Editorial significance writing and its	1 hour	19/02/2024	Lecture

	Types of Editorials	1 hour	22/02/2024	Lecture
	C2 Internal Test Unit III andIV	01 Week	01/05/2024 To 07/05/2024	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	Op-ed Page	1 hour	26/02/2024	Lecture
	Letters to the Editor	1 hour	29/02/2024	Lecture
	Middles	1 hour	04/03/2024	Lecture
	Introduction to Headlines	1 hour	07/03/2024	Lecture
	Functions and types of Headlines	1 hour	11/03/2024	Lecture
	Photo Editing	1 hour	14/03/2024	Lecture
	Caption writing	1 hour	18/03/2024	Lecture
	Column writing	1 hour	21/03/2024	Lecture
	Types of Columns	1 hour	25/03/2024	Lecture
	Ethical aspects of Editing	1 hour	28/03/2024	Lecture
Unit III **(14 hours)**	Concept of Newspaper Design	1 hour	01/04/2024	Lecture
	Types of Newspaper Layouts	1 hour	04/04/2024	Lecture
	Principles of Designing	1 hour	08/04/2024	Lecture
	Style Sheet	1 hour	15/04/2024	Lecture
	Dummy sheet	1 hour	22/04/2024	Lecture
	Front page Design	1 hour	25/04/2024	Display of C1 Internal Test marks on the notice board
	Pagination Softwares	1 hour	29/04/2024	Lecture
	Trends in Pagination	1 hour	02/05/2024	Lecture
	Translation- Meaning	1 hour	06/05/2024	Lecture

	Principles of translation	1 hour	09/05/2024	Lecture
	Techniques of Translation	1 hour	13/05/2024	Lecture
	Types of Translation	1 hour	16/05/2024	Lecture
	Continued types of translation	1 hour	20/05/2024	Lecture
	Revision Lecture	1 hour	23/05/2024	Lecture
Unit IV **(14 hours)**	Introduction to News Room	1 hour	13/02/2024	Lecture
	Newsroom Setup	1 hour	20/02/2024	Lecture
	Organizational Structure	1 hour	27/02/2024	Lecture
	Functions of a typical newsroom	1 hour	05/03/2024	Lecture
	Continued class-Functions of a typical newsroom	1 hour	12/03/2024	Lecture
	Editor	1 hour	19/03/2024	Lecture
	Role and Responsibilities of an Editor	1 hour	26/03/2024	Lecture
	Executive Editor	1 hour	02/04/2024	Lecture
	News Editor	1 hour	23/04/2024	Lecture
	Chief Sub editor	1 hour	30/04/2024	Lecture
	Sub-editor	1 hour	07/05/2024	Lecture
	Discuss about Internal Marks	1 hour	14/05/2024	Display of C2 Internal Test marks on the notice board
	Revision Lecture	1 hour	21/05/2024	Lecture

Department: Journalism and Mass Communication

Title of the Paper: News Processing and Editing (Practical)

Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Swarna
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
1. Write an Editorial on anycurrent issue 2. Write a letter to the editorabout any civic issues 3. Translate a news report from aSource Language to Target Language	**Experiment 1 to 3**	**03 / week**	**12/02/2024 to 19/03/2024**	**Practical experiments and demonstration experiments**
C1 Practical Internal test	**Experiment 1 to 2**	1 Hour	01.04.2024 To 08.04.2024	C1 Practical Internal Test
4. Choose 5 news stories andprovide suitable headlines 5. Radio and Television NewsScript writing and Recording	**Experiment 4 to 5**	**03 / week**	**02/04/2024 to 14/05/2024**	**Practical experiments and demonstration experiments**
C2 Practical Internal test	**Experiment 3-5**	1 Hour	01/05/2024 To 08.05.2024	C2 Practical Internal Test

Department: Journalism and Mass Communication
Title of the Paper: Introduction to Communication (Theory)
[Course Code – 231558]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Swarna
Total Hrs: 60 Hours

Curriculum asprescribed by the Institution	Topic s	No. of Hour required to complete	Date	Method of Deployment andRemarks
	Lesson plan and introduction	1 hour	11/09/2023	POs and Course Outcomes of the units discussed
	Introduction about Communication in General	1 hour	14/09/2023	Lecture
	Definition of Communication	1 hour	21/09/2023	Lecture

Unit I (15 hours)	Authors Definition of Communication	1 hour	25/09/2023	Lecture
	Nature of Communication	1 hour	27/09/2023	Lecture
	Scope of Communication	1 hour	05/10/2023	Lecture
	Process of Communication	1 hour	09/10/2023	Lecture
	Barriers of Communication in General	1 hour	12/10/2023	Lecture
	Continued of Barriers of Communication in Research and study	1 hour	16/10/2023	Lecture
	Understanding Communication Through Models	1 hour	17/10/2023	Lecture
	Reviewing Aristotle's Model	1 hour	19/10/2023	Lecture
	Reviewing Shannon-Weaver Model	1 hour	26/10/2023	Lecture
	Reviewing Harold Lasswell Model	1 hour	30/10/2023	Lecture
	Reviewing Wilbur Schramm Model	1 hour	31/10/2023	Lecture
	Reviewing New Comb's Model	1 hour	02/10/2023	Lecture
Unit-I & Unit – II	C1 Internal test	3 Hour	15.11.2023 to 18.11.2023	C1 Internal Test
	Introduction to Types of Communication	1 hour	06/11/2023	Lecture
	Verbal Communication	1 hour	07/11/2023	Lecture
	Non-Verbal Communication	1 hour	09/11/2023	Lecture
	Difference Between Verbal andNon-Verbal Communication	1 hour	13/11/2023	Lecture
	Introduction about Types ofNon-Verbal Communication	1 hour	20/11/2023	Lecture
	C2 Internal Test Unit-II & Unit – IV	01 Week	10-12-23 to 15-12-23	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments

Unit II (15 hours**)**	Sign Language as a Non-Verbal Communication	1 hour	23/11/2023	Lecture
	Discuss about Internal Marks	1 hour	27/11/2023	Display of C1 Internal Test marks on the notice board
	Object Language as a Non-Verbal Communication	1 hour	28//11/2023	Lecture
	Body Language as a Non-VerbalCommunication	1 hour	01/12/2023	Lecture
	Para Language as a Non-Verbal Communication	1 hour	04/12/2023	Lecture
	Touch and Space as a Non-Verbal Communication	1 hour	07/12/2023	Lecture
	Time and Silence as a Non-Verbal Communication	1 hour	11//12/2023	Lecture
	Oral Communication	1 hour	13/12/2023	Lecture
	Written Communication	1 hour	14/12/2023	Lecture
	Essentials of Good Writing	1 hour	15/12/2023	Lecture
	Techniques of Public Speaking	1 hour	16/12/2023	Lecture
Unit III (15 hours)	Levels of Communication	1 hour	11/09/2023	Lecture
	Scope of Communication	1 hour	25/09/2023	Lecture
	Limitations of Communication	1 hour	09/10/2023	Lecture
	Intra-Personal Communication	1 hour	16/10/2023	Lecture
	Inter-Personal Communication	1 hour	20/10/2023	Lecture
	Group Communication	1 hour	30/10/2023	Lecture
	Mass Communication	1 hour	06/11/2023	Lecture
	Mass-Line Communication	1 hour	13/11/2023	Lecture
	Role of Mass Communication inNational Development	1 hour	20/11/2023	Lecture
	Role of Mass Communication in Cultural Promotion	1 hour	27/11/2023	Lecture

	Role of Mass Communication in Health Development	1 hour	04/12/2023	Lecture
	Role of Mass Communication inAgricultural Development	1 hour	11/12/2023	Lecture
Unit IV (15 hours)	Introduction to Mass Media	1 hour	13/09/2023	Lecture
	Mass Media and Society	1 hour	20/09/2023	Lecture
	Introduction to Types of Mass Media	1 hour	27/09/2023	Lecture
	Print Media	1 hour	04/10/2023	Lecture
	Radio as Electronic Media	1 hour	11/10/2023	Lecture
	Television as Electronic Media	1 hour	18/10/2023	Lecture
	Folk Media	1 hour	25/10/2023	Lecture
	New Media	1 hour	08/11/2023	Lecture
	Blogs, Website as New Media	1 hour	22/11/2023	Lecture
	Contemporary Issues in Mass Media	1 hour	29/11/2023	Lecture
	Fake News in Mass Media	1 hour	06/12/2023	Lecture
	Artificial Intelligence and Media	1 hour	13/12/2023	Lecture
	Revision Class Unitwise	1 hour	16/12/2023	Display of C2 Internal Test marks on the notice board

Department: Journalism and Mass Communication
Title of the Paper: Introduction to Communication (Practical)
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Swarna
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Experiments	No. of Hours required to complete	Date	Method of Deployment and Remarks
1. Introduction to Laboratory Techniques - Safety guidelines and laboratory protocols Aseptictechniques and proper handling of materials. Basic equipment and instrument operation Preparation of reagents and media 2. Practicing Formal and Informal Letter Writing 3. Writing Articles for Newspapers 4. Practice Resume Writing	**Experiment 1 to 3**	**02 / week**	**11/09/2023 to 17/10/2023**	**Practicing writing and Review**
C1 Practical Internal test	**Experiment 1 to 3**	1 Hour	10.11.2023 To 22.11.2023	C1 Practical Internal Test
4. Writing Middles for EditorialPage 5. AI News Reading 6. Group Discussion and PaperPresentation	**Experiment 4 to 5**	**03 / week**	**20/10/2023 to 04/12/2023**	**Practicing writing and Review**
C2 Practical Internal test	**Experiment 3 to 5**	1 Hour	28/11/2023 To 02.12.2023	C2 Practical Internal Test

Department: Journalism and Mass Communication
Title of the Paper: Media Law and Ethics (Theory)
[Course Code – 231559**]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Swathy H J
Total Hrs: 60 Hours

Curriculum asprescribed by the Institution	**Topics**	**No. of Hour required to complete**	**Date**	**Method of Deployment andRemarks**
Unit I (15 hours)	Lesson plan and introduction	1 hour	11/09/2023	POs and Course Outcomes of the units discussed
	Introduction to Media Law and Ethics	1 hour	12/09/2023	Lecture
	Concept of Freedom of Speech	1 hour	13/09/2023	Lecture
	Press during Emergency of 1975	1 hour	19/09/2023	Lecture
	Discuss about Press during Emergency Incidents	1 hour	20/09/2023	Lecture
	Press Freedom in Indian Constitution	1 hour	26/09/2023	Lecture
	Article 19 (1)(a)	1 hour	27/09/2023	Lecture
	Article 19 (2)	1 hour	03/10/2023	Lecture
	Hate Speech	1 hour	04/10/2023	Lecture
	World Press Freedom Index	1 hour	10/10/2023	Lecture
	Discuss about World Press Freedom Index in India	1 hour	17/10/2023	Lecture
	Introduction about Case Studies	1 hour	18/10/2023	Lecture
	Case Studies on Freedom ofSpeech	1 hour	25/10/2023	Lecture
	Case Studies on Hate Speech	1 hour	26/10/2023	Lecture
	Case Studies on Article 19 (1)(a)	1 hour	31/10/2023	Lecture
	Case Studies on Article 19 (2)	1 hour	02/11/2023	Lecture

Unit-I & Unit – II	C1 Internal test	3 Hour	15.11.2023 to 18.11.2023	C1 Internal Test
Unit II (15 hours)	Overview of Laws in Media	1 hour	07/11/2023	Lecture
	Code of Ethics for Journalist	1 hour	08/11/2023	Lecture
	Laws of Defamation	1 hour	21/11/2023	Lecture
	Laws of Censorship	1 hour	22/11/2023	Lecture
	Laws of Sedition	1 hour	27/11/2023	Lecture
	C2 Internal Test Unit-II & Unit – IV	01 Week	10-12-23 to 15-12-23	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	Laws of Obscenity	1 hour	28/11/2023	Display of C1 Internal Test marks on the notice board
	Laws of Right to Privacy	1 hour	29/11/2023	Lecture
	Laws of Parliamentary Privileges1971	1 hour	05/12/2023	Lecture
	Cyber laws	1 hour	06/12/2023	Lecture
	Case Studies	1 hour	12/12/2023	Lecture
Unit III (15 hours)	Introduction to Acts	1 hour	16/09/2023	Lecture
	Contempt of Court act 1971	1 hour	19/09/2023	Lecture
	Right to Information Act 2005	1 hour	23/09/2023	Lecture
	The Official Secrets Act 1923	1 hour	30/09/2023	Lecture
	The Copyright Act 1957	1 hour	07/10/2023	Lecture
	Working Journalists Act 1955	1 hour	12/10/2023	Lecture
	Information Technology Act 2000	1 hour	21/10/2023	Lecture

	Case Studies on Contempt of Court act 1971	1 hour	27/10/2023	Lecture
	Case Studies on Right toInformation Act 2005	1 hour	04/11/2023	Lecture
	Case Studies on The Official Secrets Act 1923	1 hour	11/11/2023	Lecture
	Case Studies on The CopyrightAct 1957	1 hour	23/11/2023	Lecture
	Continued Case Studies on The Copyright Act 1957	1 hour	25/11/2023	Lecture
	Case Studies on WorkingJournalists Act 1955	1 hour	02/12/2023	Lecture
	Continued Case Studies on Working Journalists Act 1955	1 hour	08/12/2023	Lecture
	Case Studies on Information Technology Act 2000	1 hour	16/12/2023	Lecture
Unit IV (15 hours)	Introduction to Professional Bodies and Committes	1 hour	14/09/2023	Lecture
	RNI	1 hour	21/09/2023	Lecture
	Press Commissions of India	1 hour	05/10/2023	Lecture
	Press Council of India	1 hour	12/10/2023	Lecture
	Press Council of India Structure	1 hour	19/10/2023	Lecture
	Press Council of India Functions	1 hour	26/10/2023	Lecture
	Press Council of IndiaSignificance	1 hour	02/11/2023	Lecture
	Prasar Bharati	1 hour	09/11/2023	Lecture
	Chanda Committee	1 hour	22/11/2023	Lecture
	Varghese Committee	1 hour	23/11/2023	Lecture
	Paswan Committee	1 hour	29/11/2023	Lecture
	BRAI	1 hour	07/12/2023	Display of C2 Internal Test marks on the notice board

	TRAI	1 hour	08/11/2023	Lecture
	BCCC	1 hour	06/12/2023	Lecture
	ASCI	1 hour	13/12/2023	Lecture
	NBA	1 hour	16/12/2023	Lecture

Department: Journalism and Mass Communication
Title of the Paper: Media Law and Ethics (Practical)
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Swathy H J
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	**Experiments**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
1. File an RTI application and Prepare a news report 2. Present a case study of Defamation on Media 3. Present a case study of Hatespeech	**Experiment 1 to 3**	**03 / week**	**02/04/2024 to 14/05/2024**	**Search Case Studies on Given topic and present a report**
C1 Practical Internal test	**Experiment 3 to 5**	1 Hour	10.11.2023 To 22.11.2023	C1 Practical Internal Test
4. Present a case study of Contempt of Court on Media 5. Present a Case study onViolation of Parliamentary Privileges by Media	**Experiment 4 to 5**	**03 / week**	**12/02/2024 to 19/03/2024**	**Search Case Studies on Given topic and present a report**

C2 Practical Internal test	**Experiment 1-5**	1 Hour	01/05/2024 To 08.05.2024	C2 Practical Internal Test

Department: Journalism and Mass Communication
Title of the Paper: Advertising and Corporate Communication (Theory)
[Course Code – 231659**]**
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Swathy H J
Total Hrs: 60 Hours

Curriculum asprescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment andRemarks**
Unit I (15 hours)	Lesson plan	1 hour	12/02/2024	POs and Course Outcomes of the units discussed
	Introduction to Advertising	1 hour	14/02/2024	Lecture
	Definition of Advertising	1 hour	17/02/2024	Lecture
	Nature of Advertising	1 hour	21/02/2024	Lecture
	Scope of Advertising	1 hour	24/02/2024	Lecture
	Role of Advertising	1 hour	26/02/2024	Lecture
	Functions of Advertising	1 hour	28/02/2024	Lecture
	Evolution of Advertisement in India	1 hour	02/03/2024	Lecture
	Evolution of Advertisement in World	1 hour	06/03/2024	Lecture
	Current Trends in Advertising	1 hour	09/03/2024	Lecture
	Advertising as a Tool Communication	1 hour	13/03/2024	Lecture
	Role of Advertising in Society	1 hour	16/03/2024	Lecture
	Advertisement and Ethics	1 hour	20/03/2024	Lecture

	Revision	1 hour	23/03/2024	Lecture
Unit-I & Unit – II	C1 Internal test	3 Hour	16.04.2024 to 20.04.2024	C1 Internal Test
Unit II (15 hours)	Introduction to Types of Advertising	1 hour	27/03/2024	Lecture
	Types of Advertisements	1 hour	30/03/2024	Lecture
	Advertising Agency	1 hour	03/04/2024	Lecture
	Functions of Advertising Agency	1 hour	06/04/2024	Lecture
	C2 Internal Test (Unit III and IV)	01 Week	01/05/2024 To 07/05/2024	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	Types and Structure of Advertising Agency	1 hour	10/04/2024	Lecture
	Continued about Types andStructure of Advertising Agency	1 hour	13/04/2024	Lecture
	Advertising Copy Writing for Print Media	1 hour	24/04/2024	Lecture
	Advertising Copy Writing for Radio	1 hour	27/04/2024	Display of C1 Internal Test marks on the notice board
	Discuss about Internals Marks	1 hour	01/05/2024	Lecture
	Advertising Copy Writing for Television	1 hour	04/05/2024	Lecture
	Headlines of Advertisements	1 hour	08/05/2024	Lecture
	Signature of Advertisement	1 hour	11/05/2024	Lecture
	Slogans of Advertisement	1 hour	15/05/2024	Lecture
	Logos of Advertisements	1 hour	18/05/2024	Lecture
	Difference Between Print and Electronic Media	1 hour	22/05/2024	Lecture

	Revision class	1 hour	25/05/2024	Lecture
Unit III (15 hours)	Introduction to Corporate Communication	1 hour	15/02/2024	Lecture
	Definition of Corporate Communication	1 hour	22/02/2024	Lecture
	Nature of Corporate Communication	1 hour	29/02/2024	Lecture
	Scope of Corporate Communication	1 hour	07/03/2024	Lecture
	Structure of Corporate Organization	1 hour	14/03/2024	Lecture
	Core Functions of Corporate Communications	1 hour	21/03/2024	Lecture
	Social Responsibility of Corporate	1 hour	28/03/2024	Lecture
	Comparison with Public Relations	1 hour	04/04/2024	Lecture
	Advertising	1 hour	25/04/2024	Lecture
	Publicity	1 hour	02/05/2024	Lecture
	Propaganda	1 hour	09/05/2024	Lecture
	Discuss about Internal Marks	1 hour	16/05/2024	Display of C2 Internal Test marks on the notice board
	Revision	1 hour	23/05/2024	Lecture
	Introduction to Corporate Communication Tools	1 hour	13/02/2024	Lecture
	Print Media as Advertising Tool	1 hour	15/02/2024	Lecture
	House Journals	1 hour	20/02/2024	Lecture
	Newsletters	1 hour	22/02/2024	Lecture

	Brochures	1 hour	27/02/2024	Lecture
	Handouts	1 hour	29/02/2024	Lecture
Unit IV (15 hours)	Flyers	1 hour	05/03/2024	Lecture
	Electronic Medi aAdvertisements	1 hour	07/03/2024	Lecture
	Corporate Films	1 hour	12/03/2024	Lecture
	Digital Media	1 hour	14/03/2024	Lecture
	Social Media	1 hour	19/03/2024	Lecture
	Facebook for Advertisement	1 hour	21/03/2024	Lecture
	Youtube in Advertisement	1 hour	26/03/2024	Lecture
	Instagram and Influencers in Advertisement	1 hour	28/03/2024	Lecture
	Blogs	1 hour	02/05/2024	Lecture
	Vlogs	1 hour	04/05/2024	Lecture
	Websites	1 hour	23/05/2024	Lecture
	Revision	1 hour	25/05/2024	Lecture

Department: Journalism and Mass Communication
Title of the Paper: Advertising and Corporate Communication (Practical)
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Swathy H J
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	**Experiments**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
1. Display Advertisement (Product and Service) 2. Classified Advertisements 3. Product Announcement	**Experiment 1 to 3**	**03 / week**	**02/04/2024 to 14/05/2024**	**Practice to Create Advertisement On Products and Review**

C1 Practical Internal test	**Experiment 1 to 3**	1 Hour	01.04.2024 To 08.04.2024	C1 Practical Internal Test
4. Prepapring Brochures 5. Posters and Flyers 6. Photoshop	**Experiment 4 to 6**	**03 / week**	**12/02/2024 to 19/03/2024**	**Practice to Create Advertisement On Products and Review**
C2 Practical Internal test	**Experiment 1-6**	1 Hour	01/05/2024 To 08.05.2024	C2 Practical Internal Test

Department: Journalism and Mass Communication
Title of the Paper: Fundamentals of Radio and Television (Practical)
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Swarna
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	**Experiments**	**No. of Hours required to complete**	**Date**	**Method of Deployment and Remarks**
1. Prepare a Scripts for RadioAnnouncements 2. Prepare a Script for RadioJingles 3. Prepare an AdvertisementScript for Radio	**Experiment 1 to 3**	**03 / week**	**12/02/2024 to 19/03/2024**	**Practice Script Writing for Radio and Televisio and Practice Presenatation**
C1 Practical Internal test	**Experiment 1 to 3**	1 Hour	01.04.2024 To 08.04.2024	C1 Practical Internal Test
4. Script writing and News Reading for Television 5. Prepare Interview Script for Television	**Experiment 4 to 5**		09.04.2024 To 30.04.204	**Practice Script Writing for Radio and Televisio and Practice Presenatation**

C2 Practical Internal test	**Experiment 4-5**	1 Hour	01/05/2024 To 08.05.2024	C2 Practical Internal Test

Department: Journalism and Mass Communication
Title of the Paper: Fundamentals of Radio and Television (Theory)
[Course Code – 231658]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Swarna
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment andRemarks**
Unit I (15 hours)	Lesson plan discussion	1 hour	12/02/2024	POs and Course Outcomes of the units discussed
	Introduction to Radio	1 hour	14/02/2024	Lecture
	Nature of Radio	1 hour	21/02/2024	Lecture
	Characteristics of Radio	1 hour	28/02/2024	Lecture
	Evolution of Radio in India	1 hour	06/03/2024	Lecture
	Introduction of Radio Stations	1 hour	13/03/2024	Lecture
	AM/FM Radio Stations	1 hour	20/03/2024	Lecture
	Organizational Structure of AIR	1 hour	27/03/2024	Lecture
	Organizational Structure ofPrivate Radio	1 hour	03/04/2024	Lecture
	Organizational Structure ofCommunity Radio	1 hour	10/04/2024	Lecture
	Introduction to Radio Programme	1 hour	24/04/2024	Lecture
	Formats of Radio Programme	1 hour	08/05/2024	Lecture
	Present Status of Radio in India	1 hour	15/05/2024	Lecture
	Impact of Radio in India	1 hour	22/05/2024	Lecture
	Reach of Radio in India	1 hour	24/05/2024	Lecture

Unit-I & Unit – II	C1 Internal test	3 Hour	16.04.2024 to 20.04.2024	C1 Internal Test
Unit II (15 hours)	Introduction to Television	1 hour	12/02/2024	Lecture
	Nature of Television	1 hour	13/02/2024	Lecture
	Characteristics of Television	1 hour	19/02/2024	Lecture
	Growth of Television in India	1 hour	20/02/2024	Lecture
	C2 Internal Test (Unit III andIV)	01 Week	01/05/2024 To 07/05/2024	C2 Internal Test(Assignment)
	Theory Assignment			Submission of Theory Assignments
	Growth of Television in India Continued	1 hour	26/02/2024	Lecture
	Prasara Bharathi	1 hour	27/02/2024	Lecture
	Public Television Channels	1 hour	04/03/2024	Lecture
	Dooradarshan TV Channel	1 hour	05/03/2024	Lecture
	Indias First Private Channel and Evolution of Private TV Channels	1 hour	11/03/2024	Lecture
	Regional Television Channels	1 hour	12/03/2024	Lecture
	Private Television Channels	1 hour	18/03/2024	Lecture
	Introduction of Television Program Formats	1 hour	19/03/2024	Lecture
	Television Various Programme Formats	1 hour	25/03/2024	Lecture
	Practice Script Writing onProgramme Formats	1 hour	26/03/2024	Lecture
Unit III (15 hours)	Introduction to Audio Media Presentation	1 hour	01/04/2024	Lecture

	Introduction to Visual Media Presentation	1 hour	02/04/2024	Lecture
	Effective Communication Skillsfor Radaio	1 hour	08/04/2024	Lecture
	Effective Communication Skillsfor Television	1 hour	15/04/2024	Lecture
	Difference Betwee nCommunication Skills on Radio and Television	1 hour	22/04/2024	Lecture
	Presentation Techniques	1 hour	23/04/2024	Display of C1 Internal Test marks on the notice board
	Discuss about Internals test marks	1 hour	29/04/2024	Lecture
	Voice Modulation	1 hour	30/04/2024	Lecture
	Appearance	1 hour	06/05/2024	Lecture
	Facial Expression	1 hour	07/05/2024	Lecture
	Body Language	1 hour	13/05/2024	Lecture
	Handle Critical Situations on Live	1 hour	14/05/2024	Lecture
	Discuss about Current Televisionpresenters	1 hour	20/05/2024	Lecture
	Discuss about Presentation Tools	1 hour	21/05/2024	Lecture
Unit IV (15 hours)	Introduction to Script Writing	1 hour	12/02/2024	Lecture
	Script Writing for Radio	1 hour	19/02/2024	Lecture
	Script Writing for Television	1 hour	26/02/2024	Lecture
	Writing Skills for Broadcast	1 hour	04/03/2024	Lecture
	Writing Skills for TelecastMedia	1 hour	11/03/2024	Lecture
	Importance of Scripting	1 hour	18/03/2024	Lecture
	Principles of Scripting	1 hour	25/03/2024	Lecture
	Various Elements of Script for Radio	1 hour	01/04/2024	Lecture

	Various Elements of Script for Television	1 hour	08/04/2024	Lecture
	Scripts Formats for Various Programmes	1 hour	15/04/2024	Lecture
	Style Sheet for Radio	1 hour	22/04/2024	Lecture
	Styele Sheet for Television	1 hour	29/04/2024	Lecture
	Grammar	1 hour	06/05/2024	Lecture
	Discuss about Internal Marks ofC2	1 hour	13/05/2024	Display of C2 Internal Test marks on the notice board
	Revision	1 hour	20/05/2024	Lecture

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ಪಾಠ ಯೋಜನೆ 2022–23

ವಿಭಾಗ: **ಕನ್ನಡ ವಿಭಾಗ**

ವಿಷಯ: **ಪ್ರಥಮ ಸೆಮಿಸ್ಟರ್ – ಬಿ.ಎ. ಕನ್ನಡಭಾಷೆ ಪತ್ರಿಕೆ – 1** (22KAN101)

ದಿನಾಂಕ : 13–9–2022 ರಿಂದ 31–01–2023

ವಾರಕ್ಕೆ **4 ಗಂಟೆಗಳು** ಒಟ್ಟು ಬೋಧನಾ ಅವಧಿ–**66**

ಪಠ್ಯ ಪುಸ್ತಕದ ಹೆಸರು	ವಿಷಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕಗಳು	ಬೋಧನಾ ವಿಧಾನ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ಕನ್ನಡ ಮೆನಿಪ್ಪನಾಡು ಚೆಲ್ವಾಯ್ತು – ಕಾವ್ಯಭಾಗ	4	13, 15, 16, 19–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ಹೊಯಿಸಳನ ದಳಪತಿ – ಕಥೆ	5	20, 22, 23, 26, 27–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ತನ್ನನ್ನು ತಿಳಿದುಕೊಳ್ಳಬೇಕಾದ ಕರ್ನಾಟಕ	5	29, 30–09–2022 03, 06, 07–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ಋತು ಸಂಹಾರ – ಕವಿತೆ	3	10, 11, 13–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ಪಿಗ್ಮಿ ಏಜೆಂಟ್ ಮತ್ತು ಗಾಂಧಿ ಜೋಗತಿ	3	14, 17, 20–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ಕೇಳದ ಕಾಣದ ಸಂಗತಿಗಳು	5	21, 27, 28–10–2022 03, 04–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ಮಲ್ಲಿಗೆ	3	07, 08, 14–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ಯದುಗಿರಿಯ ಮೌನ ವಿಕಾಸ – ಕವನ	4	15, 17, 18, 21–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ನೌರು ದ್ವೀಪದ ದುರಂತ	5	22, 24, 25, 28, 29–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಕಲಾ ಗಂಗೋತ್ರಿ–1	ಗಾರ್ಮೆಂಟ್ ಹುಡುಗಿ ಹೊಲಿದ ಚೆಂದದ ಪೋಷಾಕು – ಕವಿತ	3	01, 02, 05–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ನವಿಲುಗಳು	5	06, 09, 12, 13, 15–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ಒಮ್ಮೆ ಹೆಣ್ಣಾಗು ಪ್ರಭುವೇ	5	16, 19, 20, 22, 23–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–1	ಪುನರಾವರ್ತನೆ ತರಗತಿಗಳು ಮತ್ತು ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ	16	26, 27, 29, 30–12–2022 02, 03, 05, 06–01–2023 09, 16, 17, 19, 20, 23, 24, 27, 31–01–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠ ಯೋಜನೆ 2022–23

ವಿಭಾಗ: **ಕನ್ನಡ**

ವಿಷಯ: **ಪ್ರಥಮ ಸೆಮಿಸ್ಟರ್ – ಬಿ.ಎಸ್ಸಿ. ಕನ್ನಡಭಾಷೆ ಪತ್ರಿಕೆ – 1** (22KAN102)

ದಿನಾಂಕ : 13–9–2022 ರಿಂದ 31–01–2023

ವಾರಕ್ಕೆ **4 ಗಂಟೆಗಳು** ಒಟ್ಟು ಬೋಧನಾ ಅವಧಿ–**66**

ಪಠ್ಯ ಪುಸ್ತಕದ ಹೆಸರು	ವಿಷಯ	ಪಠ್ಯ ಪೂರ್ಣ ಗೊಳಿಸಲು ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕಗಳು	ಬೋಧನಾ ವಿಧಾನ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ಕನ್ನಡ ಪದಗೊಳ್ – ಕವನ	4	13, 15, 16, 19–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ಬೆಂಕಿ ಬಿದ್ದಿದೆ ಮನೆಗೆ – ಕವನ	5	20, 22, 23, 26, 27–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ಹೊಯಿಸಳನ ದಳಪತಿ – ಕಥೆ	5	29, 30–09–2022 03, 06, 07–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ಹೊನ್ನ ಬಿತ್ತೇವು ಹೊಲಕ್ಕೆಲ್ಲ – ಕವಿತೆ	3	10, 11, 13–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ಚಿಗರಿಗಂಗಳ ಚೆಲುವಿ – ಕವಿತೆ	3	14, 17, 20–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ಬುಲ್ಡೋಜರ್ ಸಂಸ್ಕೃತಿ	5	21, 27, 28–10–2022 03, 04–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ಒಂದೇ ಒಂದು ಬಾರಿ ಹೊರಬನ್ನಿ – ಕವನ	3	07, 08, 14–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ಕತ್ತೆ ಮತ್ತು ಧರ್ಮ – ಕವನ	4	15, 17, 18, 21–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ವಿಚಾರ ಕ್ರಾಂತಿಗೆ ಆಹ್ವಾನ	5	22, 24, 25, 28, 29–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು

				ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ಚರಿತ್ರೆಯೆಂದರೆ....	3	01, 02, 05–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	'ಇಲ್ಲಿ ಯಾರೂ ಮುಖ್ಯರಲ್ಲ, ಯಾರೂ ಅಮುಖ್ಯರಲ್ಲ'	5	06, 09, 12, 13, 15–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ಅಂಗುಲಿಮಾಲ ಪುಣ್ಯಾಕ್ಷನಾದದ್ದು	5	16, 19, 20, 22, 23–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –1	ಪುನರಾವರ್ತನೆ ತರಗತಿಗಳು ಮತ್ತು ಮಾದರಿ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ	16	26, 27, 29, 30–12–2022 02, 03, 05, 06–01–2023 09, 16, 17, 19, 20, 23, 24, 27, 31–01–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠ ಯೋಜನೆ 2022–23

ಪ್ರಥಮ ಸೆಮಿಸ್ಟರ್ ಬಿ.ಬಿ.ಎ.

ವಿಭಾಗ: **ಕನ್ನಡ**

ವಿಷಯ: **ಪ್ರಥಮ ಸೆಮಿಸ್ಟರ್ – ಬಿ.ಕಾಂ ಕನ್ನಡಭಾಷೆ ಪತ್ರಿಕೆ – 1** (22KAN103)

ದಿನಾಂಕ : 13–9–2022 ರಿಂದ 31–01–2023

ವಾರಕ್ಕೆ **4 ಗಂಟೆಗಳು** ಒಟ್ಟು ಬೋಧನಾ ಅವಧಿ–**60**

ಪಠ್ಯ ಪುಸ್ತಕದ ಹೆಸರು	ವಿಷಯ	ಪಠ್ಯ ಪೂರ್ಣ ಗೊಳಿಸಲು ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕಗಳು	ಬೋಧನಾ ವಿಧಾನ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ಕನ್ನಡಾಂಬೆಯ ಹಿರಿಮೆ – ಕವನ	3	14, 15, 17–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ಕಟ್ಟುವೆವು ನಾವು– ಕವನ	4	19, 21, 22, 24–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ಡಾ. ರಾಜ್ ಕುಮಾರ್ ಎಂಬ ಬೆವರಿನ ಮನುಷ್ಯ	5	26, 28, 29–09–2022 01, 03–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ಅಮ್ಮ, ಆಚಾರ ನಾನು – ಕವನ	4	06, 08, 10, 12–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ವೀರಮಾನ್ಯ	5	13, 15, 17, 19, 22–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ಜಲಗಾರ ನಾಟಕದ ಆಯ್ದಭಾಗ (ಮೊದಲ ದೃಶ್ಯ)	5	27, 29–10–2022 02, 03, 05–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ಗಿರಣಿ ವಿಸ್ತಾರ ನೋಡಮ್ಮ	3	07, 09, 10–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ಹುಲಿ ಸವಾರಿ	6	12, 14, 16, 17, 19, 21–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ನಾನ್ಯಾರಿಗಲ್ಲದವಳು	5	23, 24, 26, 28, 30–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ದಿಕ್ಕಿಲ್ಲದ ಹಾಡು	3	01, 03, 05–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ಪೂರ್ಣತೆಯ ಪರಮ ಕಲೆ	4	07, 09, 10, 12–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ಕುಣಿಯುವ ಕುರುಡ ಕಾಂಚಾಣ	3	14, 15, 17–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–1	ಪುನರಾವರ್ತನೆ ಮತ್ತು ಮಾದರಿ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ	10	19, 21, 22, 24, 26, 28, 29, 31–12–2022 02, 04, 05, 07, 09, 23, 28, 30–01–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠ ಯೋಜನೆ 2022–23

ವಿಭಾಗ: **ಕನ್ನಡ**

ವಿಷಯ: **ಪ್ರಥಮ ಸೆಮಿಸ್ಟರ್ – ಬಿ.ಬಿ.ಎ. ಕನ್ನಡಭಾಷೆ ಪತ್ರಿಕೆ – 1** (22KAN104)

ದಿನಾಂಕ: 13–9–2022 ರಿಂದ 31–01–2023

ವಾರಕ್ಕೆ **4 ಗಂಟೆಗಳು** ಒಟ್ಟು ಬೋಧನಾ ಅವಧಿ–**60**

ಪಠ್ಯ ಪುಸ್ತಕದ ಹೆಸರು	ವಿಷಯ	ಪಠ್ಯ ಪೂರ್ಣ ಗೊಳಿಸಲು ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕಗಳು	ಬೋಧನಾ ವಿಧಾನ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ಸಾಯುತಿದೆ ನಿಮ್ಮ ನುಡಿ–ಕವನ	3	14, 15, 17–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ನಿಜಗಲ್ಲಿನ ರಾಣಿ – ಕಥೆ	4	19, 21, 22, 24–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ನನ್ನ ಕನ್ನಡ ಜಗತ್ತು – ಲೇಖನ	5	26, 28, 29–09–2022 01, 03–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ರಂಗೋಲಿ ಮತ್ತು ಮಗ	4	06, 08, 10, 12–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ಕಳಚಬೇಕಾದ ಇತರ ಯಂತ್ರಗಳು	5	13, 15, 17, 19, 22–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ಡಾಂಬರು ಬಂದುದು	5	27, 29–10–2022 02, 03, 05–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ಬಾಳಿನ ಹಂಬಲು	3	07, 09, 10–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ಅವ್ವ	6	12, 14, 16, 17, 19, 21–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ತುಂಬಿದ ಕೊಡ	5	23, 24, 26, 28, 30–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ಶಿವನ ಮೀಸುವ ಹಾಡು	3	01, 03, 05–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ಯುದ್ಧ	4	07, 09, 10, 12–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ಧರ್ಮಬಲೆ ಬೀಸಿದಾಗ	3	14, 15, 17–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–1	ಪುನರಾವರ್ತನೆ ಮತ್ತು ಮಾದರಿ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ	10	19, 21, 22, 24, 26, 28, 29, 31–12–2022 02, 04, 05, 07, 09, 23, 28, 30–01–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠ ಯೋಜನೆ 2022–23

ವಿಭಾಗ: **ಕನ್ನಡ**

ವಿಷಯ: **ಪ್ರಥಮ ಸೆಮಿಸ್ಟರ್ – ಬಿ.ಸಿ.ಎ. ಕನ್ನಡಭಾಷೆ ಪತ್ರಿಕೆ – 1** (22KAN105)

ದಿನಾಂಕ : 13–9–2022 ರಿಂದ 31–01–2023

ವಾರಕ್ಕೆ : **4 ಗಂಟೆಗಳು** ಒಟ್ಟು ಬೋಧನಾ ಅವಧಿ–**66**

ಪಠ್ಯ ಪುಸ್ತಕದ ಹೆಸರು	ವಿಷಯ	ಪಠ್ಯ ಪೂರ್ಣ ಗೊಳಿಸಲು ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕಗಳು	ಬೋಧನಾ ವಿಧಾನ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಕನ್ನಡಿಗರ ತಾಯಿ – ಕವನ	4	13, 15, 16, 19–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಕಾಣಿಕೆ	5	20, 22, 23, 26, 27–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಕನ್ನಡ ಮನಸ್ಸು – ಲೇಖನ	5	29, 30–09–2022 03, 06, 07–09–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಚಂದ್ರನನ್ನು ಕರೆಯಿರಿ ಭೂಮಿಗೆ	3	10, 11, 13–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಮೋಡಗಳ ಸಾವು	3	14, 17, 20–10–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಆಕಾಶಕ್ಕೆ ನೀಲಿ ಪರದೆ	5	21, 27, 28–10–2022 03, 04–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಎಲ್ಲವಳೆಲ್ಲವಳೆಲ್ಲವಳು	3	07, 08, 14–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಒಂದು ಖಾಸಗಿ ಪತ್ರ – ಕಥೆ	4	15, 17, 18, 21–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಹದಿಹರೆಯದವರ ಅವಶ್ಯಕತೆಗಳ	5	22, 24, 25, 28, 29–11–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು

				ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಇಲ್ಲಿ ಏನಾದರೂ ಬರೆಯಿರಿ	3	01, 02, 05–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಕನ್ನಡ ಮತ್ತು ಕಂಪ್ಯೂಟರ್	5	06, 09, 12, 13, 15–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಅ. ಕನ್ನಡದಲ್ಲಿ ಗಣಕದ ಬಳಕೆಯ ಇತಿಹಾಸ, ಬೆಳವಣಿಗೆ ಮತ್ತು ಹೊಸ ಸಾಧ್ಯತೆಗಳು	5	16, 19, 20, 22, 23–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಆ. ಕನ್ನಡ ಭಾಷೆ ಮತ್ತು ತಂತ್ರಾಂಶಗಳು	03	26, 27, 29–12–2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಇ. ಕನ್ನಡದಲ್ಲಿ ಗಣಕದ ಬಳಕೆಗೆ ಶ್ರಮಿಸಿದ ತಂತ್ರಜ್ಞರುಗಳು ಪರಿಚಯ	03	30–12–2022 02, 03–01–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–1	ಪುನರಾವರ್ತನೆ ತರಗತಿಗಳು ಮತ್ತು ಮಾದರಿ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ	10	05, 06, 09, 16, 17, 19, 20, 23, 30, 31–01–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಶಿಕ್ಷಣದಿಂದ ಶ್ರೇಷ್ಠತೆ

ಎಸ್‌ಬಿಆರ್‌ಆರ್ ಮಹಾಜನ ಪ್ರಥಮ ದರ್ಜೆ ಕಾಲೇಜು (ಸ್ವಾಯತ್ತ)

ಮೈಸೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯದಿಂದ ಸಂಯೋಜನೆಗೊಂಡು ನ್ಯಾಕ್‌ನಿಂದ "ಎ" ಮಾನ್ಯತೆ ಪಡೆದಿದೆ.

ಶ್ರೇಷ್ಠತೆಯ ಸಾಮರ್ಥ್ಯವಿರುವ ಕಾಲೇಜು

ಜಯಲಕ್ಷ್ಮೀಪುರಂ, ಮೈಸೂರು – 12

ಪಾಠಯೋಜನೆ 2022-23

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಮುಕ್ತ ಐಚ್ಛಿಕ (ಕನ್ನಡ ವ್ಯಾಕರಣ) – (ಮೊದಲನೆಯ ಚತುರ್ಮಾಸ) **22OEKAN101**

ದಿನಾಂಕ : 13–9–2022 ರಿಂದ 31–01–2023

ವಾರಕ್ಕೆ – **3** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು – **42**

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ಮುಕ್ತ ಐಚ್ಛಿಕ–1 (ಕನ್ನಡ ವ್ಯಾಕರಣ)	ಘಟಕ – ೧ ಸಂಧಿ : ವಿಧಗಳು : ಕನ್ನಡ ಸಂಧಿಗಳು	10	19,21,23,26,28, 30-10-2022 02,05,07,09,12-11-2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಐಚ್ಛಿಕ–1 (ಕನ್ನಡ ವ್ಯಾಕರಣ)	ಘಟಕ – ೨ ನಾಮಪದ : ಹಾಗೂ ಇನ್ನಿತರ ವಿಚಾರಗಳು	10	14,16,19,21,23, 26,28,30-11-2022 03,05-12-2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಐಚ್ಛಿಕ–1 (ಕನ್ನಡ ವ್ಯಾಕರಣ)	ಘಟಕ – ೩ ಲಿಂಗ,ವಚನ, ತತ್ಸಮ–ತದ್ಭವಗಳು	06	07,10,12,14,17, 19-12-2022	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಐಚ್ಛಿಕ–1 (ಕನ್ನಡ ವ್ಯಾಕರಣ)	ಘಟಕ – ದ್ವಿರುಕ್ತಿ, ಜೋಡುನುಡಿ	06	21,24,26,28,31-12-2023 04-01-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಐಚ್ಛಿಕ–1 (ಕನ್ನಡ ವ್ಯಾಕರಣ)	ಪುನರಾವರ್ತನೆ, ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ	10	07,09,14,16,18, 23,25,28,30-01-2023 01,04-02-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

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ಪಾಠಯೋಜನೆ 2023-24

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ – 3 – (ಬಿ.ಎ ಮೂರನೆಯ ಚತುರ್ಮಾಸ) 22KAN301

ದಿನಾಂಕ : 11–9–2023 ರಿಂದ 16–12–2023

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು – **53**

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ಕಲಾ ಗಂಗೋತ್ರಿ–3	ವಿಶ್ವಭಾರತಿಗೆ ಕನ್ನಡದಾರತಿ	3	11, 12, 13–09–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–3	ಆಗಸ್ಟ್ ವೀರ	4	19, 20, 22, 25–09–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–3	ಈಗ ಎಂಥ ರಾಷ್ಟ್ರೀಯತೆ ಬೇಕು?	4	26, 27, 29–09–2023 03–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–3	ಉಳುವ ಒಕ್ಕಲು ಮಗನ ತಪ್ಪ ನೋಡದೆ ಒಪ್ಪಗೊಳ್ಳಯ್ಯ	3	09, 10, 11–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–3	'ಅವರ ಪೈಕಿ ನಾನೂ ಒಬ್ಬ'	3	16, 17, 18–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–3	ಧನ್ವಂತರಿ ಚಿಕಿತ್ಸೆ	5	20, 25, 27, 30, 31–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–3	ನೆತ್ತಮನಾಡಿ ಭಾನುಮತಿ ಸೋಲ್ತೋಡೆ	3	03, 06, 07–11–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–3	ಮೇರಿ ಕೋಮ್ ಸಂತತಿ ಸಾವಿರವಾಗಲಿ	3	08, 10, 13–11–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಕಲಾ ಗಂಗೋತ್ರಿ–3	ಹಿಟ್ಲರ್ ಗೆ ಪಾಠ ಕಲಿಸಿದ ಕಪ್ಪು ಸುಂದರ	4	15, 22, 24, 27–11–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–3	ಬೆಟ್ಟದ ಮೇಲೊಂದು ಮನೆಯ ಮಾಡಿ	3	29–11–2023 01, 04–12–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–3	ತರವೆ ಬಿಡು ಪರಹಿಂಸೆ ದೋಷವು	4	05, 06, 08, 11–12–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–3	ಕಂಗಾಲಾಗಿ ಕುಳಿತು	4	11, 12, 13, 14,–12–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ=3	ಪುನರಾವರ್ತನೆ, ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ	10	15, 16, 18, 19, 20, 21, 22, 26, 27, 29–12–2023	ಗುಂಪು ಚರ್ಚಾ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠಯೋಜನೆ – 2023 – 24

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ – 3 (ಬಿ.ಎಸ್ಸಿ ಮೂರನೆಯ ಚತುರ್ಮಾಸ) 22KAN302

ದಿನಾಂಕ : 11–9–2023 ರಿಂದ 16–12–2023

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು – **60**

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಚಂದ್ರಹಾಸನ ಪ್ರಸಂಗ	3	11, 12, 13–09–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ನನ್ನ ನಾಯಿ	4	19, 20, 22, 25–09–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಪ್ರೇಮ ಭಿಕ್ಷು (ಕಾದಂಬರಿಯ ಆಯ್ದ ಭಾಗ)	4	26, 27, 29–09–2023 03–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಜೋಗದ ಗುಡಿ	3	09, 10, 11–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಮಹಾನ್ ಗೋಡೆ	3	16, 17, 18–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಅನಫಿಲ್ಲಮ್ ಮತ್ತು ಕದಂಬ	5	20, 25, 27, 30, 31–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಯಜಮಾನರಿಗೊಂದು ಪತ್ರ	3	03, 06, 07–11–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಮೈಮೇಲೆ ದೆವ್ವ ಬರುವುದೇ	3	08, 10, 13–11–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಮಿಂಚಿನ ಅಕ್ಷರ ಮಾಲೆ	4	15, 22, 24, 27–11–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಗಂಡಾಗಿ ಹುಟ್ಟಬೇಕಿತ್ತು	3	29–11–2023 01, 04–12–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಕುಸಿಯುತ್ತಿರುವ ಸಾಂಸ್ಕೃತಿಕ ಮೌಲ್ಯಗಳು	4	05, 06, 08, 11–12–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಹೃದಯ ದುರ್ಬಲವಾಗುತ್ತಿದೆಯೇ?	4	11, 12, 13, 14,–12–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ –3	ಪುನರಾವರ್ತನೆ, ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ	10	15, 16, 18, 19, 20, 21, 22, 26, 27, 29–12–2023	ಗುಂಪು ಚರ್ಚಾ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠಯೋಜನೆ – 2023-24

ವಿಭಾಗ – **ಕನ್ನಡ ವಿಭಾಗ**

ವಿಷಯ – **ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ – 3** (ಬಿ.ಕಾಂ ಮೂರನೆಯ ಚತುರ್ಮಾಸ) 22KAN303

ದಿನಾಂಕ : 11–9–2023 ರಿಂದ 16–12–2023

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು – **60**

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಕೌರವಸೇನೆ ಕೆಡೆದುದು ನಗೆಯ ಕಡಲೊಳಗೆ	3	11, 13, 15-09-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಪೆದ್ದುಂಡೆ	4	16, 19, 22, 23-09-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಜೀವಕೇಂದ್ರಿತ	4	26, 27, 29, 30-09-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಕೆಲಸವಿಲ್ಲದವರ ಹಾಡು	3	03, 04, 06-10-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಎಲ್ಲಾ ಮಾಯ	3	07, 10, 11-10-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಮೇದರಹಳ್ಳಿಯ ಅವಸಾನ	5	13, 17, 18, 20, 21-10-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಆಯ್ದ ವಚನಗಳು	3	25, 27, 31-10-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಬೆಂಕಿ ಮಳೆ	3	03, 04, 07-11-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಮೆನೆಕೆಲಸ	4	10, 11, 13, 22-11-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಸಮಾಧಿಯ ಸತ್ವ	3	24, 25, 28-11-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಆಳು	4	29-11-2023 01, 02, 05-12-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಹೈಟೆಕ್ ರಣವೈದ್ಯ	4	08, 09, 12, 13-12-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–3	ಪುನರಾವರ್ತನೆ, ಪ್ರಶ್ನೆಪತ್ರಿಕೆ ಮಾದರಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ	10	14, 15, 16, 18, 19, 20, 21, 22, 23, 26-12-2023	ಗುಂಪು ಚರ್ಚಾ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠಯೋಜನೆ – 2023-24

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ – 3 (ಬಿ.ಬಿ.ಎ ಮೂರನೆಯ ಚತುರ್ಮಾಸ) 22KAN304

ದಿನಾಂಕ : 11–9–2023 ರಿಂದ 16–12–2023

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು – **60**

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಮಾದಾರಾ ಚನ್ನಯ್ಯನ ರಗಳೆ	3	11, 13, 15-09-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಪುರಂದರದಾಸರ ಕೀರ್ತನೆಗಳು	4	16, 19, 22, 23-09-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಔದಾರ್ಯಕ್ಕೆ ಕೊನೆಯಂತೆ	4	26, 27, 29, 30-09-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಧರೆಗೆ ಒಬ್ಬನೇ ದಾನಶೂರ ಕರ್ಣ	3	03, 04, 06-10-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಅತಿಹಿತದಲಿ ನೀವಿಹಿದು	3	07, 10, 11-10-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಅಕ್ಕು	5	13, 17, 18, 20, 21-10-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ನಾಟಕ ರತ್ನ ಗುಬ್ಬೀವೀರಣನವರ್	3	25, 27, 31-10-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಪರಮಕಲೆ ಜೀವನದ ಲಲಿತ ಕಲೆ	3	03, 04, 07-11-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಡಾ. ರಾಜ್‌ಕುಮಾರ್ : ನಾಡಿನ ನುಡಿ	4	10, 11, 13, 22-11-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಪರಹಿಂಸೆಯ ಮಾಡಿ ಮಾನವಂ ಬಾಳ್ದಪನೇ	3	24, 25, 28-11-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಕೋಪಪೈಸರಿಸಿತು ಹೃದಯ ತಂಪಾಯ್ತು	4	29-11-2023 01, 02, 05-12-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಶೂದ್ರತಪಸ್ವಿ ನಾಟಕದ ಭಾಗ (ದೃಶ್ಯ 2)	4	08, 09, 12, 13-12-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣೆ ಗಂಗೋತ್ರಿ –3	ಪುನರಾವರ್ತನೆ, ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ	10	14, 15, 16, 18, 19, 20, 21, 22, 23, 26-12-2023	ಗುಂಪು ಚರ್ಚಾ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠಯೋಜನೆ – 2023-24

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ – 3 (ಬಿ.ಸಿ.ಎ ಮೂರನೆಯ ಚತುರ್ಮಾಸ) 22KAN305

ದಿನಾಂಕ : 11–9–2023 ರಿಂದ 16–12–2023

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು – **60**

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ಜನಪದ ತ್ರಿಪದಿಗಳು	3	11, 12, 13–09–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ರಾಮನ್ ಸತ್ತ ಸುದ್ದಿ	4	19, 20, 22, 25–09–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತಿ–ತ್ರಿ	ತಟ್ಟೆಯ ಕೊನೆಯ ಅಗುಳು	4	26, 27, 29–09–2023 03–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ರೊಟ್ಟಿ ಮತ್ತು ಕೋವಿ	3	09, 10, 11–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ಎಲುಬಿನ ಹಂದರದೊಳಗೆ	3	16, 17, 18–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ಭಾರತೀಯ ಸಮಾಜ,ಸಂಸ್ಕೃತಿ, ಮಹಿಳೆ	5	20, 25, 27, 30, 31–10–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ನಾಲ್ವತ್ತೇಳರ ಸ್ವಾತಂತ್ರ್ಯ	3	03, 06, 07–11–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ಮಾಡಿಮಡಿದವರು	3	08, 10, 13–11–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ಗಿರಿಜವ್ವನ ರೊಟ್ಟಿ	4	15, 22, 24, 27–11–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ಸಾರಥಿಯಾಗು ನಡೆ	3	29–11–2023 01, 04–12–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ಸೋಮೇಶ್ವರ ಶತಕ	4	05, 06, 08, 11–12–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ನಿಷಿದ್ಧ ಗಡಿಗಳ ದಾಟಿದ	4	11, 12, 13, 14,–12–2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

	ಡಾ.ರುಕ್ಮಾಭಾಯಿ			
ಗಣಕ ಗಂಗೋತ್ರಿ–3	ಪುನರಾವರ್ತನೆ, ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ	10	15, 16, 18, 19, 20, 21, 22, 26, 27, 29–12–2023	ಗುಂಪು ಚರ್ಚಾ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠಯೋಜನೆ 2023-24

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಮುಕ್ತ ಐಚ್ಛಿಕ (ಭಾಗ 1 – ಆಧುನಿಕ ಪೂರ್ವಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಚಯ) – (ಮೂರನೇ ಚತುರ್ಮಾಸ) 22OEKAN301

ದಿನಾಂಕ : 11–9–2023 ರಿಂದ 16–12–2023

ವಾರಕ್ಕೆ – **3** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು – **36**

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ಮುಕ್ತ ಐಚ್ಛಿಕ–3 **(ಭಾಗ 1 – ಆಧುನಿಕ ಪೂರ್ವಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಚಯ)**	**ಘಟಕ – ೧** ಪೂರ್ವದ ಹಳೆಗನ್ನಡ : ಸಾಹಿತ್ಯ ಚರಿತ್ರೆಯ ಸ್ವರೂಪ, ಶಾಸನ ಸಾಹಿತ್ಯ, ಕವಿರಾಜಮಾರ್ಗ, ವಡ್ಡಾರಾಧನೆ	08	12, 14, 15, 21, 22, 26, 29-09-2023 03-10-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಐಚ್ಛಿಕ–3 **(ಭಾಗ 1 – ಆಧುನಿಕ ಪೂರ್ವಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಚಯ)**	**ಘಟಕ – ೨** ಹಳಗನ್ನಡ : ಪಂಪ, ರನ್ನ, ಜನ್ನ, ನಾಗಚಂದ್ರ, ಆಂಡಯ್ಯ	08	05, 06, 10, 12, 13, 07, 19, 20-10-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಐಚ್ಛಿಕ–3 **(ಭಾಗ 1 – ಆಧುನಿಕ ಪೂರ್ವಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಚಯ)**	**ಘಟಕ – ೩** ನಡುಗನ್ನಡ : ಜೇಡರ ದಾಸಿಮಯ್ಯ, ಬಸವಣ್ಣ, ಅಲ್ಲಮಪ್ರಭು, ಅಕ್ಕಮಹಾದೇವಿ, ಹರಿಹರ.	08	26, 27, 31-10-2023 02, 03, 07, 09, 10-11-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಐಚ್ಛಿಕ–3 **(ಭಾಗ 1 – ಆಧುನಿಕ ಪೂರ್ವಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಚಯ)**	**ಘಟಕ – ೪** ಕುಮಾರವಾಸ್ಯ, ಲಕ್ಷ್ಮೀಶ, ರತ್ನಾಕರವರ್ಣಿ	04	11, 16, 17, 20-11-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಐಚ್ಛಿಕ–3 **(ಭಾಗ 1 – ಆಧುನಿಕ ಪೂರ್ವಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಚಯ)**	ಪುನರಾವರ್ತನೆ, ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ	08	22, 23, 28-11-2023 01, 05, 06, 08, 12-12-2023	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

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ಪಾಠ ಯೋಜನೆ 2024–25

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ 2 – (ಬಿ.ಎ **ದ್ವಿತೀಯ** ಚಾತುರ್ಮಾಸ) 22KAN201

ದಿನಾಂಕ : 16–02–2024 ರಿಂದ 25–05–2024 ರವರೆಗೆ

ಅಧ್ಯಾಪಕರ ಹೆಸರು : ಡಾ. ಹೆಚ್.ಆರ್ ತಿಮ್ಮೇಗೌಡರು
ಡಾ. ವಿನೋದಮ್ಮ
ಶ್ರೀ. ಎಂ. ನಾಗೇಶ್
ಶ್ರೀ. ಸಿ.ಎಂ ಕಿರಣ್‌ಕುಮಾರ್
ಶ್ರೀ. ಮನೋಜ್‌ಕುಮಾರ್ ಜೆ

ಒಟ್ಟು ಗಂಟೆಗಳು–**56**

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು

ಪಠ್ಯ ಪುಸ್ತಕದ ಹೆಸರು	**ವಿಷಯ**	**ಪಠ್ಯ ಪೂರ್ಣ ಗೊಳಿಸಲು ಬೇಕಾಗಿರುವ ಅವಧಿ**	**ದಿನಾಂಕಗಳು**	**ಬೋಧನಾ ವಿಧಾನ**
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ಕುಂಟೋಬಿಲ್ಲೆ	03	16, 19, 20–02–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ಬಿಡುಗಡೆ	04	22, 23, 26, 27–02–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ಶಹರದ ಕೊಂಬೆಗಳಲ್ಲಿ ಹಳದಿ ಎಲೆಗಳು	04	29–02–2024 01, 04, 05–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ರೊಟ್ಟಿ ಮತ್ತು ಕೋವಿ	04	07, 08, 11, 12–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ಬಚ್ಚೀಸು	04	14, 15, 18, 19–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ನಾನ್ಯಾರಿಗಲ್ಲದವಳು	04	21, 22, 25, 26–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ಬಾರೆ, ನನ್ನ ಶಾರದೆ	03	28–03–2024 01, 02–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಕಲಾ ಗಂಗೋತ್ರಿ–2	ಅವ್ವ	03	04, 05, 08–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ವೆಂಕಟಿಗನ ಹೆಂಡತಿ	04	12, 15, 22, 23–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ಭಿನ್ನ ಭೇದವ ಮಾಡಬ್ಯಾಡಿರೊ	03	25, 26, 29–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ಪರಂಪರೆ	04	30–04–2024 02, 03, 06–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ಸಂಬಳಕ್ಕೆ ಸಿಕ್ಕಿಕೊಂಡ ದೆವ್ವ	04	07, 09, 13, 14–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾ ಗಂಗೋತ್ರಿ–2	ಪುನರಾವರ್ತನೆ ತರಗತಿಗಳು ಮತ್ತು ಮಾದರಿ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ	06	16, 17, 20, 21, 23, 24–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠ ಯೋಜನೆ 2024–25

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ 2 – (ಬಿ.ಎಸ್ಸಿ **ದ್ವಿತೀಯ** ಚಾತುರ್ಮಾಸ)) 22KAN202

ದಿನಾಂಕ : 16–02–2024 ರಿಂದ 25–05–2024 ರವರೆಗೆ

ಅಧ್ಯಾಪಕರ ಹೆಸರು : ಡಾ. ಹೆಚ್.ಆರ್ ತಿಮ್ಮೇಗೌಡರು
ಡಾ. ವಿನೋದಮ್ಮ
ಶ್ರೀ. ಎಂ. ನಾಗೇಶ್
ಶ್ರೀ. ಸಿ.ಎಂ ಕಿರಣ್‌ಕುಮಾರ್
ಶ್ರೀ. ಮನೋಜ್‌ಕುಮಾರ್ ಜೆ

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು–**56**

ಪಠ್ಯ ಪುಸ್ತಕದ ಹೆಸರು	**ವಿಷಯ**	**ಪಠ್ಯ ಪೂರ್ಣ ಗೊಳಿಸಲು ಬೇಕಾಗಿರುವ ಅವಧಿ**	**ದಿನಾಂಕಗಳು**	**ಬೋಧನಾ ವಿಧಾನ**
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ಸಂಬಳದ ಸಂಜೆ	03	16, 19, 20–02–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ಅವ್ವ	04	22, 23, 26, 27–02–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ಚಂದ್ರನ ಬೊಂಬೆ ಪಾಠಗಳು ('ಕಾಮನ ಹುಣ್ಣಿಮೆ' ಕಾದಂಬರಿಯ ಆಯ್ದ ಭಾಗ)	04	29–02–2024 01, 04, 05–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ತಿರುಕನ ಕನಸು	04	07, 08, 11, 12–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ಒಂದು ಹುಡುಗನಿಗೆ ಬಿದ್ದ ಕನಸು	04	14, 15, 18, 19–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ಕನಸು ಕಾಣಿರಿ – ಕನಸುಗಳ ಶಕ್ತಿ	04	21, 22, 25, 26–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ತೆಂಕಣ ಗಾಳಿಯಾಟ	03	28–03–2024 01, 02–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ಬರ	03	04, 05, 08–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ಮೋಡ ಬಿತ್ತನೆ ಮತ್ತು ಕೃತಕ ಮಳೆ	04	12, 15, 22, 23–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ಗೂನ್ನಮ್ಮನ ಮೆಡಿಸನ್	03	25, 26, 29–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ

				ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ಮಾಹಿತಿ ತಂತ್ರಜ್ಞಾನ ಮತ್ತು ಕನ್ನಡ	04	30–04–2024 02, 03, 06–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ಕೀಟದಿಂದ ಕೋಟಿನಾಶ	04	07, 09, 13, 14–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನ ಗಂಗೋತ್ರಿ–2	ಪುನರಾವರ್ತನೆ ತರಗತಿಗಳು ಮತ್ತು ಮಾದರಿ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ	06	16, 17, 20, 21, 23, 24–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠ ಯೋಜನೆ 2024–25

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ 2 – (ಬಿ.ಕಾಂ **ದ್ವಿತೀಯ** ಚಾತುರ್ಮಾಸ)) 22KAN203

ದಿನಾಂಕ : 16–02–2024 ರಿಂದ 25–05–2024 ರವರೆಗೆ

ಅಧ್ಯಾಪಕರ ಹೆಸರು : ಡಾ. ಹೆಚ್.ಆರ್ ತಿಮ್ಮೇಗೌಡರು
ಡಾ. ವಿನೋದಮ್ಮ
ಶ್ರೀ. ಎಂ. ನಾಗೇಶ್
ಶ್ರೀ. ಸಿ.ಎಂ ಕಿರಣ್‌ಕುಮಾರ್

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು–**52**

ಪಠ್ಯ ಪುಸ್ತಕದ ಹೆಸರು	**ವಿಷಯ**	**ಪಠ್ಯ ಪೂರ್ಣ ಗೊಳಿಸಲು ಬೇಕಾಗಿರುವ ಅವಧಿ**	**ದಿನಾಂಕಗಳು**	**ಬೋಧನಾ ವಿಧಾನ**
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಇಬ್ಬನಿಯ ಅವತಾರ!	3	17, 19, 21–02–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಮಂಕುತಿಮ್ಮನ ಕಗ್ಗ (ಆಯ್ದ ಭಾಗ)	4	22, 24, 26, 28–02–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ತೊಳೆದ ಮುತ್ತು	4	29–02–2024 02, 04, 06–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಭಕ್ತಿಯುಂಬ ಪೃಥ್ವಿಯ ಮೇಲೆ (ವಚನಗಳು)	3	07, 09, 11–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಹರಕೆಗಳು (ಪ್ರಬಂಧ)	4	13, 14, 16, 18–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಹಬ್ಬ ಮತ್ತು ಬಲಿ	4	20, 21, 23, 25–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಗ್ರಾಮದೇವತೆ	3	27, 28, 30–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಕಥೆ ಹೇಳು ಗುಬ್ಬಚ್ಚಿ ನಿನ್ನ ವ್ಯಥೆಯ ಕಥೆ ಹೇಳು	3	01, 03, 04–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಬಕಾಸುರನನ್ನು ಕೊಂದ ಪರ್ವ (ಜನಪದ ಮಹಾಭಾರತ)	4	06, 08, 10, 13–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಅ) ವಾಣಿಜ್ಯ ಪತ್ರಗಳು	4	15, 22, 24, 25–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಆ) ವರದಿಗಳು	2	27, 29–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಮಾರುಕಟ್ಟೆ ನಿರ್ವಹಣೆಯಲ್ಲಿ ಜಾಹೀರಾತುಗಳ ಪಾತ್ರ	2	02, 04–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಉದ್ಯಮ ಲೋಕದ ಸಾಧಕರು	2	06, 08–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯ ಗಂಗೋತ್ರಿ–2	ಪುನರಾವರ್ತನೆ ತರಗತಿಗಳು ಮತ್ತು ಮಾದರಿ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ	10	09, 11, 13, 15, 16, 18, 20, 22, 23, 25–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠ ಯೋಜನೆ 2024–25

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ 2 – (ಬಿಸಿಎ **ದ್ವಿತೀಯ** ಚಾತುರ್ಮಾಸ)) 22KAN205

ದಿನಾಂಕ : 16–02–2024 ರಿಂದ 25–05–2024 ರವರೆಗೆ

ಅಧ್ಯಾಪಕರ ಹೆಸರು : ಡಾ. ಹೆಚ್.ಆರ್ ತಿಮ್ಮೇಗೌಡರು
ಡಾ. ವಿನೋದಮ್ಮ
ಶ್ರೀ. ಎಂ. ನಾಗೇಶ್
ಶ್ರೀ. ಸಿ.ಎಂ ಕಿರಣ್‌ಕುಮಾರ್
ಶ್ರೀ. ಮನೋಜ್‌ಕುಮಾರ್ ಜೆ

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು–**56**

ಪಠ್ಯ ಪುಸ್ತಕದ ಹೆಸರು	**ವಿಷಯ**	**ಪಠ್ಯ ಪೂರ್ಣ ಗೊಳಿಸಲು ಬೇಕಾಗಿರುವ ಅವಧಿ**	**ದಿನಾಂಕಗಳು**	**ಬೋಧನಾ ವಿಧಾನ**
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ಮನೆಯಿಂದ ಮನೆಗೆ	03	16, 19, 20–02–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ಕಟ್ಟಡದ ಕೆಲಸಗಾರರು	04	22, 23, 26, 27–02–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ಜಾಗತೀಕರಣ ಮತ್ತು ಸಂಸ್ಕೃತಿ	04	29–02–2024 01, 04, 05–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ಗಿರಣಿಯ ವಿಸ್ತಾರ ನೋಡಮ್ಮ	04	07, 08, 11, 12–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ದಿಕ್ಕು	04	14, 15, 18, 19–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ಕನ್ನಡ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ	04	21, 22, 25, 26–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ಮನದನ್ನೆ	03	28–03–2024 01, 02–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ತುಕ್ಕೋಜಿ	03	04, 05, 08–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ಮರಳಿ ಬದುಕಿಗೆ ಈ ಪಯಣ	04	12, 15, 22, 23–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ಮತ್ತೆ ಭ್ರೂಣವಾಗಬೇಕು	03	25, 26, 29–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ

				ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ಗಣಕಾಸುರ	04	30–04–2024 02, 03, 06–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ಅರಿವಿನ ಜಾಲತಾಣ ಮತ್ತು ಸಾಮಾಜಿಕ ಜಾಲತಾಣಗಳಲ್ಲಿ ಕನ್ನಡ	04	07, 09, 13, 14–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕ ಗಂಗೋತ್ರಿ–2	ಪುನರಾವರ್ತನೆ ತರಗತಿಗಳು ಮತ್ತು ಮಾದರಿ ಪ್ರಶ್ನೆ ಪತಿ	06	16, 17, 20, 21, 23, 24–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠ ಯೋಜನೆ 2024–25

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ 2 – (ಬಿಬಿಎ **ದ್ವಿತೀಯ** ಚಾತುರ್ಮಾಸ)) 22KAN204

ದಿನಾಂಕ : 16–02–2024 ರಿಂದ 25–05–2024 ರವರೆಗೆ

ಅಧ್ಯಾಪಕರ ಹೆಸರು : ಡಾ. ಹೆಚ್.ಆರ್ ತಿಮ್ಮೇಗೌಡರು
ಡಾ. ವಿನೋದಮ್ಮ
ಶ್ರೀ. ಸಿ.ಎಂ ಕಿರಣ್‌ಕುಮಾರ್
ಶ್ರೀ. ಮನೋಜ್‌ಕುಮಾರ್ ಜೆ

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು–**52**

ಪಠ್ಯ ಪುಸ್ತಕದ ಹೆಸರು	**ವಿಷಯ**	**ಪಠ್ಯ ಪೂರ್ಣ ಗೊಳಿಸಲು ಬೇಕಾಗಿರುವ ಅವಧಿ**	**ದಿನಾಂಕಗಳು**	**ಬೋಧನಾ ವಿಧಾನ**
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–2	ವಚನಗಳು	3	17, 19, 21–02–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತಿ–2	ಮೋಚಿ	4	22, 24, 26, 28–02–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–2	ರಂಗದ ಮೇಲೆ ಇರಲಿ ನನ್ನ ಕೊನೆ	4	29–02–2024 02, 04, 06–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–2	ನಾವೆಲ್ಲರೂ ಒಂದೇ	3	07, 09, 11–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–2	ಮಗು ಮತ್ತು ಹಣ್ಣುಗಳು	4	13, 14, 16, 18–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–2	ಗಿರಿಜವ್ವನ ರೊಟ್ಟಿ	4	20, 21, 23, 25–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–2	ನೀ ಹೀಂಗ ನೋಡಬ್ಯಾಡ ನನ್ನ	3	27, 28, 30–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–2	ನಿಟ್ಟುರುಸಿರಿನಲ್ಲಿ ನುಂಗಿದನು ಮನದ ಅನುಭಾವವನು	4	01, 03, 04–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–2	ಅವ್ವ	3	06, 08, 10–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–2	ಕಲ್ಲುಸಕ್ಕರೆ ಕೊಳ್ಳಿರೊ	3	13, 22, 24–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ–2	ಸಾಮಾನ್ಯ ಮನುಷ್ಯನು ಬಾನಂಗಳದಲಿ ವಿಹಾರಿಸಲಿ	4	25, 27, 29–04–2024 02–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ	ದೇವರ ಹೆಣ	3	04, 06, 08–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾ ಗಂಗೋತ್ರಿ	ಪುನರಾವರ್ತನೆ ತರಗತಿಗಳು ಮತ್ತು ಮಾದರಿ ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ	10	09, 11, 13, 15, 16, 18, 20, 22, 23, 25–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠ ಯೋಜನೆ 2024–25

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಮುಕ್ತ ಆಯ್ಕೆ (OE) – (ದ್ವಿತೀಯ ಚಾತುರ್ಮಾಸ) 22OEKAN201

ದಿನಾಂಕ : 16–02–2024 ರಿಂದ 25–05–2024 ರವರೆಗೆ

ಅಧ್ಯಾಪಕರ ಹೆಸರು : ಡಾ. ವಿನೋದಮ್ಮ
ಶ್ರೀ. ಎಂ. ನಾಗೇಶ್
ಶ್ರೀ. ಮನೋಜ್‌ಕುಮಾರ್ ಜೆ

ವಾರಕ್ಕೆ – **3** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು–**40**

ಪಠ್ಯ ಪುಸ್ತಕದ ಹೆಸರು	ವಿಷಯ	ಪಠ್ಯ ಪೂರ್ಣಗೊಳಿಸಲು ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕಗಳು	ಬೋಧನಾ ವಿಧಾನ
ಮುಕ್ತ ಆಯ್ಕೆ ಕನ್ನಡ–2 (ಆಡಳಿತಾತ್ಮಕ ಕನ್ನಡ ಕಲಿಕೆ)	**ಘಟಕ–1** ಸಂಕ್ಷಿಪ್ತ ಲೇಖನ	06	17, 19, 21, 24, 26, 28–02–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಆಯ್ಕೆ ಕನ್ನಡ–2 (ಆಡಳಿತಾತ್ಮಕ ಕನ್ನಡ ಕಲಿಕೆ)	**ಘಟಕ–2** ಪತ್ರಲೇಖನ, ಪ್ರಬಂಧರಚನೆ	08	02, 04, 06, 09, 11, 13, 16, 18–03–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಆಯ್ಕೆ ಕನ್ನಡ–2 (ಆಡಳಿತಾತ್ಮಕ ಕನ್ನಡ ಕಲಿಕೆ)	**ಘಟಕ–3** ಆಡಳಿತಾತ್ಮಕ ಪದಕೋಶ–ಪರಿಕಲ್ಪನೆಗಳು	09	20, 23, 25, 27, 30–03–2024 01, 03, 06, 08–04–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಆಯ್ಕೆ ಕನ್ನಡ–2 (ಆಡಳಿತಾತ್ಮಕ ಕನ್ನಡ ಕಲಿಕೆ)	**ಘಟಕ–4** ಗಾದೆಗಳು, ನುಡಿಗಟ್ಟುಗಳು, ಒಗಟ್ಟುಗಳು	08	10, 13, 15, 22, 24, 27, 29–04–2024 04–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಮುಕ್ತ ಆಯ್ಕೆ ಕನ್ನಡ–2 (ಆಡಳಿತಾತ್ಮಕ ಕನ್ನಡ ಕಲಿಕೆ)	ಪುನರಾವರ್ತನೆ ತರಗತಿಗಳು ಮತ್ತು ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ	09	06, 08, 11, 13, 15, 18, 20, 22, 25–05–2024	ಉಪನ್ಯಾಸ ಪದ್ದತಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

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ಪಾಠಯೋಜನೆ 2024–25

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ 4– (ಬಿ.ಎ ನಾಲ್ಕನೆಯ ಚಾತುರ್ಮಾಸ) 22KAN401

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು–**49**

ದಿನಾಂಕ : 16–02–2024 ರಿಂದ 25–05–2024 ರವರೆಗೆ

ಅಧ್ಯಾಪಕರ ಹೆಸರು : ಡಾ. ಹೆಚ್.ಆರ್ ತಿಮ್ಮೇಗೌಡರು
ಡಾ. ವಿನೋದಮ್ಮ
ಶ್ರೀ. ಎಂ. ನಾಗೇಶ್
ಶ್ರೀ. ಸಿ.ಎಂ ಕಿರಣ್‌ಕುಮಾರ್

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ಕಲಾಗಂಗೋತ್ರಿ–4	ಕಾಯಕಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ವಚನಗಳು	03	16, 19, 20–02–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾಗಂಗೋತ್ರಿ–4	ರಸ್ತೆ ನಕ್ಷತ್ರ ಕೃತಿಯ ಆಯ್ದ ಭಾಗ	03	21, 23, 26–02–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾಗಂಗೋತ್ರಿ–4	ಮಹಿಳೆಯನು ಒಳಗೊಳ್ಳದೆ	03	27, 28–02–2024, 01–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾಗಂಗೋತ್ರಿ–4	'ಬಡವರ ಭಿನ್ನಪ್ಪವನ್ನಿನಾರು ಕೇಳವರು'	04	04, 05, 06, 11–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾಗಂಗೋತ್ರಿ–4	ಧನಿಯರ ಸತ್ಯನಾರಾಯಣ	04	12, 13, 15, 18–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾಗಂಗೋತ್ರಿ–4	ಅನ್ನಕ್ಕಾಗಿ ರಾತ್ರಿಯಿಡೀ ಕಾದದ್ದು	03	20, 19, 22–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾಗಂಗೋತ್ರಿ–4	ದಡಿಗವೆಣಂಗಳನೆ ಮೆಟ್ಟಿ ಮೆಲ್ಲದೆ ನಡೆದಂ	04	25, 26, 27–03–2024 01–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾಗಂಗೋತ್ರಿ–4	ಮಬ್ಬಿನಿಂದ ಮಬ್ಬಿಗೆ	03	02, 03, 05–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾಗಂಗೋತ್ರಿ–4	ಹಗಲು ಇರುಳುಗಳ ನಡುವೆ	03	08, 10, 12–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಕಲಾಗಂಗೋತ್ರಿ–4	ಮುನ್ನೀರ್ ಬೆನ್ನೀರೆನೆ ಬೆರೆಸಲಣ್ಣ ತಣ್ಣೀರೊಳವೆ	03	15, 22, 23–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾಗಂಗೋತ್ರಿ–4	ಒಲವಾದೊಡೆ ರೂಪಿಸಿನ ಕೋಟಿಲೆಯೇವುದೋ	03	24, 26, 29–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾಗಂಗೋತ್ರಿ–4	ನಮ್ಮ ಸಂಸ್ಕೃತಿಯ ಹೆಮ್ಮೆ ಸಾಲದು	03	30–04–2024 03, 06–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಕಲಾಗಂಗೋತ್ರಿ–4	ಪುನರಾವರ್ತನೆ, ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ	10	07, 08, 13, 14, 15, 17, 20, 21, 22, 24–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠಯೋಜನೆ – 2024–25

ವಿಭಾಗ – **ಕನ್ನಡ ವಿಭಾಗ**

ವಿಷಯ – **ಕನ್ನಡ ಭಾಷೆ ಪತ್ರಿಕೆ 4** (ಬಿ.ಕಾಂ ನಾಲ್ಕನೆಯ ಚತುರ್ಮಾಸ) 22KAN403

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು – **50**

ದಿನಾಂಕ : 16–02–2024 ರಿಂದ 25–05–2024 ರವರೆಗೆ

ಅಧ್ಯಾಪಕರ ಹೆಸರು : ಡಾ. ಹೆಚ್.ಆರ್ ತಿಮ್ಮೇಗೌಡರು
ಡಾ. ವಿನೋದಮ್ಮ
ಶ್ರೀ. ಎಂ. ನಾಗೇಶ್
ಶ್ರೀ. ಸಿ.ಎಂ ಕಿರಣ್‌ಕುಮಾರ್
ಶ್ರೀ. ಮನೋಜ್‌ಕುಮಾರ್ ಜೆ

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ನೀರ್ವರಿಯಿಂದಾದಮೆ ಕಿರಿದೆಂದು ಬಗೆದಂ	03	16, 17, 20–02–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ರಾಮಕಂಡ ಕಡಲು	03	21, 23, 24–02–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ಕೆಂಪುಕಡಲಿನ ರಂಗಿನನೋಟ	04	27, 28–02–2024 01, 02–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ಜನಪದ ತತ್ವಪದಗಳು	03	05, 06, 09–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ಆಯ್ದ ಕೀರ್ತನೆ ಮತ್ತು ತ್ರಿಪದಿಗಳು	03	12, 13, 15–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ಮನುಷ್ಯರು ಹುಡುಕಬೇಕಾಗಿದ್ದಾರೆ, ಹುಡಕೋಣ ಬನ್ನಿ	04	16, 19, 20, 22–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ಚಂದ್ರಮತಿಯ ದುಃಖ	03	23, 26, 27–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ಸಾವು (ಲಲಿತ ಪ್ರಬಂಧ)	04	30–03–2024 02, 03, 05–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ನಟಿಯಾಗಲು ಹೊರಟವಳು ದುರಂತ ನಾಯಕಿಯಾದಳು	03	06, 10, 12–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ನಾಗವಲ್ಲಿ ಸ್ವಯಂವರನೆಂಬ ನಾಟ್ಯಶಾಸ್ತ್ರ	03	13, 23, 24–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ಚಪ್ಪಲಿಗಳು	04	26, 27, 30–04–2024 03–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	ನರಿಯಮಾತಂ ನಂಬಿ ಸತ್ತ ಬೆಳ್ಗತೆಯ ಕಥೆ	03	04, 07, 08–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ

				ಚಟುವಟಿಕೆ
ವಾಣಿಜ್ಯಗಂಗೋತ್ರಿ–4	**ಪುನರಾವರ್ತನೆ, ಪ್ರಶ್ನೆಪತ್ರಿಕೆ** ಮಾದರಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ	10	11, 14, 15, 17, 18, 21, 22, 24, 25–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠಯೋಜನೆ – 2024–25

ವಿಭಾಗ – **ಕನ್ನಡ ವಿಭಾಗ**

ವಿಷಯ – **ಕನ್ನಡ ಭಾಷೆ** (ಬಿ.ಬಿ.ಎ ನಾಲ್ಕನೆಯ ಚತುರ್ಮಾಸ) 22KAN404

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು – **58**

ದಿನಾಂಕ : 16–02–2024 ರಿಂದ 25–05–2024 ರವರೆಗೆ

ಅಧ್ಯಾಪಕರ ಹೆಸರು : ಡಾ. ಹೆಚ್.ಆರ್ ತಿಮ್ಮೇಗೌಡರು
ಡಾ. ವಿನೋದಮ್ಮ
ಶ್ರೀ. ಎಂ. ನಾಗೇಶ್
ಶ್ರೀ. ಸಿ.ಎಂ ಕಿರಣ್‌ಕುಮಾರ್
ಶ್ರೀ. ಮನೋಜ್‌ಕುಮಾರ್ ಜೆ

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	ಪೊಕ್ಕನಭಿಮನ್ಯು ವಿರೋಧಿಬಳಾಂಬುರಾಶಿಯಂ	03	16, 17, 20–02–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	'ಶ್ಮಶಾನ ಕುರುಕ್ಷೇತ್ರಂ' (ಆಯ್ದ ಭಾಗ)	03	21, 23, 24–02–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	ಅಣು ಚಳಿಗಾಲ	04	27, 28–02–2024 01, 02–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	ಚೆನ್ನಿಗ ವೀರ ಮಹದೇವಪ್ಪ ಮೈಲಾರ ಸಾಹೇಬ	03	05, 06, 09–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	ಕಿತ್ತೂರು ಚೆನ್ನಮ್ಮ	03	12, 13, 15–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	ರತ್ತಧ್ವಜ	04	16, 19, 20, 22–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	ಶ್ರೀ ಕೃಷ್ಣ ರಾಯಭಾರ ಪ್ರಸಂಗ	03	23, 26, 27–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	ಗೋಲ್ಗೊಥಾ	04	30–03–2024 02, 03, 05–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	ಶ್ವೇತಭವನದ ಮುಂದೆ	03	06, 10, 12–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	ಮಗಳು ಕಂಡ ಕುವೆಂಪು (ಆಯ್ದ ಭಾಗ)	03	13, 23, 24–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	ಅಗ್ನಿರೇಖೆಗಳು (ಬಾಲ್ಯ ಹಾಗೂ ಶಿಕ್ಷಣ)	04	26, 27, 30–04–2024 03–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	ಸಾಲಾಯ ತಸ್ಮೈನಮಃ	03	04, 07, 08–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ನಿರ್ವಹಣಾಗಂಗೋತ್ರಿ–4	**ಪುನರಾವರ್ತನೆ, ಪ್ರಶ್ನೆಪತ್ರಿಕೆ** ಮಾದರಿ ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ	10	11, 14, 15, 17, 18, 21, 22, 24, 25–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠಯೋಜನೆ – 2024 – 2025

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ (ಬಿ.ಎಸ್ಸಿ ನಾಲ್ಕನೆಯ ಚತುರ್ಮಾಸ) 22KAN402

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು – **49**

ದಿನಾಂಕ : 16–02–2024 ರಿಂದ 25–05–2024 ರವರೆಗೆ

ಅಧ್ಯಾಪಕರ ಹೆಸರು : ಡಾ. ಹೆಚ್.ಆರ್ ತಿಮ್ಮೇಗೌಡರು
ಡಾ. ವಿನೋದಮ್ಮ
ಶ್ರೀ. ಎಂ. ನಾಗೇಶ್
ಶ್ರೀ. ಸಿ.ಎಂ ಕಿರಣ್‌ಕುಮಾರ್
ಶ್ರೀ. ಮನೋಜ್‌ಕುಮಾರ್ ಜೆ

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ಕುಲಂ ಕುಲಮಲ್ತು	03	16, 19, 20–02–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ಅಲ್ಲೇ ಕುಂತವರೆ	03	21, 23, 26–02–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ಮಾರಿಕೊಂಡವರು	03	27, 28–02–2024, 01–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ಭಿನ್ನ ಭೇದವ ಮಾಡಬ್ಯಾಡಿರೋ	04	04, 05, 06, 11–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ಕುಲ ಕುಲ ಕುಲವೆಂದು	04	12, 13, 15, 18–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ನಮ್ಮ ನೆರೆಯಲ್ಲಿ ದೀಪಾವಳಿ	03	20, 19, 22–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ಶ್ರೀ ಸಾಮಾನ್ಯನ ದೀಕ್ಷಾ ಗೀತೆ	04	25, 26, 27–03–2024 01–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ಬೆರಣಿ ತಟ್ಟುವ ಹುಡುಗಿ	03	02, 03, 05–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ಮುಖ	03	08, 10, 12–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ಅಮ್ಮನಾಗುವುದೆಂದರೆ	03	15, 22, 23–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ಕಾಪಾಡು ಪ್ರಭುವೇ	03	24, 26, 29–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ

				ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	ಹೊತ್ತು ಮಾರುವವರು	03	30–04–2024 03, 06–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ವಿಜ್ಞಾನಗಂಗೋತ್ರಿ–4	**ಪುನರಾವರ್ತನೆ, ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ** ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ	10	07, 08, 13, 14, 15, 17, 20, 21, 22, 24–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

ಪಾಠಯೋಜನೆ – 2024–25

ವಿಭಾಗ – ಕನ್ನಡ ವಿಭಾಗ

ವಿಷಯ – ಕನ್ನಡ ಭಾಷೆ (ಬಿ.ಸಿ.ಎ ನಾಲ್ಕನೆಯ ಚತುರ್ಮಾಸ) 22KAN405

ವಾರಕ್ಕೆ – **4** ಗಂಟೆಗಳು ಒಟ್ಟು ಗಂಟೆಗಳು – **49**

ದಿನಾಂಕ : 16–02–2024 ರಿಂದ 25–05–2024 ರವರೆಗೆ

ಅಧ್ಯಾಪಕರ ಹೆಸರು : ಡಾ. ಹೆಚ್.ಆರ್ ತಿಮ್ಮೇಗೌಡರು
ಡಾ. ವಿನೋದಮ್ಮ
ಶ್ರೀ. ಎಂ. ನಾಗೇಶ್
ಶ್ರೀ. ಸಿ.ಎಂ ಕಿರಣ್‌ಕುಮಾರ್
ಶ್ರೀ. ಮನೋಜ್‌ಕುಮಾರ್ ಜೆ

ನಿಗದಿತ ಪಠ್ಯಪುಸ್ತಕ	ಪಠ್ಯ	ಬೇಕಾಗಿರುವ ಅವಧಿ	ದಿನಾಂಕ	ಬೋಧನಾ ವಿಧಾನ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಇಟ್ಟಿಗೆಯ ಪಟ್ಟಣ	03	16, 19, 20–02–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಒಂದು ಸರೀ ಕಡ್ಡಿಗಾಗಿ	03	21, 23, 26–02–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಸಂಸ್ಕೃತಿ ಮತ್ತು ನಾಗರಿಕತೆ	03	27, 28–02–2024, 01–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಪರದೆ ಸರಿದಂತೆ	04	04, 05, 06, 11–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಡಾಂಬರು ಬಂದುದು	04	12, 13, 15, 18–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಲೂಟಿಯ ಹೆದ್ದಾರಿಗಳು	03	20, 19, 22–03–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಶಿವಭೂತಿಯ ಕಥೆ	04	25, 26, 27–03–2024 01–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಕೊನೆಯ ಗಿರಾಕಿ	03	02, 03, 05–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಹಿಂಸೆಯ ಸ್ವರೂಪಗಳು ಬಲಿ–ಬಲಿದಾನ	03	08, 10, 12–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಬಾಹುಬಲಿಯ ವೈರಾಗ್ಯ	03	15, 22, 23–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಚಾಪ್ಲಿನ್	03	24, 26, 29–04–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ

				ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	ಚಿಗುರೊಡೆಯಿತ್ತಿರುವ ಗಿಡದ ತನ್ಮೆಯತೆ	03	30–04–2024 03, 06–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ
ಗಣಕಗಂಗೋತ್ರಿ–4	**ಪುನರಾವರ್ತನೆ, ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ** ಮತ್ತು ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ	10	07, 08, 13, 14, 15, 17, 20, 21, 22, 24–05–2024	ಉಪನ್ಯಾಸ ಪದ್ಧತಿ/ಪಠ್ಯಾಧಾರಿತ ಚಟುವಟಿಕೆ

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Course Plan of Odd Semester 2023-24

Department: Department of Law and Constitution of India
Subject: Constitution of India[Course code: **22COIS23]**
Term Period:29.07.2024 to15.11.2024

Course: III B.Com. IIIrd B.Sc and III BBA

Faculty Name:Manjula

Total Hrs: 46 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit1 (16 hours)	**Chapter1:Background to the study of Indian Constitution:** • Philosophical and Political foundation of India: Dharma, Danda, Buddhist, liberalism, (Rajarammohan Roy) and Subaltern (RanajitGuha)* Colonial • Scopeandimportance;Concep	**6**	29-07-2024 To 2-08-2024	Lecture
	Chapter2:Political Values and Ideals during freedom struggle: • Non-Violence, Tolerance, Satyagraha and Swadeshi(Gandhi), Swarajya(Tilak), Integral Humanism (DeenDayalUpadhyay) and Voluntarism (VinobaBhave).	**5**	5-08-2024 To 12-08-2024	Lecture
	Chapter3:PoliticalConstribution of Regional Freedom Struggle: Kittur Rani Chennamma, HardekarManjappa, Madikeri Peasants, Halagalibedas	**4**	13-08-2024 to 19-08-2024	Lecture

UnitII (15 hours)	**Constitutional Development and its Philosophy:** **Chapter4: Historical Background of Constitutional Development India:** Development between 1857 to 1952 (only Acts During this period must be taught) Composition and debates of Constituent Assembly (in brief) working of Committees.	**5**	20-08-2024 to 26-08-2024	Lecture
	Chapter5:Philosophy and feature of Indian Constitution.: Preamble, Salient features, Constitutionalism, Dr. B.R. Ambedkar and Nehru's contribution the making of the Constitution. **Chapter: 6: Working of the Constitution:** Fundamental Rights, Union-State and Inter-State dispute and trade and commerce), Important amendments to the Constitution Parliamentary Committees (Standing Adhock and Department)	**5**	2-09-2024 to 09-09-24	Lecture
Unit1and 2 C1	Chapter 1, 2,3 and 4	1 hour	16-09-2024 to 23-09-2024	C1 Internal Test
Unit III (15 hours)	**Constitutional Institution and Citizen's Sole:** **Chapter7: Parliamentary and Constitution Institution:** Legislature (Upper and Lower house), Executive (composition and powers) Judicial (High Court and Supreme Court, its composition and jurisdiction), Comptroller and Auditor General, Inter-State Councial, Election Commission.	**6**	24-09-2024 to 02-10-2024	Lecture and Seminar 25-04-2024 Display of C1 Internal Test marks
	Chapter 8: Role and Responsibilities of Citizens under Indian Constitution: Concept of Citizenship, Citizenship Amendment Act, Fundamental Duties, Right to Information Act. **Chapter 9: Goals and Policies of National Development**	**4**	14-10-2024 To 21-10-2024	Lecture and Seminar

	enshrined in the Constitution: Concept of National Development, Unity and Integrity of the Nation, Goals of Educational Policies. Role of teachers and students in Nation Building.	**5**	28-10-2024 To 4-11-2024 15-11-2024	Lecture and Seminar

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Course Plan of Even Semester 2023-24

Department: Department of Law and Constitution of India
Subject: Constitution of India [Course code: **22COIS23]**
Term Period: 12.02.2024 to 25.05.2024

Faculty Name: Manjula

Total Hrs: 46 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit 1 (16 hours)	**Chapter 1: Background to the study of Indian Constitution:** • Philosophical and Political foundation of India: Dharma, Danda, Buddhist, liberalism, (Raja ram mohan Roy) and Subaltern (RanajitGuha)* Colonial • Scope and importance; Concep	**6**	12-02-2024 To 17-02-2024	Lecture
	Chapter 2: Political Values and Ideals during freedom struggle: • Non-Violence, Tolerance, Satyagraha and Swadeshi(Gandhi), Swarajya(Tilak), Integral Humanism (DeenDayalUpadhyay) and Voluntarism (VinobaBhave).	**5**	19-02-2024 To 29-02-2024	Lecture
	Chapter 3:Political Constribution of Regional Freedom Struggle: Kittur Rani Chennamma, Hardekar Manjappa, Madikeri Peasants, Halagalibedas	**4**	01-03-2024 to 16-03-2024	Lecture

Unit II (15 hours)	**Constitutional Development and its Philosophy:** **Chapter 4: Historical Background of Constitutional Development India:** Development between 1857 to 1952 (only Acts During this period must be taught) Composition and debates of Constituent Assembly (in brief) working of Committees.	**5**	18-03-2024 to 30-03-2024	Lecture
	Chapter 5: Philosophy and feature of Indian Constitution.: Preamble, Salient features, Constitutionalism, Dr. B.R. Ambedkar and Nehru's contribution the making of the Constitution. **Chapter: 6: Working of the Constitution:** Fundamental Rights, Union-State and Inter-State dispute and trade and commerce), Important amendments to the Constitution Parliamentary Committees (Standing Adhock and Department)	**5**	1-04-2024 to 15-04-24	Lecture
Unit1and 2 C1	Chapter 1, 2,3 and 4	1 hour	16-04-2024 to 20-04-2024	C1 Internal Test
Unit III (15 hours)	**Constitutional Institution and Citizen's Sole:** **Chapter 7: Parliamentary and Constitution Institution:** Legislature (Upper and Lower house), Executive (composition and powers) Judicial (High Court and Supreme Court, its composition and jurisdiction), Comptroller and Auditor General, Inter-State Councial, Election Commission. **Chapter 8: Role and Responsibilities of Citizens under Indian Constitution**: Concept of Citizenship, Citizenship Amendment Act, Fundamental Duties, Right to Information Act. **Chapter 9: Goals and Policies**	**6** **4**	22-04-2024 to 6-05-2024	Lecture and Seminar 25-04-2024 Display of C1 Internal Test marks Lecture and

	of National Development enshrined in the Constitution: Concept of National Development, Unity and Integrity of the Nation, Goals of Educational Policies. Role of teachers and students in Nation Building.	**5**	7-5-2024 To 13-5-2024	Seminar

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Course Plan of Odd Semester 2023-24

Department : Mathematics
Title of the Paper : Algebra – I & Calculus – I [Course Code – 212139]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Dr. Sumathi M P

Total Hrs: 28 Hours (2Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Successive Differentiation and Integral Calculus-I (14 hours)	Recapitulation of differentiation and integration.	2 hours	11-09-2023 to 16-09-23	POs and Course Outcomes of the units discussed
	nth Derivatives of Standard functions e^{ax+b}, a^x, $(ax + b)^n$, $\sin(ax + b)$, $\cos(ax + b)$, $\log(ax + b)$.	2 hours	19-09-23 to 23-09-23	Chalk and Black board
	nth derivatives of $e^{ax}\sin(bx+ c)$, $e^{ax}\cos(bx + c)$.	1 hours	25-09-23 to 30-09-23	Chalk and Black board
	Leibnitz theorem and its applications.	2 hours	03-10-23 to 07-10-23	Chalk and Black board
	Recapitulation of definite integrals and its properties. Reduction formulae for $\int \sin^n x\, dx$, $\int \cos^n x\, dx$.	2 hours	09-10-23 to 11-10-23	Chalk and Black board
	Reduction formulae for $\int \sin^n x \cos^m x\, dx$, $\int \tan^n x\, dx$, $\int \cot^n x\, dx$, $\int \sec^n x\, dx$, $\int \operatorname{cosec}^n x\, dx$.	3 hours	12-10-23 to 13 -10-23	**One special class**
	Reduction formulae for $\int x^n \sin x\, dx$, , $\int x^n \cos x\, dx$, , $\int x^n e^{ax}\, dx$ with definite limits.	2 hours	16-10-23 to 21-10-23	Chalk and Black board
	Euclid's algorithm – Polynomials with integral coefficients.	2 hours	25-10-23 to 27-10-23	Chalk and Black board

Theory of Equations : (3 hours)	Remainder theorem, Factor theorem – Fundamental theorem of algebra(statement only).	1 hours	30-10-23 to 04-11-23	Chalk and Black board
Unit-I & Unit – III	C1 Practical Internal test	3 Hours	06-11-23	C1 Practical Internal Test(Expt no 1 to Expt no 5)
Theory of Equations : (03 hours)	Irrational and complex roots occurring in conjugate pairs.	2 hours	06-11-23 to 11-11-23	Chalk and Black board
	Revision class	1 hour	13-11-23	13-11-23 Display of C1 Practical Internal Test marks on the notice board
Unit-I & Unit - III	**Algebra - I & Calculus-I**	1 hour	16-11-23	15-11-2023 To 18-11-2023 C1 Internal Test
Theory of Equations : (03 hours)	Relation between roots and coefficients of a polynomial equation, Symmetric functions–transformation.	2 hours	20-11-23 to 25-11-23	22-11-23 Display of C1 Internal Test marks on the notice board
	Reciprocal equations .	01 hours	27-11-23	Chalk and Black board
Unit-II & Unit – IV	**C2 Practical Internal Test**	01 Week	27-11-23 to 02-12-23	C2 Practical Internal Test(Assignment)
Unit –I, II, III & IV	**Theory Assignment**			Submission of Theory Assignments
Theory of Equations : (06 hours)	Descartes' rule of signs – multiple roots solving cubic equations by Cardon's method.	2 hours	04-12-23 to 09-12-23	6-12-23 Display of C2 Practical Assignment marks on the notice board.
	solving quartic equations by Descarte's Method. Revision class and conclusion of syllabus.	4 hours	11-12-23 to 16-12-23	**Two special classes**

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Course Plan of Odd Semester 2023-24

Department : Mathematics
Title of the Paper : Algebra – I & Calculus – I [Course Code – 212139]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Niranjan L

Total Hrs: 28 Hours (2Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Polar Coordinates (14 hours)	Recapitulation of Polar coordinates, angle between the radius vector and tangent.	2 hours	11-09-2023 to 16-09-23	Course Outcomes of the units discussed
	Angle of intersection of two curves (polar forms).	2 hours	19-09-23 to 23-09-23	Chalk and Black board
	Length of perpendicular from pole to the tangent, pedal equations.	2 hours	25-09-23 to 30-09-23	Chalk and Black board
	Derivative of an arc in Cartesian, parametric and polar forms	2 hours	03-10-23 to 07-10-23	Chalk and Black board
	Curvature of plane curve, radius of curvature formula in Cartesian and parametric	2 hours	09-10-23 to 11-10-23	Chalk and Black board
	Radius of curvature in polar and pedal forms.	2 hours	12-10-23 to 13 -10-23	Chalk and Black board
	Center of curvature, circle of curvature and Evolutes.	3 hours	16-10-23 to 21-10-23	**One special class**
Matrices (14 hours)	Recapitulation of Symmetric and Skew Symmetric matrices	1 hours	25-10-23 to 27-10-23	Chalk and Black board
	Algebra of matrices; Row and Column reduction to Echelon form.	2 hours	30-10-23 to 04-11-23	Chalk and Black board
	Rank of a matrix. Inverse of a matrix by elementary operations.	2 hours	06-11-23 to	

			11-11-23	
	Algebra - I & Calculus-I	1 hour	16-11-2023	15-11-2023 To 18-11-2023 C1 Internal Test
	Solution of System of linear equations.	2 hours	20-11-23 to 25-11-23	Chalk and Black board
	Criteria For Existences of non-trivial solutions of homogeneous system of linear equations.	2 hours	27-11-23 to 02-12-23	Chalk and Black board
	Solution of non-homogeneous system of linear equations.	2 hours	04-12-23 to 09-12-23	Chalk and Black board
	Cayley- Hamilton theorem. Inverse of matrices by Cayley-Hamilton theorem (Without Proof). Revision class and conclusion of syllabus.	4 hours	11-12-23 to 16-12-23	**Two special class**

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Course Plan of Odd Semester 2023-24

Department : Mathematics
Title of the Paper : Algebra – III & Differential Equations – I [Course Code – 222339]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Dr. Sumathi M P

Total Hrs: 28 Hours (2Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Differential Equations – I : (14 hours)	Recapitulation of Definition, examples of differential equations.	2 hours	11-09-2023 to 16-09-23	POs and Course Outcomes of the units discussed
	Formation of differential equations by elimination of arbitrary constants	2 hours	19-09-23 to 23-09-23	Chalk and Black board
	Differential equations of first order – Separation of variables, Reducible to separation of variables,	2 hours	25-09-23 to 30-09-23	Chalk and Black board
	Homogeneous differential equations, Reducible to homogeneous.	2 hours	03-10-23 to 07-10-23	Chalk and Black board
	Exact differential equations, Reducible to exact.	2 hours	09-10-23 to 11-10-23	Chalk and Black board
	Integrating factors found by inspection and the determination of integrating factors.	2 hours	12-10-23 to 13 -10-23	Chalk and Black board
	Linear differential equations, Bernoulli's differential equations.	3 hours	16-10-23 to 21-10-23	**One special class**
Differential Equations – II: (14 hours)	Equations of First order and higher degree – Solvable for p	1 hours	25-10-23 to 27-10-23	Chalk and Black board
	Solvable for x, Solvable y, Clairaut's equations – Singular and General solutions.	2 hours	30-10-23 to 04-11-23	Chalk and Black board

	Ordinary Linear differential equations with constant coefficients –	2 hours	06-11-23 to 11-11-23	10-11-23 C1 Practical Internal Test(Expt no 1 to Expt no 5)
	Algebra - III & Differential Equations - I	1 hour	16-11-2023	15-11-2023 To 18-11-2023 C1 Internal Test 15-11-23 Display of marks sheet of C1 practical Internal Test on the notice board
	Complementary function	2 hours	20-11-23 to 25-11-23	22-11-23 C1 Display of internal Test marks on the notice board
	Particular integral	2 hours	27-11-23 to 02-12-23	Chalk and Black board
	Inverse differential operators.	2 hours	04-12-23 to 09-12-23	Chalk and Black board
	Simultaneous differential equations (two variables with constant coefficients). Revision class and conclusion of syllabus.	4 hours	11-12-23 to 16-12-23	**Two special class**

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Course Plan of Odd Semester 2023-24

Department : Mathematics
Title of the Paper : Algebra – III & Differential Equations – I [Course Code – 222339]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Niranjan L

Total Hrs: 28 Hours (2Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Group Theory – I (14 hours)	Recapitulation of sets and functions. Definition and examples of groups.	2 hours	11-09-2023 to 16-09-23	Course Outcomes of the units discussed
	Some general properties of Groups.	2 hours	19-09-23 to 23-09-23	Chalk and Black board
	Subgroups	2 hours	25-09-23 to 30-09-23	Chalk and Black board
	Group of permutations – Cyclic permutations	2 hours	03-10-23 to 07-10-23	Chalk and Black board
	Even and odd permutations.	2 hours	09-10-23 to 11-10-23	Chalk and Black board
	Order of an element of a group and theorems	2 hours	12-10-23 to 13 -10-23	Chalk and Black board
	Cyclic groups problems and theorems.	3 hours	16-10-23 to 21-10-23	**One special class**
Group Theory – II : (14 hours)	Cosets, Index of a group	1 hours	25-10-23 to 27-10-23	Chalk and Black board
	Lagrange's theorem, consequences.	1 hours	30-10-23 to 04-11-23	Chalk and Black board
	Normal Subgroups	2 hours	06-11-23	

			to 11-11-23	
	Algebra - III & Differential Equations - I	1 hour	16-11-2023	15-11-2023 To 18-11-2023 C1 Internal Test
	Quotient groups, Homomorphism.	2 hours	20-11-23 to 25-11-23	Chalk and Black board
	Kernel of homomorphism	2 hours	27-11-23 to 02-12-23	Chalk and Black board
	Isomorphism – Automorphism	2 hours	04-12-23 to 09-12-23	4-12-23 Submission of C2 Practical Internal Test(Assignment)and Theory Assignments
	Fundamental theorem of homomorphism, Cayley's theorem. Revision class with conclusion of syllabus.	4 hours	11-12-23 to 16-12-23	11-12-23 Display of C2 Practical Assignment marks on the notice board. **Two special class**

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Course Plan of Odd Semester 2023-24

Department : Mathematics
Title of the Paper : Real Analysis-II and Complex Analysis [Course Code – 232539]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Dr. Sumathi M P

Total Hrs: 45 Hours (3Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Complex numbers : (15 hours)	Complex number - Cartesian and Polar form (Definitions, properties and problems) – Geometrical representation of complex plane (z-plane); Euler's formula, $e^{i\theta} = \cos\theta + i\sin\theta$.	3 hours	11-09-2023 to 16-09-23	Course Outcomes of the course discussed.
	Separate the real and imaginary parts of some standard functions (, e^z, sinz , cosz, logz etc). Dot and vector product of z_1 and z_2.	2 hours	19-09-23 to 23-09-23	Chalk and Black board
	Equation of a straight line and circle in a complex form and Represent graphically (locus of a point). **Functions of a complex variable** - Limit of a function, Continuity and differentiability, Analytic functions, Singular points (definitions and related problems);	3 hours	25-09-23 to 30-09-23	Chalk and Black board
	Cauchy-Riemann equations - Cartesian and Polar forms – Proof & Problems, Necessary and sufficient condition for a function to be analytic (Statement only);	2 hours	03-10-23 to 07-10-23	Chalk and Black board
	Harmonic functions - Definition and problems; Properties of analytic functions - Various properties with proofs;	3 hours	09-10-23 to 11-10-23	Chalk and Black board
	Construction of analytic functions : i)Milne Thomson Method (Only problems) ii) Using the concept of	3 hours	12-10-23 to 13 -10-23	Chalk and Black board

	harmonic function.			
Complex integration : (15 hours)	Complex integration - Definition, Line integral, properties and problems.	3 hours	16-10-23 to 21-10-23	Chalk and Black board
	Cauchy's Integral theorem – proof using Green's theorem	2 hours	25-10-23 to 27-10-23	**One special class**
	Direct consequences. Cauchy's Integral f'ormula with proof.	3 hours	30-10-23 to 04-11-23	Chalk and Black board
	Cauchy's generalized formula for the derivatives with proof and applications for evaluation of simple line integrals.	3 hours	06-11-23 to 11-11-23	06-11-23 C1 Practical Internal Test(Expt no 1 to Expt no)
	Real Analysis-II and Complex Analysis	1 hour	16-11-2023	13-11-23 Display of C1 Practical Internal Test marks on the notice board. 15-11-2023 To 18-11-2023 C1 Internal Test
	Cauchy's inequality – Proof, Livouville's theorem – Proof.	4 hours	20-11-23 to 25-11-23	22-11-23 C1 Display of Internal Test marks on the notice board. **One special class**
Transformations (15 Hours)	Definition, Jacobian of a transformation –Identity transformation – Reflection – Translation – Rotation and Magnification - Inversion - Inverse points	4 hours	27-11-23 to 02-12-23	1-12-23 Submission of C2 Practical Internal Test(Assignment) **One special class**
	Linear transformation – Definitions - Bilinear transformations - Cross-ratio of four points – Cross –ratio preserving property – Preservation of the family of straight lines and circles	5 hours	04-12-23 to 09-12-23	6-12-23 Display of C2 Practical Assignment marks on the notice board. **Two special class**
	Conformal mappings – Discussion of the transformations $w = z^2$, $w = \sin z$, $w = \cos z$, $w = \bar{z}$, $w = \frac{z+\bar{z}}{2}$ etc with Conclusion of syllabus	6 hours	11-12-23 to 16-12-23	**Two special class**

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Course Plan of Odd Semester 2023-24

Department : Mathematics
Title of the Paper : Advanced algebra and Discrete Mathematics
[Course Code – 232540]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Niranjan L
Total Hrs:45 Hours (3 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Rings and Fields: (15 hours)	Recapitulation of groups, Rings - definition and properties of rings.	3 hours	11-09-23 to 16-09-23	Course Outcomes of the course discussed.
	Integral domains – Fields – theorems and problems, Sub rings - Criterion for sub rings.	3 hours	19-09-23 to 23-09-23	Chalk and Black board
	Theorems and problems on sub rings, Ideals	2 hours	25-09-23 to 30-09-23	Chalk and Black board
	Algebra of Ideals - theorems – Principal ideals – examples and standard properties following the definition.	3 hours	03-10-23 to 07-10-23	Chalk and Black board
	Divisibility in an integral domain - theorems and problems, Units and Associates - theorems and problems. Quotient rings - examples and theorems.	3 hours	09-10-23 to 13-10-23	Chalk and Black board
	The field of quotients – theorems and problems.	2 hours	16-10-23 to 19 -10-23	**One special class**
	Homomorphism - Definitions and example, Kernel of a homomorphism - examples and related theorems.	2 hours	20-10-23 to 21-10-23	**One special class**
	Isomorphism of a ring - examples and related theorems. Automorphism - problems.	3 hours	25-10-23 to 27-10-23	Chalk and Black board

Polynomial rings and Homomorphism: (15 hours)	Fundamental Theorem of Homomorphism of Rings.			
	Prime and Maximal ideals in a commutative ring - definition and examples. Polynomials over rings and fields (some standard properties). Division algorithm (proof and problems),	3 hours	30-10-23 to 04-11-23	**One special class**
	Greatest common divisor - Euclidian algorithm (problems); reducible and irreducible polynomials over fields (definition and problems)	3 hours	06-11-23 to 11-11-23	10-11-23 C1 Practical Internal Test(Expt no 1 to Expt no 5)
	Advanced algebra and Discrete Mathematics	1 hour	16-11-23	15-11-23 Display of C1 Practical Internal marks on the notice board. 15-11-2023 To 18-11-2023 C1 Internal Test
	Eisenstein's criteria for reducibility - problems; Rational roots of a polynomial - Test – problems.	3 hours	20-11-23 to 23-11-23	22-11-23 Display of C1 Internal marks on the notice board.
Basics of Graph theory: (15 hours)	Basic definitions, Isomorphism, Subgraphs, Operations on Graphs.	2 hours	24-11-23 to 25-11-23	**One special class**
	Walks, Paths, circuits. Connected and disconnected graphs.	4 hours	27-11-23 to 02-12-23	**One special class**
	Euler graphs, Hamiltonian graph , some applications.	4 hours	04-12-23 to 09-12-23	4-12-23 Submission of C2 Practical Internal Test (Asignment) **One special class**
	Trees basic properties, Distance, Eccentricity, center, Spanning trees, Minimal Spanning tree. Revision class with conclusion of syllabus.	5 hours	11-12-23 to 16-12-23	9-12-23 C2 Display of Practical Assignment marks on the notice board. **Two special class**

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Course Plan of Odd Semester 2023-24

Department : Mathematics
Title of the Paper : Real Analysis-II and Complex Analysis [Course Code – 232539]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Jayashree B

Total Hrs: 15 Hours (1Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Riemann Integration : (15 hours)	Riemann Integration : Definition & examples for partition of an interval,	1 hour	11-09-23 to 16-09-23	Course outcomes of the unit discussed.
	Refinement and Common refinement of a partition.	1 hour	25-09-23 to 30-09-23	Chalk and Black board
	Lower and Upper Riemann (Darboux) sums - definition, properties & problems.	1 hour	09-10-23 to 13-10-23	Chalk and Black board
	Riemann Integral-Lower and Upper integrals (definition & problems), Darboux's theorem and Criterion for Integrability,	1 hour	16-10-23 to 21-10-23	Chalk and Black board
	Integrability of sum, difference, product, quotient and modulus of integrable functions.	2 hour	30-10-23 to 04-11-23	**One special class**
	Integral as a limit of sum (Riemann sum) -Problems. Some integrable functions	1 hour	06-11-23 to 11-11-23	
	Integrability of continuous functions, monotonic functions	1 hour	13-11-2023	15-11-2023 To 18-11-2023 C1 Internal Test
	Integrability of bounded function with finite number of discontinuity.	1 hour	20-11-23 to 25-11-23	Chalk and Black board

	Fundamental theorem of Calculus-related problems	2 hours	27-11-23 to 02-12-23	**One special class**
	Change of variables, integration by parts	1 hour	04-12-23 to 09-12-23	Chalk and Black board
	First and second mean value theorems of integral calculus. Revision class with conclusion of syllabus	2 hours	11-12-23 to 16-12-23	**One special class**

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Course Plan of Odd Semester 2023-24

Department : Mathematics
Title of the Paper : Advanced algebra and Discrete Mathematics
[Course Code – 232540]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Jayashree B

Total Hrs:15 Hours (1 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Vector algebra: (15 Hours)	**Vector algebra:** Vectors – Scalars	1 hour	11-09-23 to 16-09-23	Course outcomes of the unit discussed.
	Vector Field –Scalar field (definition and problems); -	1 hour	19-09-23 to 23-09-23	Chalk and Black board
	Vector differentiation and related problems	1 hour	25-09-23 to 30-09-23	Chalk and Black board
	The vector differential operator Gradient and related problems	1 hour	03-10-23 to 07-10-23	Chalk and Black board
	Divergence definition with examples.	1 hour	09-10-23 to 13-10-23	Chalk and Black board
	Curl definition with examples.	1 hour	16-10-23 to 19 -10-23	Chalk and Black board
	Standard derivations	1 hour	20-10-23 to 21-10-23	Chalk and Black board
	Problems on Gradient, divergence.	1 hour	25-10-23 to 27-10-23	Chalk and Black board
	Problems on curl.	1 hour	06-11-23 to	

			11-11-23	
	Advanced algebra and Discrete Mathematics	1 hour	16-11-23	15-11-2023 To 18-11-2023 C1 Internal Test
	Vector integration	1 hour	20-11-23 to 23-11-23	Chalk and Black board
	Green's theorem in plane (definition and problems).	1 hour	24-11-23 to 25-11-23	Chalk and Black board
	Related problems on vector integration using Green’s theorem	1 hour	27-11-23 to 02-12-23	Chalk and Black board
	Applications of Green’s theorem.	1 hour	04-12-23 to 09-12-23	Chalk and Black board
	Revision class with conclusion of syllabus.	1 hour	11-12-23 to 16-12-23	Chalk and Black board

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Course Plan of Odd Semester 2023-24

Department : Mathematics
Title of the Paper :Mathematical Aptitude – I [Course Code–21OEMAT103]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Niranjan L

Total Hrs:42 Hours (3 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
Unit-I	Number System- Types Of Numbers	2 hours	11-09-23 to 16-09-23	COs of the units discussed
	Series (AP and GP)	2 hours	19-09-23 to 23-09-23	Chalk and Black board
	Algebraic Operations BODMAS-Simplification	3 hours	25-09-23 to 30-09-23	Chalk and Black board
	Divisibility	2 hours	03-10-23 to 07-10-23	Chalk and Black board
	LCM and HCF	2 hours	09-10-23 to 11-10-23	Chalk and Black board
	Fraction	2 hours	12-10-23 to 13 -10-23	Chalk and Black board
	Revision	2 hours	16-10-23 to 21-10-23	**One special class**
Unit-II	Time and Distance	4 hours	25-10-23 to 27-10-23	Chalk and Black board
	Problems Based On Trains	3 hours	30-10-23 to 04-11-23	Chalk and Black board

	Problems Based on Boats and Streams	3 hours	06-11-23 to 11-11-23	Chalk and Black board
	Revision	2 hour	13-11-23	23-11-23 Marks sheet of C1 practical Internal Test displayed on the notice board
Unit-III	Time Work and Wages	3 hour	16-11-2023	15-11-2023 To 18-11-2023 C1 Internal Test was conducted
	Pipes and Cistern	3 hour	20-11-23 to 25-11-23	Chalk and Black board
	Problems On Clock	3 hour	27-11-23 to 02-12-23	Chalk and Black board
	Problems On Calendar	5 hour	04-12-23 to 09-12-23	Submission of Assignments(C2)
	Revision	2 hour	11-12-23 to 16-12-23	Two special class was taken to complete the unit

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Course Plan of Even Semester 2023-24

Department : Mathematics
Title of the Paper : Algebra – II (Number Theory) and Calculus – II
[Course Code – 212239]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr. Sumathi M P
Total Hrs: 28 Hours (2Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
Differential Calculus-I (14 hours)	Introduction to the units Limits, Continuity definitions and its properties.	2 hours	12-02-24 to 17-02-24	Introduction class Course Outcomes of the units
	Differentiability and properties.	2 hours	19-02-24 to 24-02-24	Chalk and Black board
	Properties of continuous functions, Intermediate value theorem.	2 hours	26-02-24 to 02-03-24	Chalk and Black board
	Rolle's Theorem, Lagrange's Mean Value theorem	2 hours	04-03-24 to 09-03-24	**One special class**
	Cauchy's Mean value theorem and examples.	2 hours	11-03-24 to 16-03-24	Chalk and Black board
	Taylor's theorem, Maclaurin's series	2 hours	18-03-24 to 23-03-24	22-03-23 C1 Practical Internal Test
	Indeterminate forms and evaluation of limits using L'Hospital rule.	2 hours	25-03-24 to 30-03-24	27-03-24 Practical test marks displayed on the notice board **One special class**
	Functions of two or more variables-	2 hours	01-04-24	

Partial Derivatives (14 hours)	explicit and implicit functions.		to 06-04-24	
	Partial derivatives, Homogeneous functions- Euler's theorem	2 hours	08-04-24 to 13-04-24	**One special class**
	Differential Equations-I & Real Analysis - I	1 hours	15-04-24 to 20-04-24	C1 Internal Test
	Extension of Euler's theorem, Total derivative.	2 hours	22-04-24 to 27-04-24	24-03-24 Display of test marks on the notice board
	Differentiation of implicit and composite functions.	1 hours	29-04-24 to 04-05-24	03-05-24 C2 Practical test
	Jacobians and standard properties, Illustrative examples on Jacobian.	1 hours	06-05-24 to 11-05-24	09-05-24 Display of C2 Practical test marks on the notice board
	Taylor's & Maclaurin's series for functions of two variables.	2 hours	13-05-24 to 18-05-24	Chalk and Black board
	Revision and Conclusion of Syllabus with Question paper solving.	2 hours	20-05-24 to 25-05-24	Chalk and Black board

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Course Plan of Even Semester 2023-24

Department : Mathematics
Title of the Paper : Algebra – II (Number Theory) and Calculus – II
[Course Code – 212239]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Niranjan L

Total Hrs: 28 Hours (2Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
Number Theory (14 hours)	**Theory of Numbers:** Division Algorithm, Divisibility	2 hours	12-02-24 to 17-02-24	Introduction class Course Outcomes of the units
	Prime and composite numbers.	2 hours	19-02-24 to 24-02-24	Chalk and Black board
	Euclidean algorithm, Fundamental theorem of Arithmetic.	2 hours	26-02-24 to 02-03-24	Chalk and Black board
	The greatest common divisor and least common multiple	2 hours	04-03-24 to 09-03-24	**One special class**
	Congruences, Linear congruences.	2 hours	11-03-24 to 16-03-24	Chalk and Black board
	Simultaneous congruences, Euler's Phi-function.	2 hours	18-03-24 to 23-03-24	22-03-24 C1 Practical test
	Wilson's, Euler's theorems.	2 hours	25-03-24 to 30-03-24	28-03-24 C1 Display of Practical test marks on the notice board

Integral Calculus-II (14 hours)	**Line integral**: Definition of line integral and basic properties, Examples on evaluation of line integrals.	2 hours	01-04-24 to 06-04-24	
	Double integral: Definition of Double integrals and its conversion to iterated integrals.	2 hours	08-04-24 to 13-04-24	**One special class**
	Differential Equations-I & Real Analysis - I	1 hours	15-04-24 to 20-04-24	**C1 Internal Test**
	Evaluation of double integrals by changing the order of integration and change of variables.	2 hours	22-04-24 to 27-04-24	24-04-24 Display of Test marks on the notice board
	Computation of plane surface areas using double integrals,	2 hours	29-04-24 to 04-05-24	Chalk and Black board
	Triple integral: Definition of triple integrals and evaluation.	2 hours	06-05-24 to 11-05-24	06-05-24 C2 Practical test conducted Submission of Theory Assignments
	Change of variables, volume as triple integral.	2 hours	13-05-24 to 18-05-24	13-05-24 Display of C2 Practical test marks on the notice board
	Revision and Conclusion of Syllabus with Question paper solving.	2 hours	20-05-24 to 25-05-24	Chalk and Black board

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Course Plan of Even Semester 2023-24

Department : Mathematics
Title of the Paper : Real Analysis – I and Differential Equations – II
[Course Code – 222439]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr. Sumathi M P

Total Hrs: 28 Hours (2Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
Linear Differential Equations (14 hours)	Solution of ordinary second order linear differential equations with variable coefficient by the following methods: (i) When a part of complementary function is given.	2 hours	12-02-24 to 17-02-24	Introduction class Course Outcomes of the units
	(ii) Changing the independent variable	2 hours	19-02-24 to 24-02-24	Chalk and Black board
	(iii) Changing the dependent variable.	2 hours	26-02-24 to 02-03-24	Chalk and Black board
	(iv) By method of variation of parameters.	1 hours	04-03-24 to 09-03-24	Chalk and Black board
	(v) Exact equations.	2 hours	11-03-24 to 16-03-24	Chalk and Black board
	Total differential equations - Necessary and sufficient condition for the equation Pdx + Qdy + Rdz = 0 to be exact (proof only for the necessary part)	2 hours	18-03-24 to 23-03-24	22-03-24 C1 Practical test
	Simultaneous equations of the form $\frac{dx}{P} = \frac{dy}{Q} = \frac{dz}{R}$.	1 hours	25-03-24 to 30-03-24	27-03-24 Display of C1 Practical test marks on the notice

				board.
Partial Differential Equations (14 hours)	Basic concepts – Formation of a partial differential equations by elimination of arbitrary constants and functions	2 hours	01-04-24 to 06-04-24	Chalk and Black board
	Solution of partial differential equations – Solution by Direct integration.	2 hours	08-04-24 to 13-04-24	**One special class**
	Real Analysis – I and Differential Equations – II	1 hours	15-04-24 to 20-04-24	C1 Internal Test
	Lagrange's linear equations of the form Pp + Qq = R , Standard types of first order non-linear partial differential equations.	2 hours	22-04-24 to 27-04-24	Chalk and Black board
	Charpit's method. Homogenous linear equations with constant coefficient – Rules for finding the complementary function.	2 hours	29-04-24 To 04-05-24	03-05-24 C2 Practical test Submission of Theory Assignments
	Rules for finding the particular integral.	1 hours	06-05-24 to 11-05-24	09-05-24 Display of C2 Practical test marks on the notice board.
	Method of separation of variables (product method).	2 hours	13-05-24 to 18-05-24	Chalk and Black board
	Revision and Conclusion of Syllabus with Question paper solving.	2 hours	20-05-24 to 25-05-24	Chalk and Black board

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Course Plan of Even Semester 2023-24

Department : Mathematics
Title of the Paper : Real Analysis – I and Differential Equations – II
[Course Code – 222439]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Niranjan L
Total Hrs: 28 Hours (2Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
Sequences (14hrs)	**Sequences :** Sequence of real number Bounded and unbounded sequences	2 hours	12-02-24 to 17-02-24	Introduction class Course Outcomes of the units
	Infimum and Supremum of a sequence	2 hours	19-02-24 to 24-02-24	Chalk and Black board
	Limit of a sequence – Sum, product and quotient of limits	2 hours	26-02-24 to 02-03-24	Chalk and Black board
	Standard theorems on limits	2 hours	04-03-24 to 09-03-24	**One special class**
	Convergent , divergent and oscillatory sequences – Discuss the convergence x^n, $n^{\frac{1}{n}}$, $(1+\frac{1}{n})^n$ and standard problems	2 hours	11-03-24 to 16-03-24	Chalk and Black board
	Monotonic sequences and their properties	2 hours	18-03-24 to 23-03-24	22-03-24 C1 Practical test
	Cauchy's general principle of convergence	2 hours	25-03-24 to 30-03-24	27-03-24 Display of C1 Practical test marks on the

				notice board.
Infinite Series (12 hrs)	**Infinite Series :** Infinite series of real numbers – Convergence and Divergence - Oscillation of series.	2 hours	01-04-24 to 06-04-24	
	Properties of convergence	2 hours	08-04-24 to 13-04-24	**One special class**
	Real Analysis – I and Differential Equations – II	1 hours	15-04-24 to 20-04-24	C1 Internal Test
	Series of positive terms – Geometric series – p – series.	2 hours	22-04-24 to 27-04-24	Chalk and Black board
	Comparison tests , D'Alembert's ratio test.	2 hours	29-04-24 To 04-05-24	03-05-24 C2 Practical test **One special class**
	Raabe's test, Cauchy's root test.	2 hours	06-05-24 to 11-05-24	09-05-24 Display of C2 Practical test marks on the notice board.
	Leibnitz's test for alternating series.-	2 hours	13-05-24 to 18-05-24	Chalk and Black board
	Revision and Conclusion of Syllabus with Question paper solving.	2 hours	20-05-24 to 25-05-24	Chalk and Black board

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Course Plan of Even Semester 2023-24

Department : Mathematics
Title of the Paper : Numerical Analysis [Course Code – 232640]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr. Sumathi M P

Total Hrs: 45 Hours (3Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Algebraic and Transcendental Equations : (15 hours)	Errors – Significant digits, absolute, relative errors, Percentage errors.	3 hours	12-02-24 to 17-02-24	Introduction class Course Outcomes of the units
	Rounding off and truncation errors (meanings and related problems), General error formula (derivation of formula and problems based on it).	3 hours	19-02-24 to 24-02-24	Chalk and Black board
	Error in series approximation: Taylor series approximations (problems only)	3 hours	26-02-24 to 02-03-24	Chalk and Black board
	Solutions to algebraic and transcendental equations – Bisection method, Regular - Falsi method.	3 hours	04-03-24 to 09-03-24	Chalk and Black board
	Iterative method Newton - Raphson method. Secant method (Plain discussion of the rational behind techniques and problems on their applications).	3 hours	11-03-24 to 16-03-24	Chalk and Black board
	Direct Methods - Gauss elimination method,	3 hours	18-03-24 to 23-03-24	18-03-24 C1 Practical test
	Gauss - Jordan elimination method and Tringularization method;	4 hours	25-03-24 to 30-03-24	25-03-24 Display of C1 Practical test on

				the notice board. **One special class**
System of Linear Algebraic Equations : (15 hours)	Iterative methods – Jacobi method, Gauss – Jacobi method.	3 hours	01-04-24 to 06-04-24	Chalk and Black board
	Gauss- Seidal method. Successive – Over Relaxation (SOR) method.	3 hours	08-04-24 to 13-04-24	**One special class**
	Numerical Analysis	1 hours	15-04-24 to 20-04-24	C1 Internal Test
Polynomial Interpolations : (15 Hours)	Finite differences , Forward, backward and central differences and shift operators; definitions , properties and problems.	3 hours	22-04-24 to 27-04-24	Chalk and Black board
	Polynomial interpolation – Newton – Gregory forward and backward interpolation formulas, Gauss's Forward and backward interpolation formulas.	3 hours	29-04-24 To 04-05-24	03-05-24 C2 Practical test Submission of Theory Assignments
	Lagrange interpolation polynomial , Newton's divided differences	3 hours	06-05-24 to 11-05-24	09-05-24 Display of C2 Practical test marks on the notice board.
	Newton's general interpolation formula (Discussion on setting up the polynomials, differences between them and problems on their applications).	3 hours	13-05-24 to 18-05-24	Chalk and Black board
	Revision Class with conclusion of syllabus.	3 hours	20-05-24 to 25-05-24	Chalk and Black board

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Course Plan of Even Semester 2023-24

Department : Mathematics
Title of the Paper : Linear Algebra [Course Code – 232639]

Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Niranjan L

Total Hrs:45 Hours (3 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Linear Transformations: (15 hours)	**Linear transformation** - Definition, examples, equivalent criteria,	3 hours	12-02-24 to 17-02-24	Introduction class Course Outcomes of the units
	Some basic properties Matrix representation,	3 hours	19-02-24 to 24-02-24	Chalk and Black board
	Change of basis and effect on associated matrix, similar matrices;	3 hours	26-02-24 to 02-03-24	Chalk and Black board
	Rank-Nullity theorem – Null space , Range space,	2 hours	04-03-24 to 09-03-24	Chalk and Black board
	Proof of rank nullity theorem and related problems.	3 hours	11-03-24 to 16-03-24	Chalk and Black board
	Homomorphism, Isomorphism and automorphism - Examples, order of automorphism and Fundamental theorem of homomorphism;	3 hours	18-03-24 to 23-03-24	22-03-24 C1 Practical test
	Eigen values and Eigen vectors - Computation of Eigen values, algebraic multiplicity, Some	3 hours	25-03-24 to 30-03-24	27-03-24 Display of C1 Practical test marks on the

Isomorphism, Eigen values and Diagonalization: (15 hours)	basic properties of eigen values, determination of eigen vectors and eigen space and geometric multiplicity.			notice board.
	Diagonalizability of linear transfomation- Meaning, condition based on algebraic multiplicity.	4 hours	01-04-24 to 06-04-24	**One special class**
	Geometric multiplicity (mentioning) and related problems (Only verification of diagonalizability).	3 hours	08-04-24 to 13-04-24	
	Linear Algebra	1 hours	15-04-24 to 20-04-24	
Invertible Transformation and Inner Product spaces: (15 hours)	Invertible trasnsformaion - some basic properties of invertible , singular and non singular transformations and conditions of existence of inverses;	3 hours	22-04-24 to 27-04-24	Chalk and Black board
	Minimal polynomial of a transformation, Relation between characteristic and minimal polynomials and related problems.	3 hours	29-04-24 To 04-05-24	**One special class** Submission of Theory Assignments
	Inner product and normed linear spaces - Definitions, examples, Cauchy – Schwartz inequality (with proof) and related problems;	3 hours	06-05-24 to 11-05-24	06-05-24 C2 Practical test
	Orthogonal vectors, orthogonal basis, Gram - Schmidt orthogonalization process: both proof and problems.	4 hours	13-05-24 to 18-05-24	12-05-24 Display of C2 Practical test on the notice board. **One special class**
	Revision Class with conclusion of syllabus.	3 hours	20-05-24 to 25-05-24	Chalk and Black board

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Course Plan of Even Semester 2023-24

Department : Mathematics
Title of the Paper : Mathematical Aptitude-II [Course Code –21OEMAT203]

Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr. Sumathi M P / Niranjan L/ Jayashree B

Total Hrs:42 Hours (3 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
Unit-I (14 Hours)	Percentage, Average	3 hours	12-02-24 to 17-02-24	Introduction class Course Outcomes of the units
	Problems Based on Ages	3 hours	19-02-24 to 24-02-24	Chalk and Black board
	Ratio and Proportion	3 hours	26-02-24 to 02-03-24	Chalk and Black board
	Partnership and Share	3 hours	04-03-24 to 09-03-24	Chalk and Black board
	Mixtures	3 hours	11-03-24 to 16-03-24	Chalk and Black board
Unit-II (14 Hours)	Profit & Loss	3 hours	18-03-24 to 23-03-24	Chalk and Black board
	Discount	3 hours	25-03-24 to 30-03-24	Chalk and Black board
	Simple Interest	3 hours	01-04-24 to	Chalk and Black board

			06-04-24	
	Compound Interest	3 hours	08-04-24 to 13-04-24	**One special class**
	Mathematical Aptitude-II	1 hours	15-04-24 to 20-04-24	C1 Internal Test
Unit-III (14 Hours)	Shares and Debentures	3 hours	22-04-24 to 27-04-24	25-04-24 Display of IA marks sheet on the notice board.
	Permutation and Combination	2 hours	29-04-24 To 04-05-24	Submission of Theory Assignments
	Probability	3 hours	06-05-24 to 11-05-24	Chalk and Black board
	True Discount and Banker’s Discount	3 hours	13-05-24 to 18-05-24	Chalk and Black board
	Revision Class with conclusion of syllabus with question paper solving	3 hours	20-05-24 to 25-05-24	Chalk and Black board

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Course Plan of Even Semester 2023-24

Department : Mathematics
Title of the Paper : Numerical Analysis [Course Code – 232640]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name :Jayashree B

Total Hrs: 15 Hours (1Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Numerical Differentiation and Integration (15 hours)	Formula for derivatives (till second order)	1 hour	12-02-24 to 17-02-24	Introduction class Course Outcomes of the units
	Newton – Gregory forward interpolations.	1 hour	19-02-24 to 24-02-24	Chalk and Black board
	Newton – Gregory backward interpolations	1 hour	26-02-24 to 02-03-24	Chalk and Black board
	problems based on Newton – Gregory forward & backward interpolations.	1 hour	04-03-24 to 09-03-24	Chalk and Black board
	Numerical Integration	1 hour	11-03-24 to 16-03-24	Chalk and Black board
	General quadrature formula,	1 hour	18-03-24 to 23-03-24	Chalk and Black board
	Trapezoidal rule,	1 hour	25-03-24 to 30-03-24	Chalk and Black board
	Simpson's 1/3 rule,		01-04-24	Chalk and

		1 hour	to 06-04-24	Black board
	Simpson's 3/8 rule	1 hour	08-04-24 to 13-04-24	
	Numerical Analysis	1 hour	15-04-24 to 20-04-24	C1 Internal test
	Weddell's rule	1 hour	22-04-24 to 27-04-24	Chalk and Black board
	general quadrature formula	1 hour	06-05-24 to 11-05-24	Chalk and Black board
	trapezoidal rule	1 hour	13-05-24 to 18-05-24	Chalk and Black board
	Revision class with conclusion of syllabus.	1 hour	20-05-24 to 25-05-24	Chalk and Black board

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Course Plan of Even Semester 2023-24

Department : Mathematics
Title of the Paper : Linear Algebra [Course Code – 232639]

Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Jayashree B

Total Hrs:15 Hours (1 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Vector spaces: (15 hours)	Vector spaces - Definition, examples	1 hour	12-02-24 to 17-02-24	Introduction class Course Outcomes of the units
	Properties of Vector space.	1 hour	19-02-24 to 24-02-24	Chalk and Black board
	Subspaces - Examples, criterion for a subspace and some properties;	1 hour	26-02-24 to 02-03-24	Chalk and Black board
	Linear Combination – Linear span.	1 hour	04-03-24 to 09-03-24	Chalk and Black board
	Linear dependence and Linear independence.	1 hour	11-03-24 to 16-03-24	Chalk and Black board
	Basic properties of linear dependence and independence.	1 hour	18-03-24 to 23-03-24	Chalk and Black board
	Techniques of determining linear dependence	1 hour	25-03-24 to 30-03-24	Chalk and Black board
	Techniques of determining independence in various vector spaces and related problems;	1 hour	01-04-24 to 06-04-24	Chalk and Black board

	Theorems on Linear dependence and independence.	1 hour	08-04-24 to 13-04-24	
	Linear Algebra	1 hour	15-04-24 to 20-04-24	
	Basis and dimension , Co-ordinates.	1 hour	22-04-24 to 27-04-24	Chalk and Black board
	ordered basis , Some basic properties of basis and dimension	1 hour	29-04-24 To 04-05-24	Chalk and Black board
	Subspace spanned by given set of vectors;	1 hour	06-05-24 to 11-05-24	Chalk and Black board
	Quotient space- theorems and examples	1 hour	13-05-24 to 18-05-24	Chalk and Black board
	Revision class with conclusion of syllabus.	1 hour	20-05-24 to 25-05-24	Chalk and Black board

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Course Plan of Odd Semester 2023-24

Department : Biotechnology
Title of the Paper : Biomolecules [Course Code – 222359]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Ms. Gagantara
Total Hrs: 14 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
UNIT-I **Carbohydrates and Amino acids, peptides and proteins** **(14 hours)**	**Lesson plan discussion** **Carbohydrates:** Introduction	2 hours	11-09-23 16-09-23	Introduction class Course Outcomes of the units
	Carbohydrates: classification of carbohydrates. Structure, function and properties of carbohydrates. Monosaccharides- Isomerism and ring structure	2 hours	23-09-23 25-09-23	Lecture and ICT teaching
	Sugar derivatives – amino sugars and ascorbic acid. Disaccharides – Maltose, Lactose and Sucrose	1 hours	30-09-23 07-10-23	Lecture and ICT teaching
	Polysaccharides – Classification as homo and heteropolysaccharides.	2 hours	09-10-23	Lecture and ICT teaching

	Homopolysaccharides - storage polysaccharides (starch and glycogen-structure, reaction and properties		12-10-23	
	Structural polysaccharides (cellulose and chitin-structure, properties). Heteropolysaccharides - glycoproteins and proteoglycans (structure and functions).	2 hours	16-10-23 18-10-23	Lecture and ICT teaching
	b) Amino Acids, Peptides and Proteins: Introduction, classification Structure of amino acids.	1 hours	21-10-23 25-10-23	22-03-23 C1 Practical Internal Test
	Concept of – Zwitterion, isoelectric point, pKa values. Essential and nonessential amino acids. Peptide bond and peptide	2 hours	30-10-23 31-10-23	27-03-24 Practical test marks displayed on the notice board **One special class**
	Structural organization of proteins [primary, secondary (α, beta, tertiary and quaternary]. Fibrous and globular proteins Denaturation and renaturation of proteins	2 hours	04/11/2023 06/11/2023	Lecture and ICT teaching. **One special class**
	Unit-I	1 Hour	15.11.2023 18.11.2023	C1 Internal Test

Department : Biotechnology
Title of the Paper : Biomolecules [Course Code – 222359]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Ms. Gagantara
Total Hrs: 14 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
Unit II **Lipids and Enzymes** **(14hrs)**	**Lipids**: Classification and function of lipids. Saturated and unsaturated fatty acids properties (saponification value, acid value, iodine number, rancidity)	2 hours	11-09-23 16-09-23	Lecture and ICT teaching 23/11/2023 Display of C1 Internal Test marks on the notice board
	Hydrogenation of fats and oils. General structure and biological functions of - phospholipids	2 hours	23-09-23 25-09-23	Lecture and ICT teaching **One special class**
	Sphingolipids, glycolipids, lipoproteins, prostaglandins, cholesterol, ergosterol. **b)** Enzymes Introduction, nomenclature and classification.Enzyme kinetics: Enzyme activity, specific activity.	2 hours	30-09-23 07-10-23	03-05-24 C2 Practical test **One special class**
	. Factors influencing enzyme activity	2 hours	09-10-23	09-05-24

	metalloenzymes, activation energy and transition state.		12-10-23	Display of C2 Practical test marks on the notice board
	Cofactors, Coenzymes and their functions (one reaction involving TPP, FAD, NAD)	2 hours	16-10-23 18-10-23	Chalk and Black board
	Enzyme inhibition- Irreversible and reversible (competitive, non-competitive and uncompetitive inhibition with an example each)	2 hours	21-10-23 25-10-23	Chalk and Black board
	Zymogens, Isozymes	1 hours	30-10-23	Chalk and Black board
	Revision and Conclusion of Syllabus with Question paper solving.	1 hours	04/11/2023	Chalk and Black board
	Unit-II	1 Hour	15.11.2023 to 18.11.2023	C1 Internal Test

Department : Biotechnology
Title of the Paper : Biomolecules [Course Code – 222359]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Ms. Priyanka Shenoy
Total Hrs: 14 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT-III **Vitamins, Nucleic acids, Hormones** (14 hours)	**Vitamins: Water and fat soluble vitamins, dietary source and biological role of vitamins.**	2 hours	15/09/2023 22/09/2023	Introduction class Course Outcomes of the units
	Deficiency manifestation of vitamin A, B, C, D, E and K	2 hours	26/09/2023 29/09/2023	Chalk and Black board
	b) Nucleic acids: Structure of nucleosides, nucleotides in DNA and RNA. Structure and functions of DNA and RNA	2 hours	06/10/2023 13/10/2023	Chalk and Black board
	Watson and Crick model of DNA and other forms of DNA (A and Z). Types of RNA (rRNA, tRNA, mRNA, snRNA, hnRNA, miRNA),	3 hours	25/10/2023 to 27/10/2023	Chalk and Black board
	Ribozymes. **c) Hormones:** Classification of hormones based on chemical nature Mechanism of action of hormones	3 hours	03/11/2023 to 10/11/2023	Chalk and Black board
	Chemical structure and functions of Glucagon, insulin, Epinephrine, Testosterone and Estradiol	2 hours	24/11/2023 01/12/2023	27-03-24 Display of C1 Internal test marks on the notice board.

	C2 Internal Test Unit-III & Unit – IV **Theory Assignment**	01 Week	10-12-23 to 15-12-23	C2 Internal Test(Assignment) Submission of Theory Assignments

Department : Biotechnology
Title of the Paper : Biomolecules [Course Code – 222359]
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Dr. Anjani
Total Hrs: 14 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT-IV Bioanalytical Tools (14 hours)	**Electrophoresis:**Principle, procedure Applications of electrophoresis (paper electrophoresis) Gel electrophoresis –PAGE	3 hours	15/09/2023 22/09/2023	Introduction class Course Outcomes of the units
	SDS- PAGE & agarose electrophoresis. Isoelectric focusing	2 hours	26/09/2023 29/09/2023	Chalk and Black board
	b) Spectroscopy: Colorimetry, UV-Vis spectrophotometry Spectrofluorimetry,	2 hours	06/10/2023 13/10/2023	Chalk and Black board
	IR and NMR spectroscopy, Atomic absorption spectroscopy Mass spectroscopy	2 hours	25/10/2023 27/10/2023	Chalk and Black board
	Radioisotope techniques: Radioactivity Half life, radioisotopes GM counter	3 hours	03/11/2023 to 10/11/2023	Chalk and Black board
	Scintillating counting Autoradiography, applications, Biosafety	2 hours	24/11/2023 01/12/2023	27-03-24 Display of C1 Internal test marks on the notice board.

	C2 Internal Test Unit-III & Unit – IV **Theory Assignment**	01 Week	10-12-23 to 15-12-23	C2 Internal Test(Assignment) Submission of Theory Assignments

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Course Plan of Odd Semester 2023-24

Department: Biotechnology
Title of the Paper: Cell Biology and Genetics (Theory) **[Course Code –** 212159**]**
Term Period: 11.09.2023 to 16.12.2023
C1 internal test: 15.11.2023 to 18.11.2023
C2 internal test: 10.12.2023 to 15.10.2023

Faculty Name: Ms. Gagantaara
Total Hrs: 18 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit I (14 hours)	Lesson plan and introduction	1 hour	11-09-2023	POs and Course Outcomes of the units discussed
	Cell as a Basic unit of Living Systems and Cellular Organelles Concept, development and scope of biotechnology Historical perspectives. Discovery of cell, the cell theory. Ultra structure of a eukaryotic cell- plant cell Ultra structure of a eukaryotic cell animal cell.	3 hours	12-09-2023 to 20-09-2023	Lecture and ICT teaching
	Surface Architecture: Structural organization plasma membrane Functions of plasma membrane Cell wall of bacteria and plants	2 hours	21-09-2023 to 27-09-2023	Lecture and ICT teaching
	Cellular Organelles: Structure and functions of cell organelles – Endoplasmic reticulum, Golgi complex, Mitochondria, Chloroplast, Ribosomes, Lysosomes, Peroxisomes, Nucleus, Nuclear envelope with nuclear pore complex, Nucleolus, Nucleoplasm and Chromatin Vacuole, Cytosol and Cytoskeleton structures,	8 hours	29-09-2023 to 06-10-2023	Lecture and ICT teaching

	Microtubules Microfilaments and Intermediate filaments).			

Unit II (4 hours)	Chromosomes and Cell Division General introduction	1 hour	09-10-2023	Lecture and ICT teaching
	Discovery, morphology and structural organization – Centromere, Secondary constriction, telomere, chromonema Euchromatin and heterochromatin	3 hours	11-10-2023 to 19-10-2023	Lecture and ICT teaching

Faculty Name: Dr. Anjani
Total Hrs: 19 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit II (10 hours)	Chemical composition and karyotype, Single-stranded and multi-stranded hypothesis- folded fiber Nucleosome models Special type of chromosomes: Salivary gland and lampbrush chromosomes.	4 hours	13-09-2023 to 22-09-2023	Lecture and ICT teaching
	Cell Division: Cell cycle, phases of cell cycle Regulation of cell cycles cell cycle checkpoints Enzymes involved in regulation Significance of cell cycle, interphase nucleus,	4 hours	26-09-2023 to 10-10-2023	Lecture and ICT teaching
	Cell senescence and programmed cell death.	2 hours	12-10-2023 to 16-10-23	Lecture and ICT teaching

Unit III (9 hours)	**History of genetics:** Introduction and brief history of genetics. Mendelian theory: Laws of inheritance- dominance, Segregation, Incomplete dominance, Co dominance with an example Law of independent assortment, test cross, back cross.	5 hours	17-10-2023 to 28-10-2023	Lecture and ICT teaching
	Gene interaction: Deviations to Mendelian inheritance Supplementary factors: comb pattern in fowls Complementary genes- Flower colour in sweet peas Multiple factors–Skin colour in human beings	4 hours	30-10-2023 to 09-11-2023	Lecture and ICT teaching

Faculty Name: Dr. Priyanka Shenoy N
Total Hrs: 19 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit III (5 hours)	**Gene interaction:** Epistasis–Plumage color in poultry (13:3	1 hour	13-09-2024	Lecture and ICT Teaching
	Multiple allelism: Blood groups in Humans- ABO and Rh.	1 hour	20-09-2023	Lecture and ICT Teaching
	Maternal Inheritance: Plastid inheritance in Mirabilis**,** petite characters in yeast and Kappa particles in paramecium, Sex-linked inheritance - Colour blindness, hemophilia, Y-linked traits	3 hours	22-09-2023 to 06-10-2023	Lecture and ICT Teaching
Unit IV (14 hours)	**Mutations:** Types of mutations, spontaneous and induced. Mutagens: Physical mutagens. Chemical mutagens. Mutation at the molecular level, application of mutation-plants Mutation at the molecular level,	5 hours	10-10-2023 to 27-10-2023	Lecture and ICT Teaching

	application of mutation animals and microbesons: Types of mutations, spontaneous and induced.			
	Chromosomal variations: A general account of structural and numerical aberrations Chromosomal evolution of wheat and cotton	2 hours	02-11-2023 to 13-11-2024	Lecture and ICT Teaching
	Linkage and Crossing Over Introduction, Chromosome theory of inheritance, Coupling and repulsion hypothesis, Linkage in maize and Drosophila Mechanism of crossing over and its importance, chromosome mapping-linkage map in maize.	6 hours	21-11-2023 to 08-12-2023	Lecture and ICT Teaching
	Revision lecture	1 hour	16-12-2023	Lecture and ICT Teaching

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Course Plan of Odd Semester 2023-24

Department: Biotechnology
Title of the Paper: Genetic Engineering (Theory) **[Course Code – 232559]**
Term Period: 11.09.2023 to 16.12.2023
C1 internal test: 15.11.2023 to 18.11.2023
C2 internal test: 10.12.2023 to 15.12.2023
Faculty Name: Ms. Gagantaara
Total Hrs: 20 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit I (15 hours)	Lesson plan and introduction	1 hour	11-09-2023	POs and Course Outcomes of the units discussed
	Definition, scope, and historical overview of genetic engineering.	1 hour	14-09-2023	Lecture and ICT teaching
	DNA Structure and Manipulation - Techniques for DNA isolation Techniques for DNA purification Methods for quantification of DNA samples Characterization of DNA samples.	3 hours	21-09-2023 to 27-09-2023	Lecture and ICT teaching
	RNA Analysis and Gene Expression- Methods for RNA isolation RNA purification Analysis of gene expression	3 hours	05-10-2023 to 12-10-2023	Lecture and ICT teaching
	Recombinant DNA technology – Introduction to molecular cloning Overview of cloning vectors. Plasmids, phage, cosmid, BAC, and YAC. Features and applications of cloning vectors in genetic engineering.	3 hours	16-10-2023 to 19-10-2023	Lecture and ICT teaching

	Enzymes used in recombinant DNA technology: Restriction endonucleases Polymerases, Ligase, kinases, and phosphatases.	2 hours	26-10-2023 to 28-10-2023	Lecture and ICT teaching
	Techniques for molecular cloning of DNA or RNA fragments in bacterial Cloning of DNA or RNA fragments in eukaryotic systems	2 hours	30-10-2023 to 31-10-2023	Lecture and ICT teaching
Unit II (5 hours)	Recombinant Protein Expression and Purifications. Affinity tag	2 hours	02-11-2023 to 04-11-2023	Lecture and ICT teaching
	Techniques for expressing recombinant proteins using bacterial Techniques for expressing recombinant proteins using animal, and plant expression systems.	2 hours	06-11-2023 to 08-11-2023	Lecture and ICT teaching
	Strategies for protein purification and characterization.	1 hour	13-11-2024	Lecture and ICT teaching

Faculty Name: Dr. Anjani
Total Hrs: 20 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit II (10 hours)	Hybridization techniques, Southern, Northern, Western, FISH Polymerase Chain Reaction (PCR) and its types Molecular probes	3 hours	12-09-2023 to 19-09-2023	Lecture and ICT teaching
	DNA sequencing- Sanger's, Next Generation Sequencing	1 hour	25-09-2023	Lecture and ICT teaching

	Gene Manipulation Techniques - Methods of gene delivery. Physical methods (electroporation, micro-injection, gene gun) Chemical methods (liposome mediated, Calcium phosphate) Biological methods (Transformation, transfection)	3 hours	26-09-2023 to 06-10-2023	Lecture and ICT teaching
	Gene knockout techniques in bacterial and eukaryotic organisms.	1 hour	10-10-2023	Lecture and ICT teaching
	Genome Editing - Introduction to genome editing techniques- Principles and applications of genome editing techniques. CRISPR-Cas9, site- directed mutagenesis, and other genome editing methods.	2 hours	12-10-2023 to 18-10-2023	Lecture and ICT teaching
Unit III (10 hours)	Introduction and diverse applications of genetic engineering.	1 hour	26-10-2023	Lecture and ICT teaching
	Gene therapy Potential in treating genetic disorders Strategies for gene delivery in therapeutic applications. Diagnostic Applications	4 hours	20-11-2023 to 29-11-2023	Lecture and ICT teaching
	DNA fingerprinting and its applications in forensics. Molecular diagnostic techniques Molecular diagnostic role in disease diagnosis	5 hours	30-11-2023 to 08-12-2023	Lecture and ICT teaching

Faculty Name: Dr. Priyanka Shenoy N
Total Hrs: 20 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit III (5 hours)	Use of genetic engineering in the development of therapeutics Use of genetic engineering in vaccines Production of biopharmaceuticals using recombinant DNA technology.	5 hours	12-09-2023 to 27-09- 2023	Lecture and ICT teaching
Unit IV (15 hours)	Industrial applications of genetic engineering, such as enzyme production, Biofuel production, Bioremediation. Scale-up techniques Process optimization in industrial settings.	5 hours	03-10-2023 to 20-10-2023	Lecture and ICT teaching
	Introduction to synthetic biology Synthetic biology integration with genetic engineering Design and construction of artificial biological systems	3 hours	25-10-2023 to 06-11-2023	Lecture and ICT teaching
	Ethical and Regulatory Considerations Discussion of ethical implications associated with genetic engineering. Introduction to regulatory guidelines Safety considerations for genetic engineering research Genetic engineering research applications	7 hours	20-11-2023 to 08-12-2023	Lecture and ICT teaching

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Course Plan of Odd Semester 2023-24

Department: Biotechnology
Title of the Paper: Plant and Animal Biotechnology(Theory) **[Course Code –** 232560**]**
Term Period: 11.09.2023 to 16.12.2023
C1 Internal test: 15.11.2023 to 18.11.2023
C2 Internal test: 10.12.2023 to 15.12.2023

Faculty Name: Ms. Gagantaara
Total Hrs: 20 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit I (15 hours)	Lesson plan and introduction	1 hour	11-09-2023	POs and Course Outcomes of the units discussed
	Introduction, principle, history, definition, hypothesis of plant tissue culture, Cellular totipotency, Media and laboratory organization	3 hours	12-09-2023 to 19-09-2023	Lecture and ICT teaching
	Types of culture; callus culture, seed culture, embryo culture, meristem culture, bud culture Culture limitations and applications	2 hours	20-09-2023 to 26-09-2023	Lecture and ICT teaching
	Concept of morphogenesis, differentiation, Direct, indirect organogenesis, Somatic embryogenesis, synthetic seeds	3 hours	27-10-2023 to 04-10-2023	Lecture and ICT teaching
	In vitro propagation Micropropagation Secondary metabolites, In vitro secondary metabolite production Suspension cultures, cell cultures Growth vs secondary metabolite production	5 hours	10-10-2023 to 26-10-2023	Lecture and ICT teaching

	Bioreactors and scaling up of secondary metabolite production Limitations and applications	1 hour	31-10-2023 to 02-11-2023	Lecture and ICT teaching
Unit II (5 hours)	Overview of transgenic plants and their significance in agriculture.	1 hour	03-11-2023	Lecture and ICT teaching
	Techniques for introducing foreign genes into plants: Agrobacterium mediated transformation Biolistics, and other methods. Selection and screening of transformed plants	4 hours	05-11-2023 to 13-11-2023	Lecture and ICT teaching

Faculty Name: Dr. Anjani
Total Hrs: 20 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit II (10 hours)	Applications of Transgenic Plants - Improved crop traits through genetic engineering: pest resistance, Herbicide tolerance, disease resistance, and abiotic stress tolerance	4 hours	12-09-2023 to 21-09-2023	Lecture and ICT teaching
	Biosafety assessment of transgenic plants: potential risks and benefits	2 hours	26-09-2023 to 03-10-2023	Lecture and ICT teaching
	International regulatory frameworks for releasing and commercializing genetically modified organisms (GMOs). Ethical and socio-economic impacts of transgenic crops. Intellectual property rights and access to transgenic technologies	4 hours	05-10-2023 to 25-10-2023	Lecture and ICT teaching

Unit III (10 hours)	History and laboratory organization Types of Media (Natural media, artificial media, serum free media, chemically defined media and protein free media). Cell types and culture characters	2 hours	30-10-2023 to 06-11-2023	Lecture and ICT teaching
	Trans differentiation, Reprogramming Biology and characterization of cultured cells- cell adhesion, proliferation, differentiation, morphology of cells, and identification.	3 hours	08-11-2023 to 17-11-2023	Lecture and ICT teaching
	The basic technique of mammalian cell culture in vitro	2 hours	20-11-2023 to 29-11-2023	Lecture and ICT teaching
	Measuring parameters of growth in cultured cells (Lag phase, log phase, and plateau phase) cell viability, and cytotoxicity Large-scale culture of cell lines- monolayer, suspension, and immobilized cultures.	3 hours	30-11-2023 to 05-12-2023	Lecture and ICT teaching

Faculty Name: Dr. Priyanka Shenoy N
Total Hrs: 20 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit III (5 hours)	Organ and histotypic culture: Technique, advantages, limitations and applications	2 hours	15-09-2023 to 21-09-2023	Lecture and ICT teaching
	Stem cells: types (embryonic, adult, induced pluripotent) Isolation, identification, expansion, differentiation and uses Stem cell engineering and ethical issues.	3 hours	25-09-2023 to 06-10-2023	Lecture and ICT teaching

Unit IV (15 hours)	Gene constructs promoter/ enhancer sequences for transgene expression in animals. Selectable markers for animal cells- thymidine kinase.	2 hours	10-10-2023 to 18-10-2023	Lecture and ICT teaching
	Transfection of animal cells- calcium phosphate coprecipitation, electroporation, lipofection, peptides, direct DNA transfer, viral vectors, Retrovirus, microinjection.	3 hours	25-10-2023 to 03-11-2023	Lecture and ICT teaching
	Transgene identification methods. Transgenic and genome-edited animals Ethical issues in transgenesis Recent advances and applications in the field.	3 hours	09-11-2023 to 21-11-2023	Lecture and ICT teaching
	Manipulation of animal reproduction and characterization of animal genes	2 hours	23-11-2023 to 30-11-2023	Lecture and ICT teaching
	Embryo transfer in cattle and applications	2 hours	01-12-2023 to 04-12-2023	Lecture and ICT teaching
	Somatic cell cloning - cloning of Dolly, Ethical issues.	1 hour	07-12-2023	Lecture and ICT teaching
	Production of recombinant vaccines.	1 hour	09-12-2023	Lecture and ICT teaching
	Revision class	1 hour	16-12-2023	Lecture and ICT teaching

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Course Plan of Even Semester 2024-25

Department : Biotechnology
Title of the Paper : Bioprocess and Environmental Biotechnology (Theory)
[Course Code 232660]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Ms.Amulya S
Total Hrs: 15 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
UNIT-I **Introduction to Bioprocess technology** **(15 hours)**	**Lesson plan discussion** Introduction to bioprocess technology	2 hours	12/02/2024 14/02/2024	Introduction class Course Outcomes of the units
	Basic principle components of fermentation technology	2 hours	17/02/2024 21/03/2024	Lecture and ICT teaching
	Strain improvement of industrially important microorganisms. Types of microbial culture	2 hours	24/02/2024 26/02/2024	Lecture and ICT teaching
	growth kinetics– Batch Fed-batch	2 hours	28/02/2024 02/03/2024	Lecture and ICT teaching

	Continuous culture. Principles of upstream processing.	2 hours	06/03/2024 09/03/2024	Lecture and ICT teaching
	Media preparation Inoculum development	2 hours	13/03/2024 16/03/2024	Lecture and ICT teaching
	sterilization	2 hours	20/03/2024 23/03/2024	Lecture and ICT teaching **One special class**
	Revision	1 hours	23/03/2024	Lecture and ICT teaching. **One special class**
Unit-I	C1 Internal test	1 Hour	16.04.2024 to 20.04.2024	C1 Internal Test

Department : Biotechnology
Title of the Paper : Bioprocess and Environmental Biotechnology (Theory)
[Course Code 232660]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Ms.Amulya S
Total Hrs: 15 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
UNIT-II **Bioreactors and downstream processing** **(15 hours)**	Bioreactors and downstream processing Bioreactors- Significance of Impeller, Baffles, Sparger;	2 hours	27/03/2024 30/03/2024	Introduction class Course Outcomes of the units
	Specialized bioreactors- design and their functions Airlift bioreactor,	2 hours	03/04/2024 06/04/2024	C1 practical internal test Lecture and ICT teaching
	tubular bioreactors Membrane bioreactors, tower bioreactors	2 hours	10/04/2024 13/04/2024	Lecture and ICT teaching
	Fluidized bed reactor, packed bed reactors Downstream processing- cell disruption, precipitation methods, solid-liquid separation	2 hours	24/04/2024 27/04/2024	Lecture and ICT teaching

	Liquid-liquid extraction Filtration, centrifugation.	2 hours	01/05/2024 04/05/2024	Lecture and ICT teaching
	Chromatography, drying devices (Lyophilization and spray dry technology) Crystallization, biosensors construction and applications	2 hours	08/05/2024 11/05/2024	Lecture and ICT teaching
	Microbial production of ethanol Amylase production	2 hours	15/05/2024 18/05/2024	Lecture and ICT teaching **One special class**
	Single Cell Proteins production Revision class	1 hours	22/05/2024	Lecture and ICT teaching. **One special class**
Unit-II	C1 Internal test	1 Hour	16.04.2024 to 20.04.2024	C1 Internal Test

Department : Biotechnology
Title of the Paper : Bioprocess and Environmental Biotechnology (Theory)
[Course Code 232660]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr Anjani
Total Hrs: 15 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
UNIT-III **Fundamentals of Environmental Biotechnology** **(15 hours)**	Fundamentals of Environmental Biotechnology Introduction to Environmental Biotechnology- Principles of Environmental Science.	2 hours	15/02/2024 22/02/2024	Introduction class Course Outcomes of the units
	Role of Biotechnology in Environmental Conservation. Microbial Processes in Environmental Biotechnology.	2 hours	29/02/2024 07/03/2024	Lecture and ICT teaching
	Pollution and Biotechnology – Major issues in environmental pollution Role of biotechnology in addressing them.	2 hours	14/03/2024 21/03/2024	Lecture and ICT teaching
	Biotechnological Methods of Pollution environmental pollution General bioassay methods for pollution detection.	2 hours	28/03/2024 04/04/2024	Lecture and ICT teaching
	Cell biological methods for assessing pollution levels.	2 hours	25/05/2024 02/05/2024	Lecture and ICT teaching

	Use of biosensors in pollution monitoring. Biotechnological Methods in Pollution Abatement	2 hours	09/05/2024 11/05/2024	C2 Practical internal test Lecture and ICT teaching
	Reduction of CO2 emission using biotechnological approaches Addressing eutrophication through biotechnological interventions	2 hours	16/05/2024 23/05/2024	Lecture and ICT teaching **One special class**
	Application of cell immobilization techniques in pollution abatement	1 hours	13/05/2024	Lecture and ICT teaching.
C2 Internal Test (UnitIII)	01 Week	01/05/2024 To 07/05/2024	C2 Internal Test(Theory Assignment)	**C2 Internal Test (Unit III)** **Submission of theory Assignment.**

Department : Biotechnology
Title of the Paper : Bioprocess and Environmental Biotechnology (Theory)
[Course Code 232660]
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Ms Priyanka Shenoy N
Total Hrs: 15 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of deployment
UNIT-IV **Bioremediation and Waste management** **(15 hours)**	Bioremediation and Waste Management Importance of bioremediation in environmental cleanup.	2 hours	15/02/2024 20/02/2024	Introduction class Course Outcomes of the units
	Types of contaminants suitable for bioremediation. Microorganisms used in bioremediation.	2 hours	22/02/2024 27/02/2024	Lecture and ICT teaching
	In-situ Bioremediation Methods. – Bioaugmentation. Biostimulation.	2 hours	29/02/2024 05/03/2024	Lecture and ICT teaching
	Bioventing. Phytoremediation.	2 hours	07/03/2024 12/03/2024	Lecture and ICT teaching
	Ex-situ Bioremediation Methods – Composting, Land farming, Biopile and bioslurry systems. Xenobiotics.	2 hours	14/03/2024 19/03/2024	Lecture and ICT teaching

	Bio metallurgy and biomining, Waste water Management Waste water Characterization and Composition.	2 hours	21/03/2024 26/03/2024	Lecture and ICT teaching
	Biological Processes in Waste water Treatment. Activated Sludge Process and Biological Nutrient Removal	2 hours	28/03/2024 23/05/2024	Lecture and ICT teaching **One special class**
	Anaerobic Digestion and Biogas Production. Solid Waste Management.	1 hours	25/05/2024	Lecture and ICT teaching.
C2 Internal Test (UnitIII)	01 Week	01/05/2024 To 07/05/2024	C2 Internal Test(Theory Assignment)	**C2 Internal Test (Unit III)** **Submission of theory Assignment.**

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Course Plan of Even Semester 2024-25

Department : Biotechnology
Title of the Paper : Molecular Biology (Theory) **[Course Code –** 222459**]**
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr, Anjani
Total Hrs: 14 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of deployment**
UNIT-I **DNA as genetic material, Replication and Repair** **(14 hours)**	**Lesson plan discussion** **DNA as genetic material, Replication and Repair:**	2 hours	12/02/2024 to 17/02/2024	Introduction class Course Outcomes of the units
	Experimental proof of DNA as genetic material Griffith's, Avery-Mcleod-McCarty, Martha-Chase Experiment	2 hours	24/02/2024 to 02/03/2024	Lecture and ICT teaching
	Central dogma, Replication of DNA in prokaryotes	2 hours	09/03/2024 to 16/03/2024	Lecture and ICT teaching
	Replication of DNA in eukaryotes	2 hours	23/03/2024 to	Lecture and ICT teaching

	Semiconservative mode (Messelson and Stalh experiment),		30/03/2024	
	Enzymes and proteins involved in replication-DNA polymerases, Theta, linear and rolling circle models.	2 hours	06/04/2024 to 13/04/2024	Lecture and ICT teaching
	Helicases, gyrases, Ligase, SSB proteins, RNAse H	1 hours	27/04/2024	Lecture and ICT teaching
	The replication complex: Pre-primming proteins, Primosome, replisome. Unique aspects of eukaryotic chromosome replication,	2 hours	11/05/2024 to 18/05/2024	**One special class**
	Fidelity of replication	1 hours	25/05/2024	Lecture and ICT teaching. **One special class**
	Unit-I	1 Hour	16.04.2024 to 20.04.2024	C1 Internal Test

Department : Biotechnology
Title of the Paper : Molecular Biology (Theory) **[Course Code –** 222459**]**
Term Period : 15.02.2024 to 25.05.2024
Faculty Name : Ms Amulya S
Total Hrs: 14 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of deployment**
UNIT-II **Transcription and RNA Processing** **(14 hours)**	**Transcription and RNA processing:** Transcription in prokaryotes. RNA polymerase,	2 hours	12/02/2024 to 15/02/2024	Introduction class Course Outcomes of the units
	Sigma factor, promoter Initiation, elongation	2 hours	19/02/2024 to 22/02/2024	Lecture and ICT teaching
	Transcription termination Transcription in eukaryotes: Eukaryotic RNA polymerases,	2 hours	26/02/2024 to 29/02/2024	Lecture and ICT teaching
	Transcription factors Promoters, enhancers	2 hours	04/03/2024 to 07/03/2024	Lecture and ICT teaching
	Promoter clearance Transcription elongation .	2 hours	11/03/2024 to 14/03/2024	Lecture and ICT teaching

	Transcription termination.	1 hours	18/03/2024	
	RNA processing of pre-mRNA: 5’ cap formation,	2 hours	21/03/2024 to 25/03/2024	22-03-23 C1 Practical Internal Test **One special class**
	Polyadenylation, splicing.	1 hours	28/03/2024	Lecture and ICT teaching. 27-03-24 Practical test marks displayed on the notice board **One special class**
	Unit-II	1 Hour	16.04.2024 to 20.04.2024	C1 Internal Test

Department : Biotechnology
Title of the Paper : Molecular Biology (Theory) **[Course Code –** 222459**]**
Term Period : 15.02.2024 to 25.05.2024
Faculty Name : Ms Amulya S
Total Hrs: 14 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of deployment**
UNIT-III **Translation** **(14 hours)**	**Translation:** Genetic code and its characteristics Wobble hypothesis.	2 hours	01/04/2024 to 04/04/2024	Introduction class Course Outcomes of the units
	Translation- in prokaryotes Translation eukaryotes- ribosomes, enzymes	2 hours	08/04/2024 to 15/04/2024	Lecture and ICT teaching
	Factors involved in translation Activation of amino acids	2 hours	22/04/2024 to 25/04/2024	Lecture and ICT teaching
	Aminoacyl tRNA synthetases. Mechanism of translation- initiation, elongation	3 hours	29/04/2024 to 02/05/2024	Lecture and ICT teaching
	Termination of polypeptide chain. Fidelity of translation,	1 hours	09/05/2024	Lecture and ICT teaching

	Inhibitors of translation Chloramphenicol	1 hours	13/05/2024	Lecture and ICT teaching.
	Inhibitors of translation Tetracycline Post translational modifications of proteins Phophorylation	2 hours	16/05/2024 to 20/05/2024	Lecture and ICT teaching. **One special class**
	Post translational modifications Methylation	1 hours	23/05/2024	Lecture and ICT teaching. **One special class**
Unit III and IV	**C2 Internal Test** C2 Internal Test(Assignment)	01 Week	01/05/2024 To 07/05/2024	**C2 Internal Test Unit III and IV**

Department : Biotechnology
Title of the Paper : Molecular Biology (Theory) **[Course Code –** 222459**]**
Term Period : 15.02.2024 to 25.05.2024
Faculty Name : Ms Priyanka Shenoy N
Total Hrs: 14 Hours

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of deployment**
UNIT-IV **Regulation of gene expression** **(14 hours)**	**Regulation of gene expression:** Prokaryotic gene regulation- operon concept Regulation of *lac* operon	2 hours	01/04/2024 to 04/04/2024	Introduction class Course Outcomes of the units
	Regulation of *trp* operon Attenuation control.	2 hours	08/04/2024 to 15/04/2024	Lecture and ICT teaching
	Eukaryotic gene regulation- Activators, Repressors binding to enhancers	2 hours	22/04/2024 to 25/04/2024	Lecture and ICT teaching
	coordinated control (tissue specific gene expression), DNA methylation,	3 hours	29/04/2024 to 02/05/2024	Lecture and ICT teaching
	chromatin remodeling,	1 hours	09/05/2024	Lecture and ICT teaching

	Translational control of gene expression-ferritin mRNA regulation,			
	Inhibitors of translation Chloramphenicol	1 hours	13/05/2024	Lecture and ICT teaching.
	Inhibitors of translation Tetracycline RNAi	2 hours	16/05/2024 to 20/05/2024	Lecture and ICT teaching. **One special class**
	miRNA, siRNA.	1 hours	23/05/2024	Lecture and ICT teaching. **One special class**
Unit III and IV	**C2 Internal Test** C2 Internal Test(Assignment)	01 Week	01/05/2024 To 07/05/2024	**C2 Internal Test Unit III and IV**

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Course Plan of Even Semester 2024-25

Department: Biotechnology
Title of the Paper: Microbiological Methods (Theory) **[Course Code – 212259]**
Term Period: 12.02.2024 to 25.05.2024
C1 Internal test: 16.04.2024 to 20.04.2024
C2 Internal test: 01.05.2024 to 07.05.2024

Faculty Name: Ms. Amulya
Total Hrs: 19 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit I (14 hours)	Lesson plan and introduction	1 hour	12-02-2024	POs and Course Outcomes of the units discussed
	General Microbiology and Instrumentation: General Introduction to Microbiology, Scope and relevance of microbiology Important contributions by Robert Koch, Leeuwenhoek, Jenner, Pasteur, Flemming, Ivanowsky.	2 hours	13-02-2023 to 17-02-2023	Lecture and ICT teaching
	General account on structure, classification and reproduction of bacteria Structure, classification and reproduction of virus and fungi	2 hours	20-02-2023 to 26-02-2023	Lecture and ICT teaching
	Microscopy: Principles and applications of Compound microscope, Dark field microscope, Phase contrast microscope, Fluorescence Microscope, Confocal microscope, Electron Microscopes-TEM and SEM.	4 hours	28-02-2023 to 12-03-2023	Lecture and ICT teaching

	Analytical techniques: Working principles and applications: Centrifuge, Ultracentrifuge, Spectrophotometer, Chromatography: Paper, TLC, Column (adsorption, gel-filtration) Column (ion exchange, affinity) HPLC, GC.	5 hours	14-03-2024 to 27-03-2024	Lecture and ICT teaching
Unit II (5 hours)	Definition of terms-Sterilization, Disinfectant Antiseptic, Sanitizer, Germicide, Microbicidal agents, Micro biostatic agent and antimicrobial agent.	5 hours	02-04-2024 to 10-04-2024	Lecture and ICT teaching

Faculty Name: Dr. Anjani
Total Hrs: 18 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit II (9 hours)	**Physical methods of control:** Principle, construction and applications of Moist heat sterilization- Pasteurization**,** Boiling, Fractional sterilization-Tyndallization and autoclave.	2 hours	13-02-2024 to 20-02-2024	Lecture and ICT teaching
	Dry heat sterilization-Incineration and hot air oven.	1 hour	22-02-2024	Lecture and ICT teaching
	Filtration – Diatomaceous earth filter, seitz filter, Membrane filter, HEPA filter	1 hour	29-02-2024	Lecture and ICT teaching
	Radiation: Ionizing radiation-**γ** rays, non-ionizing radiation- UV rays	1 hour	04-03-2024	Lecture and ICT teaching
	Chemical methods: Alcohol, aldehydes, Phenols, halogen, Metallic salts, quaternary ammonium compounds, Sterilizing gases as antimicrobial agents.	4 hours	05-03-2024 to 20-03-2024	Lecture and ICT teaching

Unit III (9 hours)	**Culture Media:** Components of media Natural and synthetic media, chemically defined media, Complex media, Selective, Differential, indicator, Enriched and enrichment media.	4 hours	22-03-2024 to 08-04-2024	Lecture and ICT teaching
	Pure culture methods: Serial dilution Plating methods (pour, spread, streak) Cultivation, Maintenance, Preservation/stocking of pure cultures Cultivation of anaerobic bacteria	5 hours	12-04-2024 to 22-04-2024	Lecture and ICT teaching

Faculty Name: Dr. Priyanka Shenoy N
Total Hrs: 19 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hour required to complete	Date	Method of Deployment and Remarks
Unit III (5 hours)	**Microbial growth and its measurements:** Growth curve, Enumeration methods (turbidity, cell counting, Colony counting	3 hours	16-02-2024 to 27-02-2024	Lecture and ICT teaching
	Stains and staining techniques: Principles of staining, Types of stains simple stains	2 hours	02-03-2024 to 12-03-2024	Lecture and ICT teaching
Unit IV (14 hours)	**Antimicrobial Agents**	1 hour	15-03-2024	Lecture and ICT teaching
	Antibiotic sensitivity testing methods: Disc diffusion techniques, Agar well diffusion techniques	2 hours	23-03-2024 to 28-03-2024	Lecture and ICT teaching

	Five modes of action with one example each: Inhibitor of nucleic acid synthesis; Inhibitor of cell wall synthesis; Inhibitor of cell membrane function; Inhibitor of protein synthesis; Inhibitor of metabolism.	5 hours	01-04-2024 to 15-04-2024	Lecture and ICT teaching
	Antifungal agents: Mechanism of action of Amphotericin B, Mechanism of action of Griseofulvin	2 hours	22-04-2024 to 30-04-2024	Lecture and ICT teaching
	Antiviral agents: Mechanism of action of Amantadine, Mechanism of action of Acyclovir, Mechanism of action of Azidothymidine, Antibiotic resistance, MDR, XDR, MRSA, NDM	4 hours	10-05-2024 to 25-05-2024	Lecture and ICT teaching

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Course Plan of Even Semester 2024-25

Department: Biotechnology
Title of the Paper: Immunology (Theory) [Course Code – 232659]
Term Period: 12.02.2024 to 25.05.2024
C1 Internals: 16.04.2024 to 20.04.2024
C2 Internals: 01.05.2024 to 07.05.2024

Faculty Name: Ms. Amulya
Total Hrs: 20 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I (15 hours)	Lesson plan discussion	1 hour	12-02-2023	POs and Course Outcomes of the units discussed
	Introduction to the Immune System History of Immunology	2 hours	13-02-2023 to 17-02-2023	Lecture and ICT teaching
	Types of Immunity: first and second line of defense, innate and acquired/adaptive immunity, Specificity, diversity	3 hours	20-02-2023 to 26-02-2023	Lecture and ICT teaching
	Cells of the immune system: Antigen presenting cells (APCs) Role of B and T-lymphocytes in Humoral immunity, Cell-mediated immunity Primary and secondary immune response, Immunization, memory.	6 hours	28-02-2023 to 12-03-2023	Lecture and ICT teaching
	Organs of the Immune system: Thymus, bone marrow, spleen, Lymph Node, Peripheral lymphoid organs	3 hours	14-03-2024 to 27-03-2024	Lecture and ICT teaching

Unit II (5 hours)	Antigens and haptens Properties (foreignness, molecular size, heterogeneity). Adjuvants, Antigenicity and Immunogenicity. Affinity and Avidity	4 hours	02-04-2024 to 10-04-2024	Lecture and ICT teaching
	B and T cell epitopes, Superantigens	1 hour	12-04-2024	Lecture and ICT teaching

Faculty Name: Dr. Anjani
Total Hrs: 20 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit II (10 hours)	Immunoglobulins: Classification, structure, and function. Antibody diversity Monoclonal and polyclonal antibodies	3 hours	13-02-2024 to 20-02-2024	Lecture and ICT teaching
	Major histocompatibility complexes: Classification, structure, and function.	2 hours	23-02-2024 to 29-02-2024	Lecture and ICT teaching
	Antigen processing pathways – Cytosolic and Endocytic, Complement Pathways	2 hours	04-03-2024 to 08-03-2024	Lecture and ICT teaching
	Cytokines: Classification and function	1 hour	13-03-2024	Lecture and ICT teaching
	Hypersensitivity: Reactions – Types I, II, III Delayed Type Hypersensitive Response.	2 hours	16-03-2024 to 27-03-2024	Lecture and ICT teaching
Unit III (10 hours)	Structure of antigens properties of antigens- iso- and allo-antigens, antigen specificity, Cross-reactivity, Precipitation	5 hours	02-04-2024 to 15-04-2024	Lecture and ICT teaching
	Ouchterlony double diffusion	1 hour	23-04-2024	Lecture and ICT teaching
	Immunoelectrophoresis	1 hour	29-04-2024	Lecture and ICT teaching
	Agglutination: Agglutination reactions.	1 hour	09-05-2024	Lecture and ICT teaching
	ELISA	1 hour	14-05-2024	Lecture and ICT teaching
	RIA	1 hour	17-05-2024	Lecture and ICT teaching

Faculty Name: Dr. Priyanka Shenoy N
Total Hrs: 20 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit III (5 hours)	Immunocytochemistry	2 hours	16-02-2024 to 27-02-2024	Lecture and ICT teaching
	Fluorescent Techniques	2 hours	02-03-2024 to 12-03-2024	Lecture and ICT teaching
	Immunodiffusion reactions: Radial immunodiffusion,	1 hour	15-03-2024	Lecture and ICT teaching
Unit IV (15 hours)	Transplantation immunology: Phases in graft rejection, immunosuppressors.	1 hour	23-03-2024	Lecture and ICT teaching
	Autoimmune Disorders: Systemic Organ-specific Autoimmune disorders with examples	2 hours	28-03-2024 to 01-04-2024	Lecture and ICT teaching
	Immunodeficiencies: Primary immunodeficiencies Secondary immunodeficiencies; Acquired immunodeficiency syndrome PIDD-SCID	3 hours	01-04-2024 to 15-04-2024	Lecture and ICT teaching
	X-Linked agammaglobulinemia	1 hour	23-04-2024	Lecture and ICT teaching
	Cancer and the immune system – immune surveillance, Immunological escape, cancer antigens, cancer immunotherapy	4 hours	24-04-2024 to 30-04-2024	Lecture and ICT teaching
	Vaccines: Conventional (Killed vaccines, live attenuated vaccines, toxoids), peptide vaccines, subunit, DNA vaccines. Toxoids, antisera, edible vaccines, plantibodies, and Cancer vaccines (HPV)	4 hours	11-05-2024 to 25-05-2024	Lecture and ICT teaching

Course Plan of Odd Semester 2023-24

Department: Physics
Semester: I Semester
Title of the Paper: Mechanics and Properties of Matter [Course Code – 212129]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Gayathri V
Workload: Gayathri V - 2hr/week

Total Hrs: 28 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 (14 hours)	**Units and measurements:** System of units (CGS and SI),	2hours	11-09-2023 to 16-09-23	POs and COs discussion Class room teaching
	Measurement of length, mass and time, dimensions of physical quantities, dimensional formulae. Minimum deviation, errors.	2 hours	19-09-23 to 23-09-23	Chalk and Black board
	Momentum and Energy: Work and energy, Conservation of momentum (linear).	2hours	25-09-23 to 30-09-23	Chalk and Black board
	Conservation of energy with examples. Motion of rockets.	2hours	03-10-23 to 07-10-23	Activity taken in lab
	Special Theory of Relativity: Constancy of speed of light. Postulates of Special Theory of Relativity.	2 hours	9-10-23 to 13 -10-23	Chalk and Black board
	Length contraction. Time dilation. Relativistic addition of velocities. Numerical problems. **Activity no.1 and 2**	4hours	16-10-23 to 21-10-23	Chalk and Black board Activity in the lab
Unit 4 (06 hours)	**Surface tension:** Definition of surface tension. Surface energy, the relation between surface tension and surface energy.	2hours	25-10-23 to 27-10-23	Chalk and Black board one special class required
	The pressure difference across the curved surface example, excess pressure inside the spherical liquid drop.	2 hours	30-10-23 to 04-11-23	Chalk and Black board one special class required

	Angle of contact. Numerical problems.	2 hours	06-11-23 to 11-11-23	Chalk and Black board
Unit 1,2 and 3	**Internal test –C1**	**1 hours**	**15-11-23 to 18-11-23**	**C1 Internal Test- Theory**
Unit 4 (06 hours)	**Viscosity:** Streamline flow, turbulent flow.	2 hours	20-11-23 to 25-11-23	Chalk and Black board Marks sheet of C1 displayed on the notice board
	Equation of continuity, determination of coefficient of viscosity by Poisulle's method,	2 hours	27-11-23 to 02-12-23	Chalk and Black board
	Activity no.7 and 8	2 hours	04-12-23 to 09-12-23	Activity in the lab
Unit 1,3 and 4	**Assignment-C2**	**One week**	**05-12-2023**	**C2 Internal Assignment**
Unit 4 (02 hours)	Determination of coefficient of viscosity by Stoke's method. Numerical problems.	2 hours	11-12-23 to 16-12-23	Chalk and Black board Display of C2 Assignment marks on the notice board

Course Plan of Odd Semester 2023-24

Department: Physics
Semester: I Semester
Title of the Paper: Mechanics and Properties of Matter [Course Code – 212129]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Dr. Poornima S
Workload: Dr. Poornima S - 2hr/week

Total Hrs: 28 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 2 (14 hours)	**Laws of Motion:** Newton's Laws of motion. Dynamics of single and a system of particles.	2hours	11-09-2023 to 16-09-23	Class room teaching
	Centre of mass. Numerical problems.	1 hours	19-09-23 to 23-09-23	Chalk and Black board
	Dynamics of Rigid bodies: Rotational motion about an axis, Relation between torque and angular momentum, Rotational energy.	2hours	25-09-23 to 30-09-23	Chalk and Black board
	Moment of inertia: M I of a rectangular Lamina and solid cylinders.	1hours	03-10-23 to 07-10-23	Chalk and Black board
	Moment of inertia: Flywheel, Theory of compound pendulum and determination of g. Numerical problems.	2 hours	9-10-23 to 13 -10-23	Chalk and Black board
	Gravitation: Law of Gravitation. Motion of a particle in a central force field (motion is in a plane, angular momentum is conserved, areal velocity is constant). **Activity No.3.**	4hours	16-10-23 to 21-10-23	Chalk and Black board Activity in lab
	Kepler's laws (statements). Satellite in a circular orbit. Numerical problems. **Activity No.4**	2hours	25-10-23 to 27-10-23	Activity in lab
	Elasticity: Hooke's law - Stress-strain diagram,	2hours	30-10-23 to 04-11-23	Chalk and Black board

Unit 3 (04 hours)	**Elasticity:** elastic moduli-relation between elastic constants, Poisson's Ratio-expression for Poisson's ratio in terms of elastic constants.	2 hours	06-11-23 to 11-11-23	Chalk and Black board
Unit 1,2 and 3	**Internal test –C1**	**1 hours**	**15-11-23 to 18-11-23**	**C1 Internal Test- Theory**
Unit 3 (04 hours)	**Elasticity:** Work done in stretching and work done in twisting a wire	2 hours	20-11-23 to 25-11-23	Chalk and Black board Marks sheet of C1 displayed on the notice board
	Elasticity: Twisting couple on a cylinder.	2 hours	27-11-23 to 02-12-23	Chalk and Black board
Unit 2,3 and 4	**Practical IA test**	**3hours**	**01-12-2023**	**C1 Internal Practical test**
Unit 3 (3 hours)	**Elasticity:** Torsional pendulum-Determination of rigidity modulus and moment of inertia **Activity No.5**	3 hours	04-12-23 to 09-12-23	Chalk and Black board Activity in lab Display of C1 lab Internal Test marks on the notice board
Unit 1,3 and 4	**Assignment-C2**	**One week**	**05-12-2023**	**C2 Internal Assignment**
Unit 3 (3 hours)	**Elasticity:** q, η and σ by Searle's method. Numerical problems. **Activity No.6**	3hours	11-12-23 to 16-12-23	Chalk and Black board Activity in lab
Unit 1,2 and 3	**Practical IA test**	**3hours**	**15-12-2023**	**C2 Internal Practical test**
			16-12-23	Display of C2 lab Internal Test and Assignment marks on the notice board

Course Plan of Odd Semester 2023-24

Department: Physics
Semester: III Semester
Title of the Paper: Wave motion and Optics [Course Code – 222329]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Gayathri V
Workload: Gayathri V- 2hrs/week

Total Hrs: 28 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 Waves and Superposition of Harmonic Waves (14 hours)	**Waves:** Plane and Spherical Waves. Longitudinal and Transverse Waves. Characteristics of wave motion, Plane Progressive (Travelling) Wave and its equation.	2 hours	11-09-2023 to 16-09-23	POs and COs discussion Class room teaching
	Wave Equation – Differential form (derivation). Particle and Wave Velocities: Relation between them, Energy Transport – Expression for the intensity of progressive wave.	2 hours	19-09-23 to 23-09-23	Chalk and Black board
	Newton's Formula for Velocity of Sound. Laplace's Correction (Derivation). A brief account of Ripple and Gravity Waves. Numerical Problems. Activity 1,2 and 3.	2 hours	25-09-23 to 30-09-23	Chalk and Black board Activity in the lab
	Superposition of Harmonic Waves Linearity and Superposition Principle. Superposition of two collinear oscillations having (1) equal frequencies	2 hours	03-10-23 to 07-10-23	Activity taken in lab
	(2) different frequencies (Beats) – Analytical treatment. Superposition of two perpendicular Harmonic Oscillations:	2 hours	9-10-23 to 13 -10-23	Chalk and Black board
	Lissajous Figures with equal and unequal frequency- Analytical treatment,	2 hours	16-10-23 to 21-10-23	Chalk and Black board
	Graphical method. Uses of Lissajous' figures. Numerical Problems. Activity 4,5 and 6.	2 hours	25-10-23 to 27-10-23	Chalk and Black board

Unit – 3: Nature of light and Interference (04 hours)	**Nature of light:** The types of fringes using Michelson interferometer. The corpuscular model of light - The wave model - Maxwell's electromagnetic waves- Wave-Particle Duality. Numerical Problems.	2 hours	30-10-23 to 04-11-23	Chalk and Black board
	Interference of light by division of wavefront: Huygen's theory-Concept of wave-front-Interference pattern produced on the surface ofwater.	2 hours	06-11-23 to 11-11-23	Chalk and Black board
Unit 1and 2	**Internal test –C1**	**1 hours**	**15-11-23 to 18-11-23**	**C1 Internal Test- Theory**
Unit – 3: Nature of light and Interference (04 hours)	Coherence-Interference of light waves by division of wave-front- Young's doubleslit experiment- derivation of expression for fringe width-Fresnel Biprism.	2 hours	20-11-23 to 25-11-23	Chalk and Black board Marks sheet of C1 displayed on the notice board
	Loyd's Mirror (description only) - Interference with white light- Numerical Problems. **Interference of light by division of amplitude:** Interference by division of amplitude-	2 hours	27-11-23 to 02-12-23	Chalk and Black board
Unit 2,3 and 4	**Practical IA test**	**3hours**	**01-12-2023**	**C1 Internal Practical test**
Unit – 3: Nature of light and Interference (03 hours)	Interference by a plane parallel film illuminated by a plane wave- Interference by a film with two non-parallel reflecting surfaces- the colour of thin films. **Activity 11 and 12.**	3 hours	04-12-23 to 09-12-23	Chalk and Black board Activity in lab Display of C1 lab Internal Test marks on the notice board
Unit 3 and 4	**Assignment-C2**	**One week**	**05-12-2023**	**C2 Internal Assignment**
Unit – 3: Nature of light and Interference (03 hours)	Newton's rings-(Reflected light)- Michelson Interferometer- Determination of the wavelength of light. Numerical Problems. **Activity 13.**	3 hours	11-12-23 to 16-12-23	Chalk and Black board Activity in lab
Unit 1,3 and 4	**Practical IA test**	**3hours**	**15-12-2023**	**C2 Internal Practical test**

			16-12-23	Display of C2 lab Internal Test and Assignment marks on the notice board

Course Plan of Odd Semester 2023-24

Department : Physics
Semester: III Semester
Title of the Paper: Wave motion and Optics [Course Code – 222329]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Dr. Poornima S
Workload: Dr. Poornima S- 2hrs/week
Total Hrs: 28 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 2 Standing Waves and Acoustics (14 hours)	**Standing Waves:** Velocity of transverse waves along a stretched string (derivation).	2 hours	11-09-2023 to 16-09-23	Class room teaching
	Standing (Stationary)Waves in a String - Fixed and Free Ends (qualitative). Theory of Normal modes of vibration in a stretched string.	2 hours	19-09-23 to 23-09-23	Chalk and Black board
	Energy density and energy transport of a transverse wave along a stretched string. Vibrations in rods – longitudinal and transverse modes (qualitative). The velocity of Longitudinal Waves in gases (derivation).	2 hours	25-09-23 to 30-09-23	Chalk and Black board
	Normal Modes of vibrations in Open and Closed Pipes – Analytical treatment. Concept of Resonance, Theory of Helmholtz resonator. Numerical Problems.	2 hours	03-10-23 to 07-10-23	Activity in lab
	Acoustics: Intensity and loudness of sound, Intensity level, Absorption coefficient, Reverberation and Reverberation time.	1 hours	9-10-23 to 13 -10-23	Chalk and Black board
	Sabine's Reverberation formula (derivation), Factors affecting acoustics in buildings, Requisites for good acoustics.	2 hours	16-10-23 to 21-10-23	Chalk and Black board
	Acoustic measurements – intensity and pressure levels. Numerical Problems. **Activity 7, 8, 9and 10.**	3 hours	25-10-23 to 27-10-23	Chalk and Black board Activity in lab

Unit 4 Diffraction and Polarisation (04 hours)	**Fraunhoferdiffraction:** Introduction- Fraunhofer diffractions- Single slit diffraction pattern-position of Maxima and Minima (Qualitative arguments)- Two slit diffraction pattern-position of Maxima and minima.	2 hours	30-10-23 to 04-11-23	Chalk and Black board
	Fraunhofer diffraction: Theory of plane diffraction grating-Grating spectrum- normal and oblique incidence- Resolving power and dispersive power of a grating Single slit; Double Slit. Multiple slits & Diffraction grating. Numerical Problems.	2 hours	06-11-23 to 11-11-23	Chalk and Black board
Unit 1and 2	**Internal test –C1**	**1 hours**	**15-11-23 to 18-11-23**	**C1 Internal Test- Theory**
Unit 4 Diffraction and Polarisation (07 hours)	**Fresnel Diffraction:** Fresnel Diffraction- Fresnel half-period zones- Diffraction by a circular aperture.	2 hours	20-11-23 to 25-11-23	Chalk and Black board Marks sheet of C1 displayed on the notice board
	Fresnel Diffraction: Diffraction by an opaque disc- The zone plate - comparison between zone plate and convex lens. Numerical Problems.	2 hours	27-11-23 to 02-12-23	Chalk and Black board
	Polarisation: Introduction- Production of polarized light- The wire Grid polarizer and Polaroid- Superposition of two disturbances- Phenomenon of double refraction. **Activity 14, 15 and 16.**	3 hours	04-12-23 to 09-12-23	Chalk and Black board Activity in lab
Unit 3 and 4	**Assignment-C2**	**One week**	**05-12-2023**	**C2 Internal Assignment**
Unit 4 Diffraction and Polarisation (03 hours)	**Polarisation:** Quarter waveplates and half wave plates- Analysis of polarized light-optical activity. Numerical Problems. **Activity 17and 18.**	3 hours	11-12-23 to 16-12-23	Chalk and Black board Activity in lab Display of C2 Assignment marks on the notice board

Course Plan of Odd Semester 2023-24

Department: Physics
Semester: V Semster- Paper-5
Title of the Paper: Classical Mechanics-I and Quantum Mechanics-I
[Course Code – 232529]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Dr. Poornima S
Workload: Dr. Poornima S 4hr/week

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 (15 hours)	**Introduction to Newtonian Mechanics**: Frames of references, Newton's laws of motion, inertial and non-inertial frames. Mechanics of a particle, Conservation of linear momentum, Angular momentum and torque, conservation of angular momentum.	4 hours	11-09-2023 to 16-09-23	POs and COs discussion Class room teaching ICT
	Work done by a force, conservative force and conservative energy. **Lagrangian formulation**: Constraints, Holonomic constraints, non-holonomic constraints, Scleronomic and Rheonomic constraints. Generalized coordinates, degrees of freedom.	3 hours	19-09-23 to 23-09-23	ICT
	Principle of virtual work, D'Alembert's principle, Lagrange equations. Newton's equation of motion from Lagrange equations Activity 1.	3 hours	25-09-23 to 30-09-23	ICT Activity in lab
	simple pendulum, Atwood's machine and linear harmonic oscillator. Activity 2 and 3.	5 hours	03-10-23 to 07-10-23	ICT Activity in lab
Unit 4 (15 hours)	**Foundation of Quantum Mechanics** Probabilistic interpretation of the wave function - normalization and orthogonality of wave functions, Admissibility conditions on a wave function, Schrödinger equation: equation of motion of matter waves - Schrodinger wave equation for a free particle in one and three-dimension. Time-dependent and time-independent wave equations, Probability current	5 hours	9-10-23 to 13 -10-23	ICT One special class

	density, equation of continuity and its physical significance.			
	Postulates of Quantum mechanics: States as normalized wavefunctions. Dynamical variables as linear Hermitian operators (position, momentum, angular momentum, and energy as examples). Expectation values of operators and their time evolution. Ehrenfest theorem (no derivation), Commutator brackets- Simultaneous Eigen functions,	5 hours	16-10-23 to 21-10-23	ICT One special class
	Commutator bracket using position, momentum and angular momentum operators. Particle in a one-dimensional infinite potential well (derivation), degeneracy in three-dimensional case, particle in a finite potential well (qualitative), Transmission across a potential barrier, the tunnel effect (qualitative), scanning tunnelling microscope, One-dimensional simple harmonic oscillator (qualitative) - concept of zero - point energy. Activity 10 and 11.	5 hours	25-10-23 to 27-10-23	ICT Activity in lab
Unit 3 (10 hours)	**Introduction to Quantum Mechanics** Brief discussion on failure of classical physics to explain black body radiation, Photoelectric effect, Compton effect, stability of atoms and spectra of atoms. Compton scattering: Expression for Compton shift (With derivation). Activity 8.	5 hours	30-10-23 to 04-11-23	ICT Activity in lab
	Matter waves: de Broglie hypothesis of matter waves, Electron microscope, Wave description of particles by wave packets, Group and Phase velocities and relation between them, Experimental evidence for matter waves: Davisson-Germer experiment, G.P Thomson's experiment and its significance. Heisenberg uncertainty principle: Elementary proof of Heisenberg's relation between momentum and position, energy and time, angular momentum and angular position.	5 hours	06-11-23 to 11-11-23	ICT One special class
Unit 1and 4	**Internal test –C1**	**1 hours**	**15-11-23 to 18-11-23**	**C1 Internal Test- Theory**
Unit 3 (05 hours)	Illustration of uncertainty principle by Gamma ray microscope thought	5 hours	20-11-23 to	ICT One special

	experiment. Consequences of the uncertainty relations: Diffraction of electrons at a single slit, why electron cannot exist in nucleus? Two-slit experiment with photons and electrons. Linear superposition principle as a consequence. Activity 9.		25-11-23	class Marks sheet of C1 displayed on the notice board
Unit – 2 (05 hours)	**Variational principle:** Hamilton's principle, Deduction of Hamilton's principle, Lagrange's equation of motion from Hamilton's principle, Hamilton's principle for non-holonomic systems. Activity 4 and 5.	4 hours	27-11-23 to 02-12-23	ICT Activity in lab
Unit 1 and 2	**Practical IA test**	**3hours**	**01-12-2023**	**C1 Internal Practical test**
Unit – 2 (05 hours)	**Hamiltonian Mechanics**: The Hamiltonian of a system, Hamilton's equations of motion, Hamilton's equations from variational principle, Integrals of Hamilton's equations, energy integrals.	5 hours	04-12-23 to 09-12-23	ICT One special class Display of C1 lab Internal Test marks on the notice board
Unit 3 and 4	**Assignment-C2**	**One week**	**05-12-2023**	**C2 Internal Assignment**
Unit – 4 (05 hours)	Canonical Transformations, Poison Brackets, fundamental properties and equations of motion in Poison Brackets. Activity 6.	5 hours	11-12-23 to 16-12-23	ICT Activity in lab
Unit 3 and 4	**Practical IA test**	**3hours**	**13-12-2023**	**C2 Internal Practical test**
			16-12-23	Display of C2 lab Internal Test and Assignment marks on the notice board

Course Plan of Odd Semester 2023-24

Department: Physics
Semester: V Semster- Paper-6
Title of the Paper: Elements of Atomic, Molecular and Laser Physics
[Course Code – 232530]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Dr. Poornima S
Workload: Dr. Poornima S 2hrs/week

Total Hrs: 30 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 (15 hours)	Thomson's atomic model; Rutherford atomic model – Model, Theory of alpha particle scattering.	2 hours	11-09-2023 to 16-09-23	POs and COs discussion Class room teaching ICT
	Rutherford scattering formula; Bohr atomic model – postulates, Derivation of expression for radius, total energy of electron.	2 hours	19-09-23 to 23-09-23	ICT
	Origin of the spectral lines; Spectral series of hydrogen atom; Effect of nuclear motion on atomic spectra – derivation.	2 hours	25-09-23 to 30-09-23	ICT
	Ritz combination principle; Correspondence principle.	2 hours	03-10-23 to 07-10-23	ICT
	Critical potentials – critical potential, excitation potential and ionisation potential; Atomic excitation and its types.	2 hours	9-10-23 to 13 -10-23	ICT One special class
	Franck-Hertz experiment. Activity 1 and 2.	3 hours	16-10-23 to 21-10-23	ICT Activity in lab
	Sommerfeld's atomic model – model, Derivation of condition for allowed elliptical orbits. Activity 2.	2 hours	25-10-23 to 27-10-23	ICT Activity in lab
Unit 4 (4 hours)	Ordinary light versus laser light; Characteristics of laser light;	2 hours	30-10-23 to	ICT

	Interaction of radiation with matter - Induced absorption, spontaneous emission and stimulated emission with mention of rate equations.		04-11-23	
	Einstein's A and B coefficients – Derivation of relation between Einstein's coefficients and radiation energy density;	2 hours	06-11-23 to 11-11-23	ICT
Unit 1and 2	**Internal test –C1**	**1 hours**	**15-11-23 to 18-11-23**	**C1 Internal Test- Theory**
Unit 4 (05 hours)	Possibility of amplification of light; Population inversion; Methods of pumping; Metastable states; Requisites of laser – energy source, active medium and laser cavity;	2 hours	20-11-23 to 25-11-23	ICT One special class Marks sheet of C1 displayed on the notice board
	Difference between Three level and four level lasers with examples; Types of lasers with examples; Activity 1.	3hours	27-11-23 to 02-12-23	ICT Activity in lab
Unit – 4 (03 hours)	Construction and Working principle of Ruby Laser and He-Ne Laser. Activity 1 and 2.	3 hours	04-12-23 to 09-12-23	ICT Activity in lab
Unit 3 and 4	**Assignment-C2**	**One week**	**05-12-2023**	**C2 Internal Assignment**
Unit – 4 (03 hours)	Application of lasers (qualitative) in science & research, isotope separation, communication, fusion, medicine, industry, war and space. Activity 2.	3 hours	11-12-23 to 16-12-23	ICT Activity in lab Display of C2 Assignment marks on the notice board

Course Plan of Odd Semester 2023-24

Department: Physics
Semester: V Semster- Paper-6
Title of the Paper: Elements of Atomic, Molecular and Laser Physics
[Course Code – 232530]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Gayathri V
Workload: Gayathri V 2 hr/week
Total Hrs: 30 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 2 (15 hours)	Vector atom model – model fundamentals, spatial quantisation, spinning electron; Quantum numbers associated with vector atomic model.	2 hours	11-09-2023 to 16-09-23	Class room teaching ICT
	Coupling schemes – L-S and j-j schemes; Pauli's exclusion principle; Magnetic dipole moment due to orbital motion of electron – derivation.	2 hours	19-09-23 to 23-09-23	ICT
	Magnetic dipole moment due to spin motion of electron; Lande g-factor and its calculation for different states.	1hour	25-09-23 to 30-09-23	ICT
	Stern-Gerlach experiment – Experimental arrangement and Principle.	2 hours	03-10-23 to 07-10-23	ICT
	Fine structure of spectral lines with examples; Spin-orbit coupling/Spin-Orbit Interaction – qualitative; Optical spectra – spectral terms, spectral notations, selection rules, intensity rules; Fine structure of the sodium D-line.	2 hours	9-10-23 to 13 -10-23	ICT
	Zeeman effect: Types, Experimental study and classical theory of normal Zeeman effect, Zeeman shift expression (no derivation), examples. Activity 1 and 2.	3 hours	16-10-23 to 21-10-23	ICT Activity in lab
	Stark effect: Experimental study, Types and examples. Activity 1 and 2.	3 hours	25-10-23 to 27-10-23	ICT Activity in lab

Unit 3 (04 hours)	Types of molecules based on their moment of inertia.	1 hour	30-10-23 to 04-11-23	ICT
	Types of molecular motions and energies; Born-Oppenheimer approximation; Origin of molecular spectra; Nature of molecular spectra; Theory of rigid rotator – energy levels and spectrum, Qualitative discussion on Non-rigid rotator and centrifugal distortion.	3 hours	06-11-23 to 11-11-23	ICT One special class
Unit 1and 4	**Internal test –C1**	**1 hours**	**15-11-23 to 18-11-23**	**C1 Internal Test- Theory**
Unit 3 (03 hours)	Theory of vibrating molecule as a simple harmonic oscillator – energy levels and spectrum.	3 hours	20-11-23 to 25-11-23	ICT One special class Marks sheet of C1 displayed on the notice board
Unit 1,2,3 and 4	**Practical IA test**	**3hours**	**23-11-2023**	**C1 Internal Practical test**
Unit – 3 (05 hours)	Electronic spectra of molecules – fluorescence and phosphorescence; Raman effect – Stoke's and anti-Stoke's lines. Activity 1.	2 hours	27-11-23 to 02-12-23	ICT Activity in lab Display of C1 lab Internal Test on the notice board
	characteristics of Raman spectra, classical and quantum approaches, Experimental study of Raman effect. Activity 2.	3 hours	04-12-23 to 09-12-23	ICT Activity in lab
Unit 3 and 4	**Assignment-C2**	**One week**	**05-12-2023**	**C2 Internal Assignment**
Unit 1,3 and 4	**Practical IA test**	**3hours**	**07-12-2023**	**C2 Internal Practical test**
Unit – 4 (03 hours)	Applications of Raman effect. Activity 1 and 2.	3 hours	11-12-23 to 16-12-23	ICT Activity in lab Display of C2 lab Internal Test and Assignment marks on the notice board

Course Plan of Odd Semester 2023-24

Department: Physics
Semester: I Semester- Open Elective
Title of the Paper: Energy Sources [Course Code – 21OEPHY101]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Gayathri V
Workload: Gayathri V - 2hr/week
Total Hrs: 28 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 **Non-Renewable energy sources** (14 hours)	**Introduction:** Energy concept-sources in general, its significance & necessity. Classification of energy sources: Primary and Secondary energy.	2 hours	11-09-2023 to 16-09-23	POs and COs discussion Class room teaching
	Commercial and Non-commercial energy. Renewable and Non-renewable energy, Conventional and Non-conventional energy.	2 hours	19-09-23 to 23-09-23	Chalk and Black board
	Based on Origin-Examples and limitations Importance of Non-commercial energy resources.	2hours	25-09-23 to 30-09-23	Chalk and Black board
	Conventional energy sources: Fossil fuels & Nuclear energy production & extraction, usage rate and limitation.	2hours	03-10-23 to 07-10-23	Chalk and Black board
	Impact on environment and their issues& challenges.	2 hours	9-10-23 to 13 -10-23	Chalk and Black board
	Overview of Indian & world energy scenario with latest statistics-consumption & necessity.	2 hours	16-10-23 to 21-10-23	Chalk and Black board Activity taken in lab
	Need of eco-friendly & green energy & their related technology.	2hours	25-10-23 to 27-10-23	Chalk and Black board

Unit – 2: Renewable energy sources (04 hours)	**Introduction:** Need of renewable energy, and non-conventional energy sources. An overview of developments in Offshore Wind Energy, Tidal Energy.	2 hours	30-10-23 to 04-11-23	Chalk and Black board One special class
	Wave energy systems, Ocean Thermal Energy Conversion, solar energy, biomass, biochemical conversion, biogas generation, geothermal energy.	2 hours	06-11-23 to 11-11-23	Chalk and Black board
Unit 1 and 3	**Internal test –C1**	**1 hours**	**15-11-23 to 18-11-23**	**C1 Internal Test- Theory**
Unit – 2: Renewable energy sources (07hours)	Tidal energy and Hydroelectricity. Activity	2 hours	20-11-23 to 25-11-23	Chalk and Black board Activity in the lab Display of C1 Internal Test marks on the notice board
	Solar Energy-Key features its importance, Merits & demerits of solar energy.	2 hours	27-11-23 to 02-12-23	Chalk and Black board
	Applications of solar energy. Solar water heater, flat plate collector, solar distillation, solar cooker, solar greenhouses.	3 hours	04-12-23 to 09-12-23	Chalk and Black board One special class
Unit 2 and 3	**Assignment-C2**	**One week**	**05-12-2023**	**C2 Internal Assignment**
Unit – 2: Renewable energy sources (03hours)	Solar cell -a brief discussion of each. Need and characteristics of photovoltaic (PV) systems, PV models and equivalent circuits, and sun-tracking systems.	3hours	11-12-23 to 16-12-23	Chalk and Black board One special class Display of C2 Assignment marks on the notice board

Course Plan of Odd Semester 2023-24

Department: Physics
Semester: I Semester- Open Elective
Title of the Paper: Energy Sources [Course Code – 21OEPHY101]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Dr. Poornima S
Workload: Dr. Poornima S - 1hr/week

Total Hrs: 14Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit – 3 **(09 Hours)**	**Wind and Tidal Energy harvesting**: Fundamentals of Wind energy.	1hour	11-09-2023 to 16-09-23	Class room teaching
	Wind Turbines and different electrical machines in wind turbines.	1 hour	19-09-23 to 23-09-23	Chalk and Black board
	Power electronic interfaces, and grid interconnection topologies.	1hour	25-09-23 to 30-09-23	Chalk and Black board
	Ocean Energy Potential against Wind and Solar.	1hour	03-10-23 to 07-10-23	Chalk and Black board
	Wave Characteristics and Statistics, Wave Energy Devices.	1 hour	9-10-23 to 13 -10-23	Chalk and Black board
	Tide characteristics and Statistics,	1 hour	16-10-23 to 21-10-23	Chalk and Black board Activity taken in lab
	Tide Energy Technologies,	1hour	25-10-23 to 27-10-23	Chalk and Black board
	Ocean Thermal Energy. Activity	1 hour	30-10-23 to 04-11-23	Chalk and Black board One special class
	Geothermal and hydro energy: Geothermal Resources.	1 hour	06-11-23 to 11-11-23	Chalk and Black board

Unit 1and 3	**Internal test –C1**	**1 hour**	**15-11-23 to 18-11-23**	**C1 Internal Test- Theory**
Unit – 3 (03 Hours)	Geothermal Technologies.	1hour	20-11-23 to 25-11-23	Chalk and Black board Activity in the lab Display of C1 Internal Test marks on the notice board
	Hydropower resources, hydropower technologies.	1 hour	27-11-23 to 02-12-23	Chalk and Black board
	The environmental impact of hydropower sources.	1 hour	04-12-23 to 09-12-23	Chalk and Black board One special class
Unit 2 and 3	**Assignment-C2**	**One week**	**05-12-2023**	**C2 Internal Assignment**
Unit – 3 (02 Hours)	Carbon-captured technologies, cell, batteries, power consumption.	2hours	11-12-23 to 16-12-23	Chalk and Black board One special class Display of C2 Assignment marks on the notice board

Course Plan of Odd Semester 2023-24

Department: Physics
Semester: III Semester- Open Elective
Title of the Paper: Sports Science [Course Code – 22OEPHY302]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Gayathri V

Workload: Gayathri V - 2hr/week

Total Hrs: 28 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit – 1 (14 hours)	**Measurement**: Physical quantities. Standards and Units. An international system of Units.	2hours	11-09-2023 to 16-09-23	POs and COs discussion Class room teaching
	Standards of time, length and mass. Precision and significant figures.	2 hours	19-09-23 to 23-09-23	Chalk and Black board
	Newton's laws of motion: Newton's first law.	1hour	25-09-23 to 30-09-23	Chalk and Black board
	Force, mass. Newton's second law. Newton's third law. Mass and weight.	2hours	03-10-23 to 07-10-23	Chalk and Black board
	Applications of Newton's laws.	2 hours	9-10-23 to 13 -10-23	Chalk and Black board
	Projectile motion: Shooting a falling target. Physics behind Shooting. Activity.	3 hours	16-10-23 to 21-10-23	Chalk and Black board Activity in lab
	Physics behind Javelin throw and Discus throw.	2hours	25-10-23 to 27-10-23	Chalk and Black board One special class
Unit – 3 (04 hours)	**Food and Nutrition:** Proteins, Vitamins, Fat, Blood pressure.	2 hours	30-10-23 to 04-11-23	Chalk and Black board

	Problems due to the deficiency of vitamins.	2 hours	06-11-23 to 11-11-23	Chalk and Black board
Unit 1 and 2	**Internal test –C1**	**1 hours**	**15-11-23 to 18-11-23**	**C1 Internal Test- Theory**
Unit – 3 (07hours)	**Energy:** Different forms of Energy,	2 hours	20-11-23 to 25-11-23	Chalk and Black board Activity in the lab Display of C1 Internal Test marks on the notice board
	Conservation of mass-energy. Activity	2 hours	27-11-23 to 02-12-23	Chalk and Black board Activity in lab
	Physical exercises: Walking, Jogging and Running,	3 hours	04-12-23 to 09-12-23	Chalk and Black board One special class
Unit 2 and 3	**Assignment-C2**	**One week**	**05-12-2023**	**C2 Internal Assignment**
Unit – 3 (03hours)	**Physical exercises** : Weight management.	3hours	11-12-23 to 16-12-23	Chalk and Black board One special class Display of C2 lab Internal Test marks on the notice board

Course Plan of Odd Semester 2023-24

Department: Physics
Semester: III Semester- Open Elective
Title of the Paper: Sports Science [Course Code – 22OEPHY302]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Dr. Poornima S
Workload: Dr. Poornima S - 1hr/week

Total Hrs: 14Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit – 2 **(09 Hours)**	**Conservation laws**: Conservation of linear momentum.	1hour	11-09-2023 to 16-09-23	Classroom teaching
	collisions – elastic and inelastic. Angular momentum.	1 hour	19-09-23 to 23-09-23	Chalk and Black board
	Physics behind Carom.	1hour	25-09-23 to 30-09-23	Chalk and Black board
	Physics behind Billiards and Racing.	1hour	03-10-23 to 07-10-23	Chalk and Black board
	Centre of mass: Introduction.	1 hour	9-10-23 to 13 -10-23	Chalk and Black board
	Physics behind Cycling. Activity	1 hour	16-10-23 to 21-10-23	Chalk and Black board Activity
	Physics behind rock climbing	1hour	25-10-23 to 27-10-23	Chalk and Black board
	Physics behind Skating	1 hour	30-10-23 to 04-11-23	Chalk and Black board
	Gravitation: Origin.	1 hour	06-11-23 to 11-11-23	Chalk and Black board

Unit 1and 3	**Internal test –C1**	**1 hour**	**15-11-23 to 18-11-23**	**C1 Internal Test- Theory**
Unit – 2 (03 Hours)	Newton's law of gravitation.	1hour	20-11-23 to 25-11-23	Chalk and Black board Activity in the lab Display of C1 Internal Test marks on the notice board
	Archimedes's principle.	1 hour	27-11-23 to 02-12-23	Chalk and Black board
	Buoyancy	1 hour	04-12-23 to 09-12-23	Chalk and Black board
Unit 2 and 4	**Assignment-C2**	**One week**	**05-12-2023**	**C2 Internal Assignment**
Unit – 2 (02 Hours)	Physics behind swimming. Activity	2hours	11-12-23 to 16-12-23	Chalk and Black board One special class Display of C2 Assignment marks on the notice board

Course Plan of Even Semester 2023-24

Department: Physics
Semester: II Semester
Title of the Paper: Electricity and Magnetism [Course Code – 212229]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr. Poornima S
Workload: Dr. Poornima S- 2hr/week

Total Hrs: 28 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 2 (14 hours)	Conductors in an electrostatic field Conductors and insulators, conductors in electric field.	2hours	12-02-2024 to 17-02-24	POs and Cos of the units discussed Classroom teaching
	Capacitance and capacitors, calculating capacitance in a parallel plate capacitor, parallel plate capacitor with dielectric.	2 hours	19-02-24 to 24-02-24	Chalk and Blackboard
	Dielectrics: an atomic view. Energy stored in a capacitor, Dielectric and Gauss's law.	2hours	26-02-24 to 02-03-24	Chalk and Blackboard
	Electric currents and current density. Electrical conductivity and Ohm's law. Physics of electrical conduction, conduction in metals and semiconductors.	2hours	04-03-24 to 09-03-24	Chalk and Blackboard one special class
	Circuits and circuit elements: Variable currents in capacitor circuits, Resistor. Activity no.3	3 hours	11-03-24 to 16 -03-24	Chalk and Blackboard Activity in the lab
	Circuits and circuit elements: inductor and capacitor and their combination. force on a moving charge. Activity no.4	3hours	18-03-24 to 23-03-24	Chalk and Blackboard Activity in lab
Unit 3 (3 hours)	Magnetism Definition of the magnetic field, Ampere's law, and Biot-Savart law (magnetic force and magnetic flux).	1hours	25-03-24 to 30-03-24	Chalk and Blackboard

	Magnetic force on a current-carrying conductor, Hall effect. Electromagnetic induction, conducting rod moving in a magnetic field.	2 hours	01-04-24 to 06-04-24	Chalk and Blackboard
Unit 3 (1 hour)	law of induction and mutual inductance, self-inductance.	1 hour	08-04-24 to 13-04-24	Chalk and Blackboard
Unit 1 and 2	**Internal test –C1**	**1 hour**	**16-04-24 to 20-04-24**	**C1 Internal Test was conducted**
Unit 3 (8 hours)	Energy is stored in a magnetic field. Numerical problems.	2 hours	22-04-24 to 27-04-24	Chalk and Blackboard Display of C1 Internal Test marks on the notice board
	Alternating current circuits: Resonant circuit, alternating current,	2 hours	29-04-24 to 04-05-24	Chalk and Blackboard
	The quality factor, RL circuits, admittance, and impedance.	1 hour	06-05-24 to 11-05-24	Chalk and Blackboard
	RC, LC, LCR circuits, admittance, and impedance. Activity no.5	3 hours	13-05-24 to 18-05-24	Chalk and Blackboard Activity in the lab
Unit 3 and 4	**Assignment-C2**	**One week**	**13-05-2024**	**C2 Internal Assignment submission**
Unit 3 (2 hours)	Power and energy in AC circuits. Activity no.6	2 hours	20-05-24 to 25-05-24	Chalk and Blackboard Activity in the lab Display of C2 Assignment marks on the notice board

Course Plan of Even Semester 2023-24

Department: Physics
Semester: II Semester
Title of the Paper: Electricity and Magnetism [Course Code – 212229]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Gayathri V
Workload: Gayathri V- 2hr/week

Total Hrs: 28 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 (14 hours)	Electric charge and field, Coulomb's law, electric field strength, electric field lines, point charge in an electric field and electric dipole,	2 hours	12-02-2024 to 17-02-24	Classroom teaching
	work done by a charge (derivation of the expression for potential energy). Numerical problems. Gauss's law and its applications.	2 hours	19-02-24 to 24-02-24	Chalk and Blackboard
	Electric fields of an (i) spherical charge distribution, (ii) line charge and (iii) an infinite flat sheet of charge. Numerical problems.	2 hours	26-02-24 to 02-03-24	Chalk and Blackboard
	Electric potential, line integral, the gradient of a scalar function, and the relation between field and potential.	2 hours	04-03-24 to 09-03-24	Chalk and Blackboard one special class
	Potential due to point charge and distribution of charges (Examples: potential associated with a spherical charge distribution, infinite line charge distribution, an infinite plane sheet of charges).	2 hours	11-03-24 to 16 -03-24	Chalk and Blackboard Activity in the lab
	Constant potential surfaces, Potential due to a dipole and electric quadrupole. Numerical problems.	2 hours	18-03-24 to 23-03-24	Chalk and Blackboard Activity in lab
	Activity no.1 and no.2	2 hours	25-03-24 to 30-03-24	Chalk and Blackboard Activity
Unit 1,2,3 and 4	**Internal test –C1**	**3 hours**	**27-03-24**	**C1 Lab Internal Test**

Unit 4 (4 hours)	Electromagnetic waves: Equation of continuity, Maxwell's equations, displacement current,	2 hours	01-04-24 to 06-04-24	Chalk and Blackboard Display of C1 lab Internal Test marks on the notice board
	Electromagnetic wave, energy transported by electromagnetic waves.	1 hour	08-04-24 to 13-04-24	Chalk and Blackboard
	Electromagnetic waves in different frames of reference	1 hour	15-04-24	Chalk and Blackboard
Unit 1 and 2	**Internal test –C1**	**1 hour**	**16-04-24 to 20-04-24**	**C1 Internal Test**
Unit 4 (6 hours)	Field of a current loop, magnetic moment, Electric current in atoms,	2 hours	22-04-24 to 27-04-24	Chalk and Blackboard Display of C1 Internal Test marks on the notice board
	Electron spin and magnetic moment, magnetization and magnetic susceptibility.	2 hours	29-04-24 to 04-05-24	Chalk and Blackboard Marks sheet of C1 displayed on the notice board
	Types of magnetic materials: diamagnetic, paramagnetic and ferromagnetic materials.	2 hours	06-05-24 to 11-05-24	Chalk and Blackboard
Unit 1,2 and 4	**Internal test –C2**	**3 hours**	**08-05-24**	**C2 Lab Internal Test**
Unit 4 (2 hours)	B-H hysteresis curves and its characteristics Activity no.7	2 hours	13-05-24 to 18-05-24	Chalk and Blackboard Activity in the lab Display of C2 lab Internal Test marks on the notice board

Unit 3 and 4	**Assignment-C2**	**One week**	**13-05-2024**	**C2 Internal Assignment submission**
Unit 4 (2 hours)	Characteristics of Ferrites. Activity no.8	2 hours	20-05-24 to 25-05-24	Chalk and Blackboard Activity in the lab Display of C2 Assignment marks on the notice board

Course Plan of Even Semester 2023-24

Department: Physics
Semester: IV Semester
Title of the Paper: Thermal Physics and Electronics [Course Code – 222429]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Gayathri V
Workload: Gayathri V- 2hr/week
Total Hrs: 28 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 (14 hours)	**Laws of Thermodynamics**: Review of the concepts of Heat and Temperature **First Law of Thermodynamics:** Differential form, Internal Energy.	2hours	12-02-2024 to 17-02-24	POs and COs discussion Classroom teaching
	Equation of state for an adiabatic process. Work Done during Isothermal Processes. Numerical Problems.	2 hours	19-02-24 to 24-02-24	Chalk and Blackboard
	Work Done during Adiabatic Processes. Numerical Problems. **Second Law of Thermodynamics:** Kelvin-Planck and Clausius Statements and their Equivalence.	2hours	26-02-24 to 02-03-24	Chalk and Blackboard
	Reversible and Irreversible processes with examples. Heat Engines: Carnot engine & efficiency (no derivation). Refrigeration & coefficient of performance, Applications of Carnot engine in locomotion.	2hours	04-03-24 to 09-03-24	Chalk and Blackboard one special class
	Thermodynamic Scale of Temperature and its Equivalence to Perfect Gas Scale. Concept of Entropy, Second Law of Thermodynamics in terms of Entropy. Numerical Problems.	2hours	11-03-24 to 16 -03-24	Chalk and Blackboard
	Third Law of Thermodynamics: Statement, Significance. Activity No.1 and 2.	2hours	18-03-24 to 23-03-24	Chalk and Blackboard Activity in lab
	Third Law of Thermodynamics: Unattainability of Absolute Zero. Activity No.3	2hours	25-03-24 to 30-03-24	Chalk and Black board Activity in lab

Unit 2 (4 hours)	**Thermodynamics Potentials:** Internal Energy, Enthalpy, Helmholtz Free Energy, Gibb's Free Energy. Their Definitions, Properties and Applications. Numerical Problems.	2 hours	01-04-24 to 06-04-24	Chalk and Blackboard
	Maxwell's thermodynamic Relations Derivations and applications of Maxwell's Relations (1) First-order Phase Transitions with examples, Clausius-Clapeyron Equation	1 hour	08-04-24 to 13-04-24	Chalk and Blackboard
	(2) Values of Cp-Cv 3) Joule-Thomson Effect and J- T coefficient (Derivation) for Vander Walls gas	1 hour	15-04-24	Chalk and Blackboard
Unit 1 and 4	**Internal test –C1**	**1 hour**	**16-04-24 to 20-04-24**	**C1 Internal Test was conducted**
Unit 2 (8 hours)	Attainment of low temperature by liquefaction of gases and adiabatic demagnetization. Numerical Problems. **Kinetic Theory Of Gases:** Distribution of Velocities: Maxwell-Boltzmann Law of Distribution of Velocities in an Ideal Gas	2 hours	22-04-24 to 27-04-24	Chalk and Blackboard Display of C1 Internal Test marks on the notice board
	Mean, RMS, and Most Probable Speeds. Degrees of Freedom, Law of Equipartition of Energy (no derivation). Specific heats of Gases. Numerical Problems.	2 hours	29-04-24 to 04-05-24	Chalk and Blackboard
	Specific heats of Gases. Numerical Problems.	1 hour	06-05-24 to 11-05-24	Chalk and Blackboard
	Radiation: Blackbody radiation, spectral distribution, Lummer-Pringsheim experiment-Result, the concept of energy density and pressure of radiation (no derivation). Activity No.4 and 5	3 hours	13-05-24 to 18-05-24	Chalk and Blackboard Activity in the lab

Unit 2and 3	**Internal test –C2**	**One week**	**13-05-2024**	**C2 Internal Assignment submission**
Unit 2 (2 hours)	Derivation of Planck's law, Wein's law, Rayleigh-Jean law, deduction of Stefan-Boltzmann law and Wien's displacement law from Planck's law. Numerical Problems. Activity 6	2 hours	20-05-24 to 25-05-24	Chalk and Blackboard Activity in the lab Display of C2 Assignment marks on the notice board

Course Plan of Even Semester 2023-24

Department: Physics
Semester: IV Semester
Title of the Paper: Thermal Physics and Electronics [Course Code – 222429]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr. Poornima S
Workload: Dr. Poornima S- 2hr/week

Total Hrs: 28 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 4 (14 hours)	**Electronics**: Integrated Circuits (Analog and Digital), Operational Amplifiers, Ideal characteristics of Op-Amp.	2 hours	12-02-2024 to 17-02-24	Classroom teaching
	Op-amp: Inverting and Non-Inverting Configurations. Applications- Voltage Follower, Addition and Subtraction. Numerical problems.	2 hours	19-02-24 to 24-02-24	Chalk and Blackboard
	Digital: Switching and Logic Levels, Digital Waveform. Number Systems: Decimal Number System, Binary Number System.	2 hours	26-02-24 to 02-03-24	Chalk and Blackboard
	Converting Decimal to Binary, Hexadecimal Number System: Converting Binary to Hexadecimal, Hexadecimal to Binary.	2 hours	04-03-24 to 09-03-24	Chalk and Blackboard
	Boolean Algebra Theorems: De Morgan's theorem. Digital Circuits.	2 hours	11-03-24 to 16 -03-24	Chalk and Blackboard
	Logic gates, NOT Gate, AND Gate, OR Gate, NAND Gate, NOR Gate. Activity No.10 and 11	2 hours	18-03-24 to 23-03-24	Chalk and Blackboard Activity in lab
	Algebraic Simplification, Implementation of NAND and NOR functions. Activity No.12	2 hours	25-03-24 to 30-03-24	Chalk and Blackboard Activity
Unit 1,2 and 3	**Internal test –C1**	**3 hours**	**05-04--24**	**C1 Lab Internal Test**

Unit 3 (4 hours)	**Semiconductor devices**: Review of Intrinsic and Extrinsic semiconductors.	2 hours	01-04-24 to 06-04-24	Chalk and Blackboard Display of C1 lab Internal Test marks on the notice board
	p-n junction and its Characteristics and Parameters, Diode approximations, Half-wave rectifier, Full-wave rectifier,	2 hours	08-04-24 to 13-04-24	Chalk and Blackboard
Unit 1 and 4	**Internal test –C1**	**1 hour**	**16-04-24 to 20-04-24**	**C1 Internal Test**
Unit 3 (8 hours)	Zener diode voltage regulators: Regulator circuit with no load, Loaded Regulator. Numerical problems.	2 hours	22-04-24 to 27-04-24	Chalk and Blackboard Marks sheet of C1 displayed on the notice board
	Junction Transistors: Basics of Bipolar Junction Transistors (BJT),	2 hours	29-04-24 to 04-05-24	Chalk and Blackboard One special class
	BJT operation, Common Base, Common Emitter and Common Collector Characteristics.	2 hours	06-05-24 to 11-05-24	Chalk and Blackboard
	Field Effect Transistor (FET) and its characteristics. Activity No.7 and 8.	2 hours	13-05-24 to 18-05-24	Chalk and Blackboard Activity in the lab
Unit 2 and 3	**Assignment-C2**	**One week**	**13-05-2024**	**C2 Internal Assignment submission**
Unit 3 and 4	**Internal test –C2**	**3 hours**	**17-05-24**	**C2 Lab Internal Test**
Unit 3 (2 hours)	Transistor as an Amplifier and Oscillator. Numerical problems. Activity No.9.	2 hours	20-05-24 to 25-05-24	Chalk and Blackboard Activity in the lab Display of C2 lab Internal Test and assignment marks on the notice board

Course Plan of Even Semester 2023-24

Department: Physics
Semester: VI Semester-Paper-8
Title of the Paper: Electronic Instrumentation and Sensors [Course Code – 232630]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr. Poornima S
Workload: Dr. Poornima S- 4hr/week

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 (15 hours)	**Power supply** AC power and its characteristics, Single phase and three phase, Need for DC power supply and its characteristics, line voltage and frequency, Rectifier bridge, Filters: Capacitor and inductor filters, L-section and π-section filters, ripple factor. Activity no. 1.	5 hours	12-02-2024 to 17-02-24	POs and COs discussion Classroom teaching Activity in lab
	Electronic voltage regulators, stabilization factor, voltage regulation using ICs. **Basic electrical measuring instruments** Cathode ray oscilloscope- Block diagram, basic principle, electron beam, Activity no. 2.	5 hours	19-02-24 to 24-02-24	ICT Activity in the lab
	CRT features, signal display. Basic elements of digital storage oscilloscopes. Basic DC voltmeter for measuring potential difference, Extending Voltmeter range, AC voltmeter using rectifiers. Basic DC ammeter, requirement of a shunt, Extending of ammeter ranges. Activity no. 3.	5 hours	26-02-24 to 02-03-24	ICT Activity in the lab

Unit 4 (15 hours)	**Transducers and sensors** Definition and types of transducers. Basic characteristics of an electrical transducer, factors governing the selection of a transducer, Activity no. 1	5 hours	04-03-24 to 09-03-24	ICT Activity in lab
	Resistive transducer-potentiometer, Strain gauge and types (general description),Resistance thermometer - platinum resistance thermometer. Thermistor. Inductive Transducer-general principles. Activity no. 2.	5 hours	11-03-24 to 16 -03-24	ICT Activity in lab
	Linear Variable Differential Transducer (LDVT)- principle and construction, Capacitive Transducer, Piezo-electric transducer, Photoelectric transducer, Photovoltaic cell, photo diode and phototransistor – principle and working. Activity no. 1 and 2.	5hours	18-03-24 to 23-03-24	ICT Activity in lab
Unit 3 (4 hours)	**Data Conversion and display** Digital to Analog (D/A) and Analog to Digital (A/D) converters – A/D converter with pre-amplification and filtering. D/A converter - Variable resistor network, Ladder type (R-2R) D/A converter.	4 hours	25-03-24 to 30-03-24	Chalk and Blackboard Activity
Unit 1,2 and 3	**Internal test –C1**	**3 hours**	**26-03-24**	**C1 Lab Internal Test**
Unit 3 (7 hours)	Op-amp based D/A converter. Digital display systems and Indicators-Classification of displays. Activity no. 1	4 hours	01-04-24 to 06-04-24	Chalk and Blackboard Display of C1 lab Internal Test marks on the notice board
	Light Emitting Diodes (LED) and Liquid Crystal Display (LCD) – Structure and working.	2 hours	08-04-24 to 13-04-24	ICT
	Data Transmission systems – Advantages and disadvantages of digital transmission over analog transmission.	1 hour	15-04-24	Chalk and Blackboard

Unit 1 and 4	**Internal test –C1**	**1 hour**	**16-04-24 to 20-04-24**	**C1 Internal Test**
Unit 3 (4 hours)	Pulse amplitude modulation (PAM), Pulse time modulation (PTM) and Pulse width modulation (PWM)- General principles. Principle of Phase Sensitive Detection (PSD). Activity no. 2	4 hours	22-04-24 to 27-04-24	Chalk and Blackboard Marks sheet of C1 displayed on the notice board
Unit 2 (7 hours)	**Waveform generators and Filters** Basic principle of standard AF signal generator: Fixed frequency and variable frequency, AF sine and square wave generator.	3 hours	29-04-24 to 04-05-24	ICT
	Basic Wein-bridge network and oscillator configuration, Triangular and saw tooth wave generators, circuitry and waveforms. Activity no. 1 and 2	4 hours	06-05-24 to 11-05-24	ICT Activity in lab
Unit 3 and 4	**Internal test –C2**	**3 hours**	**07-05-24**	**C2 Lab Internal Test**
Unit 2 (4 hours)	Passive and active filters. Fundamental theorem of filters, Proof of the theorem by considering a symmetrical T-network. Types of filters. Activity no. 3	4hours	13-05-24 to 18-05-24	ICT Activity in lab Display of C2 lab Internal Test marks on the notice board
Unit 2 and 3	**Assignment-C2**	**One week**	**13-05-2024**	**C2 Internal Assignment submission**
Unit 2 (4 hours)	Circuitry and Cut-off frequency and frequency response of Passive (RC) and Active (op-amp based) filters: Low pass, high pass and band pass. Activity no. 4	4 hours	20-05-24 to 25-05-24	ICT Activity in lab Display of C2 Assignment marks on the notice board

Course Plan of Even Semester 2023-24

Department: Physics
Semester: VI Semester-Paper-7
Title of the Paper: Elements of Condensed Matter and Nuclear Physics
[Course Code – 232629]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr. Poornima S
Workload: Dr. Poornima S- 2hr/week

Total Hrs: 30 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 3 (15 hours)	**General Properties of Nuclei**: Constituents of a nucleus and their intrinsic properties, quantitative facts about mass, radii, charge density (matter density),	2 hours	12-02-2024 to 17-02-24	Classroom teaching
	Binding energy, main features of binding energy versus mass number curve. Activity no.7.	2 hours	19-02-24 to 24-02-24	Chalk and Blackboard
	Angular momentum, parity, magnetic moment, electric moments. Activity no.8.	2 hours	26-02-24 to 02-03-24	Chalk and Blackboard
	Radioactivity decay: Radioactivity: definition of radioactivity, half-life, mean life.	2 hours	04-03-24 to 09-03-24	Chalk and Blackboard One special class
	Radioactivity equilibrium **(**a) Alpha decay: basics of α-decay processes, theory of α emission (brief),	2 hours	11-03-24 to 16 -03-24	Chalk and Blackboard
	Gamow factor, Geiger-Nuttall law. (b) β-decay: energy kinematics for β-decay, positron emission, electron capture, neutrino hypothesis.	2hours	18-03-24 to 23-03-24	Chalk and Blackboard
	(c) Gamma decay: Gamma rays emission	1 hour	25-03-24 to 30-03-24	Chalk and Blackboard
	kinematics, internal conversion (Definition). Activity no.9.	2 hours	01-04-24 to 06-04-24	Chalk and Blackboard

Unit 4 (2 hours)	**Interaction of Nuclear Radiation with matter**: Gamma-ray interaction through matter.	2 hours	08-04-24 to 13-04-24	Chalk and Blackboard
Unit 1 and 3	**Internal test –C1**	**1 hour**	**16-04-24 to 20-04-24**	**C1 Internal Test**
Unit 4 (10 hours)	Photoelectric effect, Compton scattering, pair production,	2 hours	22-04-24 to 27-04-24	Chalk and Blackboard Marks sheet of C1 displayed on the notice board
	Energy loss due to ionization (quantitative description of Bethe Block formula), energy loss of electrons, introduction of Cerenkov radiation	2 hours	29-04-24 to 04-05-24	Chalk and Blackboard
	Detector for Nuclear Radiations: Gas detectors: estimation of electric field, mobility of particles, for ionization chamber and GM Counter. Basic principle of Scintillation.	3 hours	06-05-24 to 11-05-24	Chalk and Blackboard Two special class
	Detectors and construction of photo-multiplier tube (PMT). Semiconductor Detectors (Si and Ge) for charge particle and photon detection (concept of charge carrier and mobility) qualitative only. Activity no.10.	3 hours	13-05-24 to 18-05-24	Chalk and Blackboard Activity in the lab
Unit 2 and 4	**Assignment-C2**	**One week**	**13-05-2024**	**C2 Internal Assignment submission**
Unit 4 (3 hours)	Accelerators: Cyclotrons and Synchrotrons. Activity no.11 and 12.	3 hours	20-05-24 to 25-05-24	Chalk and Blackboard Activity in the lab Display of C2 Assignment marks on the notice board

Course Plan of Even Semester 2023-24

Department: Physics
Semester: VI Semester-Paper-7
Title of the Paper: Elements of Condensed Matter and Nuclear Physics
[Course Code – 232629]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Gayathri V
Workload: Gayathri V- 2hr/week

Total Hrs: 30 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 (15 hours)	**Crystal systems and X-rays:** Crystal structure**:** Space Lattice, Lattice translational vectors.	2 hours	12-02-2024 to 17-02-24	Pos and Cos discussion Classroom teaching
	Basis of crystal structure, Types of unit cells, primitive, non-primitive cells. Seven crystal system, Coordination numbers, Miller Indices.	2 hours	19-02-24 to 24-02-24	Chalk and Blackboard
	Expression for inter-planner spacing. **X Rays**: Production and properties of X rays, Coolidge tube, Continuous and characteristic X-ray spectra; Moseley's law. **X-ray diffraction**, Scattering of X-rays, Bragg's law.	2 hours	26-02-24 to 02-03-24	Chalk and Blackboard
	Crystal diffraction: Bragg's X-ray spectrometer- powder diffraction method, Intensity vs 2θ plot (qualitative).	2 hours	04-03-24 to 09-03-24	Chalk and Blackboard
	Free electron theory of metals: Classical free electron model (Drude-Lorentz model), expression for electrical and thermal conductivity, Weidman-Franz law, Failure of classical free electron theory; Quantum free electron theory.	2 hours	11-03-24 to 16 -03-24	Chalk and Blackboard Activity in the lab

	Fermi level and Fermi energy, Fermi-Dirac distribution function (expression for probability distribution F(E), statement only); Fermi Dirac distribution at T=0 and $E<E_f$, at $T\neq 0$ and $E>E_f$, F(E) vs E plot at T = 0 and $T\neq 0$. Activity No.1	2 hours	18-03-24 to 23-03-24	Chalk and Blackboard
	The density of states for free electrons (statement only, no derivation). Qualitative discussion of lattice vibration and concept of Phonons.; Specific heats of solids: Classical theory, Einstein's and Debye's theory of specific heats. Hall Effect in metals. Activity No.2 and 3.	3 hours	25-03-24 to 30-03-24	Chalk and Blackboard Activity in the lab
Unit 1,2 and 3	**Internal test –C1**	**3 hours**	**28-03-24**	**C1 Lab Internal Test**
Unit 2 (4 hours)	**Magnetic Properties of Matter** Review of basic formulae: Magnetic intensity, magnetic induction, permeability, magnetic susceptibility, magnetization (M),	2 hours	01-04-24 to 06-04-24	Chalk and Blackboard Display of C1 lab Internal Test marks on the notice board
	Classification of Dia, Para, and ferro magnetic materials.	2 hours	08-04-24 to 13-04-24	Chalk and Blackboard
Unit 1 and 3	**Internal test –C1**	**1 hours**	**16-04-24 to 20-04-24**	**C1 Internal Test**
Unit 2 (7 hours)	Langevin Classical Theory of dia – and Paramagnetism. Curie's law, Ferromagnetism and Ferromagnetic Domains (qualitative).	3 hours	22-04-24 to 27-04-24	Chalk and Black board Marks sheet of C1 displayed on the notice board
	Discussion of B-H Curve. Hysteresis and Energy Loss, Hard and Soft magnetic materials **Dielectrics**: Static dielectric constant, polarizability (electronic, ionic and orientation).	2 hours	29-04-24 to 04-05-24	Chalk and Black board One special class

	Calculation of Lorentz field (derivation), Clausius-Mosotti equation (derivation), dielectric loss. Piezo electric effect, cause, examples and applications.	2 hours	06-05-24 to 11-05-24	Chalk and Blackboard
Unit 3 and 4	**Internal test –C2**	**3 hours**	**09-05-24**	**C2 Lab Internal Test**
Unit 2 (2 hours)	**Superconductivity:** Definition, Experimental results – Zero resistivity and Critical temperature. Activity No.4	2hours	13-05-24 to 18-05-24	Chalk and Blackboard Activity in the lab Display of C2 lab Internal Test marks on the notice board
Unit 2 and 4	**Assignment-C2**	**One week**	**13-05-2024**	**C2 Internal Assignment submission**
Unit 2 (2 hours)	The critical magnetic field – Meissner effect, Type I and type II superconductors. Activity No.5 and 6	2 hours	20-05-24 to 25-05-24	Chalk and Blackboard Activity in the lab Display of C2 Assignment marks on the notice board

Course Plan of Even Semester 2023-24

Department: Physics
Semester: II Semester- Open Elective
Title of the Paper: Astronomy [Course Code – 21OEPHY201]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Dr. Poornima S
Workload: Dr. Poornima S- 1hr/week

Total Hrs: 14 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1 (09 hours)	Ancient Astronomy Greek Observations,	1hour	12-02-2024 to 17-02-24	Classroom teaching
	Sumerian Observations, Mayan Observations	1 hour	19-02-24 to 24-02-24	Chalk and Blackboard
	Arabic Observations, and Chinese Observations.	1hour	26-02-24 to 02-03-24	Chalk and Blackboard
	Indian Astronomy Vedic Astronomy, Ancient Astronomy – Aryabhata.	1hour	04-03-24 to 09-03-24	Chalk and Blackboard
	Varahamihira, Bhaskara Astronomy in Indian Scriptures .	1 hour	11-03-24 to 16 -03-24	Chalk and Blackboard
	Precession of the Equinox, Celebrations of Equinox.	1hour	18-03-24 to 23-03-24	Chalk and Blackboard
	Medieval & Modern Astronomy The invention of Telescopes, Models of the Solar System & Universe .	1hour	25-03-24 to 30-03-24	Chalk and Blackboard
	Observations by Tycho Brahe, Kepler, Galileo, Herschel and Others, and Modern Astronomy.	1 hour	01-04-24 to 06-04-24	Chalk and Blackboard
	Optical tools for Astronomy Pin Hole,	1 hour	08-04-24 to 13-04-24	Chalk and Blackboard

Unit 1 and 2	**Internal test –C1**	**1 hour**	**16-04-24 to 20-04-24**	**C1 Internal Test**
Unit 1 (04 hours)	Binoculars, Telescopes & Imaging. Mathematical Methods of Observations	1 hour	22-04-24 to 27-04-24	Chalk and Blackboard Display of C1 Internal Test marks on the notice board
	Angular Measurement, Trigonometric functions, Stellar Parallax Observational Terminologies	1 hour	29-04-24 to 04-05-24	Chalk and Blackboard
	Cardinal Directions, Azimuth, Altitude, Measurements using Compass and Hand	1 hour	06-05-24 to 11-05-24	Chalk and Blackboard
	Equatorial Coordinates, Light years, Magnitude, Colors, etc.	1 hour	13-05-24 to 18-05-24	Chalk and Blackboard
Unit 3	**Assignment-C2**	**One week**	**13-05-2024**	**C2 Internal Assignment submission**
Unit 1 (1 hours)	**Activity**	1 hour	20-05-24 to 25-05-24	Classroom Display of C2 Assignment marks on the notice board

Course Plan of Even Semester 2023-24

Department: Physics
Semester: II Semester- Open Elective
Title of the Paper: Astronomy [Course Code – 21OEPHY201]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Gayathri V
Workload: Gayathri V- 2hr/week

Total Hrs: 28 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 2 (13 hours) + 01 hour activity	The Sun Ecliptic and the Orientation of the Earth, Seasons - Solstices and Equinox.	2hours	12-02-2024 to 17-02-24	Pos and Cos discussion Classroom teaching
	Observations of the Sun from Earth during seasons. Eclipses, Zero-shadow day.	2hours	19-02-24 to 24-02-24	Chalk and Blackboard
	The Moon Earth-Moon system – Phases, Lunar Eclipses. Ecliptic and Lunar Orbital Plane – Nodes, Lunar Month.	2hours	26-02-24 to 02-03-24	Chalk and Blackboard
	Full Moon Names. Inner Planets: Mercury & Venus Observational History, Observational Windows.	2hours	04-03-24 to 09-03-24	Chalk and Blackboard
	Appearance, Apparitions, Elongations, Superior Conjunctions, Inferior Conjunctions, Transits.	2 hours	11-03-24 to 16 -03-24	Chalk and Blackboard
	Outer Planets: Mars, Jupiter & Saturn Observational History. Observational Windows.	2hours	18-03-24 to 23-03-24	Chalk and Blackboard
	Appearance, Frequency of Oppositions, Conjunctions, Moons Eclipses. Galilean Moons, Saturn‟s Rings + Activity	2 hours	25-03-24 to 30-03-24	Chalk and Blackboard Activity in lab
Unit 3 (06 hours)	March to June Prominent Stars and Constellations Visible during this period.	2hours	25-03-24 to 30-03-24	Chalk and Blackboard
	Methods of Spotting	2 hours	01-04-24 to 06-04-24	Chalk and Blackboard

	June to September Prominent Stars and Constellations Visible during this period	2 hours	08-04-24 to 13-04-24	Chalk and Blackboard
Unit 1 and 2	**Internal test –C1**	**1 hour**	**16-04-24 to 20-04-24**	**C1 Internal Test**
Unit 3 (06 hours)	Methods of Spotting	2 hours	22-04-24 to 27-04-24	Chalk and Blackboard Display of C1 Internal Test marks on the notice board
	September to December Prominent Stars and Constellations Visible during this period.	2 hours	29-04-24 to 04-05-24	Chalk and Blackboard One special class
	Methods of Spotting .	2 hours	06-05-24 to 11-05-24	Chalk and Blackboard
	December to March Prominent Stars and Constellations Visible during this period,	2 hours	13-05-24 to 18-05-24	Chalk and Blackboard
Unit 3	**Assignment-C2**	**One week**	**13-05-2024**	**C2 Internal Assignment submission**
Unit 3 (2 hours)	Methods of Spotting **Activity**	2 hours	20-05-24 to 25-05-24	Chalk and Blackboard Activity in the lab Display of C2 Assignment marks on the notice board

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13.02.2024

HoDs are hereby informed to mail the Course Plan for the academic year 2023-24 on or before 29.02.2023 to dean.fgc@mahajana.edu.in without fail. The commencement and closure date of the semester is given below :

1. Odd Semester Term Dates – 11.09.2023 to 16.12.2023
2. C1 Test Dates – 15.11.2023 to 18.11.2023 (Theory & Practical)
3. Even Semester Term Dates – 12.02.2024 to 25.05.2024
4. C1 Test Dates – 16.04.2024 to 20.04.2024 (Theory & Practical)

(Dr. Sreedhara H) (Dr. B R Jayakumari)

Encl: A sample filled in format of the Course Plan

Course Plan of Odd Semester 2023-24

Department: Psychology
Semester: III Sem BA
Title of the Paper: Child Psychology [Course Code-221365]
Term Period: 11-9-2023 to 16-12-2023
Faculty Name: Smt. Mamatha C k and Smt. Sujata. M
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 INTRODUCTION	**a)Development – Meaning & Nature – Heredity and Environment.** **b) Theories of child development** – Cognitive theories, Behavioral and socio- cognitive theories; Ecological model – Bronfenbrenner. **c) Methods and Designs** – Longitudinal, Cross – sectional, Sequential, Correlation. **d)Application of Child Psychology.**	12 hours	11-9-2023 To 25-9-2023	PPT
UNIT – 2 PRE-NATAL DEVELOPMENT	**a)** Stages in prenatal development – Conception, Germinal stage, Embryonic stage and Fetal stage. **b)** Hazards- Environmental (Pollutants, Teratogens and Psychoactive drug, Infectious Diseases) and Incompatible Blood types. **c) Child birth** – Stages of child birth, Complications of child birth- Water Breaking Early, Perinatal Asphyxia, LBW (Low Birth Weight), Breech, Excessive bleeding, Umbilical cord issues. **New Born Assessment –**	10 hours	26-9-2023 To 10-10-2023	PPT

	APGAR scale, Brazelton Neonatal Behavioural Assessment Scale. **d) Chromosomal and Gene linked abnormalities** – Chromosomal abnormalities - Down Syndrome; Abnormalities of the sex chromosomes - Kleinfelters, Fragile x, Turner's, XXX, XYY; Gene linked abnormalities - PKU, Sickle Cell Anaemia, Tay Sachs Disease.			
UNIT – 3 PHYSICAL, COGNITIVE AND LANGUAGE DEVELOPMENT (Infancy, Babyhood & Childhood)	**a) MOTOR DEVELOPMENT**: Meaning; Reflexes, Sequence of motor development – Gross motor development & fine motor development. **b) PERCEPTUAL DEVELOPMENT** - Touch, Taste and Smell, Hearing, Vision. **c) COGNITIVE DEVELOPMENT** - Piaget's theory of cognitive development., Vygotsky's Theory of cognitive Development- Zone of Proximal Development and Scaffolding. **d) LANGUAGE DEVELOPMENT** – Pre-linguistic development – receptivity to language, first speech sounds. Phonological development; Semantic development; Grammatical Development, Pragmatic development; Bilingualism.	12 hour	11-10-2023 To 28-10-2023	PPT

UNIT – 4 EMOTIONAL, SOCIAL AND MORAL DEVELOPMENT (Infancy, Babyhood & Childhood)	**a) EMOTIONAL DEVELOPMENT** - Development of emotional expression, Basic Emotions, Self-Conscious Emotions, Emotional self-Regulation, Acquiring Emotional Display Rules. b) **SOCIAL DEVELOPMENT** - Social Orientation, Development of attachment, sense of security, Cultural Influences - Self Awareness and Self Understanding. **c) MORAL DEVELOPMENT** - Kohlberg's theory of Moral development.	11 hour	30-10-2023 To 23-11-2023	PPT
UNIT – 5 DISORDERS OF CHILDHOOD	ADHD, Conduct disorder, Oppositional defiance disorder, Childhood depression, Symptom disorders (Eneuresis, encopresis, sleep walking and tics); Pervasive developmental disorders – Autism, Intellectual Disability.	11 hour	24-11-2023 To 12-12-2023	PPT
	Revision class	1 hours	13-12-2023	For internal Assessment
	Internal C1 Theory and C1 Practical	1hours(Theory) 3 hours (Particles)	15-11-2023 To 18-11-2023	C1 test conducted C2 test conducted
	Unit 1 and 2 assessed for C2 (IA) Evaluation		16-12-2023 to 18-12-2023	Mark sheet of C1 Internals test was displayed on the notice board

Course Plan of Odd Semester 2023-24

Department: Psychology
Semester: I Sem BA
Title of the Paper: Foundation of Psychology-I [Course Code- 211165]
Term Period: 11-9-2023 TO 16-12-2023
Faculty Name: Smt. Mamatha C k and Smt. Sujata. M
Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 GENESIS AND GOALS OF PSYCHOLOGY	• Psychology: History and Development of Psychology; Definition and Goals of Psychology- Understanding, Describing, Predicting and Control of Behaviour. • Key Perspectives: Psychodynamic, Behavioural, Humanistic, Biological and Cognitive. • Branches of Psychology - General, Bio–Physiological, Social, Child, Developmental, Abnormal and Cognitive Psychology. Methods in Psychology: Observation, Experimental, Clinical and Survey/Questionnaire Methods.	13 hours	11-9-2023 To 26-9-2023	PPT
UNIT – 2 BIOLOGY AND BEHAVIOUR	• Neuron: Structure and functions; Neural impulse; Synapse and Neurotransmitters • Nervous system: Structure and Functions of Central nervous system and Peripheral nervous system • Advanced Methods of studying brain functions: Various Scanning methods. • Endocrine system: Pituitary, Thyroid, Parathyroid, Adrenal and Gonads – Functions	10 hours	27-9-2023 To 11-10-2023	PPT

UNIT – 3 SENSATION, ATTENTION AND PERCEPTION	• Sensation: Definition and Characteristics. • Types of Senses and functions. • Attention: Meaning and Phenomena (Span of Attention, Division of Attention, Fluctuation and distraction), Determinants of Attention. • Perception: Meaning and Characteristics, Gestalt - Laws of Perceptual Organization. • Depth Perception: Meaning, Monocular and Binocular Cues, Perceptual Constancies – Size, Shape & Color. • Errors in Perception - 1) Illusion - Types - Horizontal-Vertical, Muller Lyer and Illusion of Movement. 2) Hallucination	12 hours	12-10-2023 To 29-10-20234	PPT
UNIT – 4 LEARNING	• Introduction: Definition, Factors Influencing Learning: Motivation, Reinforcement and Association. • Types of Learning: Trial and Error Learning- Thorndike's Experiment and Laws; Classical Conditioning- Acquisition, Spontaneous Recovery, Generalization, Discrimination, Extinction and Higher Order Conditioning. • Operant Conditioning: Experiment - Reinforcement, Schedules of Reinforcement, Shaping and Chaining.	11 hour	30-10-2023 To 22-11-2023	PPT

	• Cognitive Learning: Insightful (Kohler) and Observational (Bandura).			
UNIT – 5 MEMORY AND FORGETTING	• Memory: Meaning, Basic Processes – Encoding, Storage and Retrieval. • Types of Memory: Sensory Memory, Short-Term Memory, Long-Term Memory, Working Memory, Semantic Memory, Autobiographical Memory and Flashbulb Memory. • Techniques to Improve Memory: Mnemonics, Chunking, SQ4R (Survey, Question, Read, Reflect,Recite and Review) • Forgetting: Nature – Normal & Abnormal forgetting and Causes of Forgetting.	10 hour	23-11-2023 To 12-12-2023	For internal Assessment
	Internal C1 Theory and C1 Practical's	1hour(Theory) 3hours(Practical)	15-11-2023 To 18-11-2023	C1 Test conducted C2 Test conducted
	Unit- 1 and Unit-2 assessed for C2 (IA Evaluation)		14-12-2023 To 18-12-2023	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board

Course Plan of Odd Semester 2023-24

Department: Psychology
Semester: III Sem Open Elective-II
Title of the Paper: Psychology and Mental Health [Course Code- [22OEPSY301]
Term Period: 11-9-2023 to 16-12-2023
Faculty Name: Smt. Mamatha C K & Smt Sujata. M
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 Introduction	a. Meaning and definition of Mental Health, Fundamentals of Mental Health. b. Factors affecting mental health: Physiological factors, Psychological factors and Social factors, c. Ethical issues	11 hours	11-9-2023 To 26-9-2023	PPT
UNIT – 2 Interpersonal approach to Mental Health	**a.** Interpersonal approaches to mental health: communication and conflict – Non-violence communication, the four horsemen of the apocalypse. **b.** Cognitive distortions - personalization, catastrophizing, polarised thinking,	11 hours	27-9-2023 To 11-10-2023	PPT

	shoulds and musts, mental filtering, fallacies (control, change, and heaven's reward), A-B-C model			
	Revision class	1 hour	13-10-2023	For internal Assessment
	Internal C1 Theory	1hour(Theory)	15-11-2023 To 18-11-2023	C1 Test conducted C2 Test conducted
	Unit- 1 and Unit-2 assessed for C2 (IA Evaluation)		15-12-2023 To18-12-2023	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board
UNIT – 3 Mental Health issues	a. Stress / Burnout b. Anxiety, fear, worry, phobia, depression c. Grief and trauma	10 hours	15-10-2023 To 4-11-2023	PPT
UNIT – 4 Intervention and Management	a. Need for mental health intervention and strategies b. Coping Mechanisms: Grounding techniques, Mindfulness practices, Positive Management of emotions, Healthy Psychological and Social functioning (flourishing), Self care in mental health: A conceptual model.	10 hours	8-11-2023 To 30-11-2023	PPT

Course Plan of Odd Semester 2023-24

Department: psychology
Semester: V Sem
Title of the Paper: Health Psychology [Course Code-221565]

Term Period: 11-9-2023 to 16-12-2023
Faculty Name: Smt. Mamatha C k and Stm. Sujata. M

Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 **INTRODUCTION TO HEALTH PSYCHOLOGY AND HEALTH BEHAVIOUR**	**Health**: Meaning and definition (WHO); Components of health: social, emotional, cognitive and physical aspects**.** Health and Quality of life. **b) Health Psychology**: Introduction; Need for the field of health psychology; History of body mind relationship; Models of health -Biomedical and Bio psychosocial model. **c) Health Behaviours:** factors influencing health behaviours, barriers to modify Poor health behaviours.	14 hours	11-9-2023 To 27-9-2023	PPT
UNIT – 2 HEALTH ENHANCING AND COMPROMISING BEHAVIOUR	**Theories of Health behaviors:** Theories of planned behaviour, The health belief model and their implications. **b) Health compromising behaviors:** Substance abuse, over eating and obesity **c) Health enhancing behaviors:** Physical Exercise, Maintaining healthy diet, sleep and hygiene.	14 hours	29-9-2023 To 13-10-2023	PPT

	d) Adherence: Meaning and factors predicting adherence.			
UNIT – 3 STRESS AND HEALTH	**a) Stress:** Nature and sources of stress; Theories of stress- Selyes' and Lazarus view. **b) Effects of stress on health:** Stress and immune system, Role of stress in CHD, Hyper tension and Diabetes. **c) Coping strategies** -Social support; time management; Yoga, Meditation and Relaxation technique, expressive therapy-music, art and dance d) Positive psychological interventions - gratitude, forgiveness, savouring, patience, creativity.	14 hours	13-10-2023 To 29-10-2023	PPT
	Revision class	1 hour	14-11-2023	For internal Assessment
	Internal C1 Theory and C2 Practical	1hour(Theory) 3hour Practical	15-11-2023 To 18-11-2023	C1 Test conducted C2 Test condudcted
	Unit- 1 and Unit-2 assessed for C2 (IA Evaluation)		15-12-2023 To 18-12-2023	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board
UNIT – 4 MANAGEMENT OF PAIN, CHRONIC AND TERMINAL ILLNESS	**Pain-** Significance; Types; Psychological factors; Cognitive Behavioral Methods of Pain Control- gate control theory of pain, individual differences and socio-cultural	14 hours	30-10-2023 To 23-11-2023	PPT

	differences in reaction to pain. **b) Management of chronic and terminal Illness -** Emotional responses to chronic illness, coping with chronic illness, psychological and social issues related to dying – the issue of non-traditional treatment. **c) Alternatives to hospital care** – Hospice or home care; Psychological management of terminally ill.			

Course Plan of Odd Semester 2023-24

Department: psychology
Semester: V Sem
Title of the Paper: Social Psychology [Course Code-221565]

Term Period: 11-9-2023 to 16-12-2023
Faculty Name: Smt. Mamatha C k and Smt. Sujata. M

Total Hrs: 56 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
UNIT – 1 Fundamentals of Social Psychology	**Health**: Meaning and definition (WHO); Components of health: social, emotional, cognitive and physical aspects**.** Health and Quality of life. **b) Health Psychology**: Introduction; Need for the field of health psychology; History of body mind relationship; Models of health -Biomedical and Bio psychosocial model. **c) Health Behaviours:** factors influencing health behaviours, barriers to modify Poor health behaviours.	14 hours	11-9-2023 To 27-9-2023	PPT
UNIT – 2 Understanding And Evaluating the Social World	**Attribution:** Meaning, Theories of attribution - Fritz-Heider's theory, Jones and Davis theory, Kelly's theory; Attributional Bias. **b) Attitudes:** Definition, attitude-	14 hours	28-9-2023 To 13-10-2023	PPT

	behaviour link; Attitude - Formation and change. **c) Prejudice:** Meaning, Causes, and techniques to reduce Prejudice. **d) Stereotype:** Meaning & Types, glass ceiling and discrimination.			
UNIT – 3 Social Relations, Interaction and Influences	**Interdependent Relationship**: Family, Friendship and Attachment style, Relationship problems, Effects of relationship failure. **b) Group Dynamics:** Meaning & Characteristics**, Group Processes -** Social facilitation, Social loafing, Group Think, Group Polarization, De-individuation, Co-operation, Conflict and techniques to resolve conflicts. **c) Pro-Social Behaviour-** Meaning, situational factors influencing pro-social behaviour. d) **Social Media** - Impact of social media on Interpersonal Relations.	14 hours	16-10-2023 To 30-10-2023	PPT
	Revision class	1 hour	16-12-2023	For internal Assessment
	Internal C1 Theory and C2 Practical	1hour(Theory) 3hour Practical	15-11-2023 To 18-11-2023	C1 Test conducted C2 Test conducted
	Unit- 1 and Unit-2 assessed for C2 (IA Evaluation)		15-12-2023 To 18-12-2023	Marks sheet of C1 Internal Test was displayed on the notice board
Unit – 4 Issues in Social Behaviours	**Aggression-** Meaning, Theories - Social learning perspectives & Drive	14 hours	3-11-2023 To 30-11-2023	PPT

	theory, Determinants of Aggression, Anger Management Strategies. **b) Violence** – Meaning, Nature and types of violence **–** Interpersonal Violence. Collective violence towards social change. **c) Anti-Social behaviour**- Meaning & Types, Psychosocial factors influencing Anti-Social Behaviours. d) **Applying social psychology to Social Systems** - Work & Family.			

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Circular

13.02.2024

HoDs are hereby informed to mail the Course Plan for the academic year 2023-24 on or before 29.02.2023 to dean.fgc@mahajana.edu.in without fail. The commencement and closure date of the semester is given below :

1. Odd Semester Term Dates – 11.09.2023 to 16.12.2023
2. C1 Test Dates – 15.11.2023 to 18.11.2023 (Theory & Practical)
3. Even Semester Term Dates – 12.02.2024 to 25.05.2024
4. C1 Test Dates – 16.04.2024 to 20.04.2024 (Theory & Practical)

(Dr. Sreedhara H) (Dr. B R Jayakumari)

Encl: A sample filled in format of the Course Plan

Course Plan of Even Semester 2023-24

Department: Psychology
Semester: IV Sem BA
Title of the Paper: Developmental Psychology [Course Code-221465]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Mamatha C k and Madhushree A m
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Puberty and Adolescence (12 hours)	a. Definition. b. Biological and Physical changes c. Psychological changes and mental health d. Identity formation e. New media	12 hours	12-2-2024 To 24-2-2024	PPT
Unit-2: Early Adulthood(10hour)	a. Early adulthood definition and Adjustment b. Healthy and physical development c. Psycho-social development d. Cognitive development	10 hours	27-2-2024 To 11-3-2024	PPT
Unit-3:Middle Adulthood(10hours)	a. Definition and Adjustment b. Physical Changes c. Cognitive Development d. Psycho –social changes	10 hour	12-3-2024 To 22-3-2024	PPT
Unit-4: Late Adulthood(10hours)	a. Physical changes b. Psychosocial development c. Health concern d. Living arrangements for the elderly and successful aging	10 hour	23-3-2024 TO 3-4-2024	PPT
Unit-5:Late Adulthood (10hours)	a. Spirituality and Wellbeing b. Finding Meaning and purpose c. Death and Dying d. Issues related to Death e. Care for the dying	12 hour	4-4-2024 TO 18-4-2024	PPT

	Revision class	1 hours	22-04-2024 to 9-05-2024	For internal Assessment
	Internal C1 Theory and C1 Practical	1hours(Theory) 3 hours (Particles)	13-05-2024	C1 test conducted C2 test conducted
	Unit 1 and 2 assessed for C2 (IA) Evaluation		to 25-05-2024	Mark sheet of C1 Internals test was displayed on the notice board

Course Plan of Even Semester 2023-24

Department: Psychology
Semester: II Sem BA
Title of the Paper: Foundation of Psychology-II [Course Code- 211265]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Mamatha C k and Madhushree A m
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Emotion (12hours)	**a.** Definition , elements of Emotion **b.** Classification of emotion **c.** Theories of Emotion **d.** Emotional Intelligence	12 hours	12-2-2024 To 24-2-2024	PPT
Unit-2: Motivation (10 hours)	a. Definition and basic concept of Motivation b. Approaches to the study of Motivation c. Biological motives d. Social motives	10 hours	26-2-2024 To 5-3-2024	PPT
Unit -3: Intelligence (10hours)	a. Definition of Intelligence b. Types c. Theories of Intelligence d. The concept of intelligence e. Artificial Intelligence	10 hours	6-3-2024 To 17-3-2024	PPT
Unit -4Thinking and reasoning	a. Introduction to cognition b. Concept of formation c. Types of thinking d. Problem solving e. Reasoning	10 hour	18-3-2024 To 29-3-2024	PPT
	Revision class	1 hour	15-04-24	For internal Assessment
	Internal C1 Theory and C1		16-04-2024	C1 Test

	Practical's	1hour(Theory) 3hours(Practical)	to 20-04-2024	conducted C2 Test conducted
	Unit- 1 and Unit-2 assessed for C2 (IA Evaluation)		22-04-2024 to 25-04-2024	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board

Course Plan of Even Semester 2023-24

Department: Psychology
Semester: II Sem Open Elective-II
Title of the Paper: [Course Code- 21OEpsy201]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Mamatha C K & Smt. Madhushree A M
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Introduction(11hours)	a. Concept of Youth b. Concept of Gender c. Gender and identity d. Concepts of identity	11 hours	12-2-2024 to 23-2-2024	PPT
Unit-2: Youth and Identity (11 hours)	a. Family b. Peer group identity c. Work place identity and relationship d. Youth culture	11 hours	24-3-2024 To 7-3-2024	PPT
	Revision class	1 hour	15-04-24	For internal Assessment

	Internal C1 Theory	1hour(Theory)	16-04-2024 to 20-04-2024	C1 Test conducted C2 Test conducted
	Unit- 1 and Unit-2 assessed for C2 (IA Evaluation)		22-04-2024 to 25-04-2024	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board
Unit-3: Issues related to youth , Gender and Identity (10hours)	a. Youth Gender and Violence b. Enhancing work life c. Changing role and women empowerment	10 hours	8-3-2024 To 18-3-2024	PPT
Unit-4 : Law and Youth (10hours)	a. Juvenile Justice act b. LGBT right in India c. UNICEF Program for youth	10 hours	19-3-2	PPT

Course Plan of Even Semester 2023-24

Department: psychology
Semester: VI Sem
Title of the Paper: Abnormal Psychology [Course Code-231665]

Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Mamatha C k and Madhushree A m

Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Understanding Abnormality (15hours)				
	a. Introduction **b.** Models of Abnormality	15 hours	20-02-2024 to 28-2-2024	PPT
UNIT -2: Anxiety Based Disorder(15hours)	**a.** Anxiety based disorder **b.** Somatoform disorders **c.** Dissociative disorder	15 hours	29-02-2024 to 14-03-2024	PPT
Unit-3: Schiz ophrenia and Mood Disorder (15hours)	a. Schizophrenia b. Persistent Delusional Disorder c. Mood Disorder	15hours	15-03-2024 to 22-03-2024	PPT
	Revision class	1 hour	15-04-24	For internal Assessment
	Internal C1 Theory and C2 Practical	1hour(Theory) 3hour Practical	16-04-2024 to 20-04-2024	C1 Test conducted C2 Test condudcted
	Unit- 1 and Unit-2 assessed for C2 (IA Evaluation)		22-04-2024 to 25-04-2024	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board
Unit-4:Personality Disorders	a. Cluster A	15hours	22-04-2024	PPT

	b. Cluster B c. Cluster C		to 30-04-2024	

Course Plan of Even Semester 2023-24

Department: Psychology
Semester: VI SEM B.A.
Title of the Paper: Organizational Psychology [Course Code-221452]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Mamatha C K and Madhushree A M
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Introduction to organization	**a.** Nature , Importance and fundamental assumptions **b.** Organization Justice	15 hours	12-2-2024 to 19-2-2024	PPT

Psychology (15hours)	**c.** Ethical Behavior in Organizations			
Unit-2: Individual Differences and Job Stress	a. Personality b. Ability and Skill c. Job Stress	4 hours	29-02-2024 to 14-03-2024	PPT
Unit-3: Organizational Perception and Learning (15)	a. Social Perception and Social Learning b. Learning	715hours	15-03-2024 to 22-03-2024	Chalk and Blackboard
	Revision class	1 hour	15-04-24	For internal Assessment
	Internal C1 Theory and C1 Practical	1hour(Theory) 3hours(Practical)	16-04-2024 to 20-04-2024	C1 Test conducted C2 Test conducted
	Unit-1 and Unit-2 assessed for C2 (IA Evaluation)		22-04-2024 to 25-04-2024	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board
Unit-4: Organizational culture and Structure (15hours)	a. Organizational Structure b. Organizational culture c. Creating and Transmitting and changing organizational culture	15 hours	22-04-2024 to 30-04-2024	PPT

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Course Plan of Odd Semester 2023-24

Department : SANSKRIT
Title of the Paper : Sanskrit Poetry, Grammar and Comprehension **[Course Code – 21SAN109]**
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Dr.SHRINIVAS
Total Hrs: 56 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
	INTRODUCTION TO SUBJECT	2 hours	11-09-2023 to 16-09-23	POs and Course Outcomes of the units discussed
Unit I, and IV (14 hours)	Short History of Sanskrit Literature	2		
	Vedas and vedangas	3 hours	19-09-23 to 23-09-23	Reading.Writing by students and Lecturing
	BASICS OF GRAMMAR- SANSKRIT ALPHABET S WRITING ,Types of Alphabits	1 hours		Chalk and Black board
	Ramayanam and Mahabharatam Pancha Mahakavyani, Laghukavyani ,Stotrakavyani .	3 hours	25-09-23 to 30-09-23	Reading.Writing by students and Lecturing
	Types of swara and vyanjana	01 hours		Chalk and Black board
	Date ,place of Valmeeki , Jevanavruttantah	2 hours	03-10-23 to 07-10-23	Reading.Writing by students and Lecturing

Unit II & IV (14 hours)	Valmiki Ramayana – Balakanda – Sarga 1 – 1 to 5 shloka with Meaning	**3 hours**	09-10-23 to 11-10-23	Reading.Writing by students and Lecturing
	Vocabulary building - SamskritaVyavaharaSahasri	**1 hours**		Chalk and Black board
	Valmiki Ramayana – Balakanda – Sarga 1 – 6 to 10 shloka with Meaning	**3 hours**	12-10-23 to 13 -10-23	Reading.Writing by students and Lecturing
	Vocabulary building - SamskritaVyavaharaSahasri	**1 hours**		Chalk and Black board
	Valmiki Ramayana – Balakanda – Sarga 1 – 11 to 20 shloka with Meaning	**4 hours**	16-10-23 to 21-10-23	Reading.Writing by students and Lecturing Chalk and Black board
	Valmiki Ramayana – Balakanda – Sarga 1 – 21 to 25 shloka with Meaning	**4 hours**	25-10-23 to 27-10-23	Reading.Writing by students and Lecturing
Unit-III **(14 hours)**	Karaka prakarana	**4 hours**	30-10-23 to 04-11-23	Reading.Writing by students and Lecturing Chalk and Black board
	Valmiki Ramayana – Balakanda – Sarga 1 – 26 to 30 shloka with Meaning	**3** Hours	06-11-23 to 11-11-23	Reading.Writing by students and Lecturing
	Karaka prakarana	1 hours		Chalk and Black board
	Vocabulary building - SamskritaVyavaharaSahasri	4 hours	13-11-2023 to 14-11-	Chalk and Black board

			2023	
Unit-I & IV		1 hours	15-11-2023 To 18-11-2023	C1 Internal Test
Unit III and IV (14 hours)	*Valmiki Ramayana – Balakanda – Sarga 1 – 31 to 35 shloka* with Meaning	4 hours	20-11-23 to 25-11-23	Reading.Writing by students and Lecturing Internal Test marks 22-11-23 Display of C1 on the notice board
	Valmiki Ramayana – Balakanda – Sarga 1 – 36 to 40 shloka with Meaning	4 hours	27-11-23 to 02-12-23	Chalk and Black board
	Valmiki Ramayana – Balakanda – Sarga 1 – 41 to 50 shloka with Meaning Karaka prakarana	4 hours	04-12-23 to 09-12-23	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	1 hour	11-12-23 to 16-12-23	Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			16.12.2023	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

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Course Plan of Odd Semester 2023-24

Department : SANSKRIT
Title of the Paper : Sanskrit Poetry, Grammar and Comprehension **[Course Code –** 21SAN110**]**
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Dr.SHRINIVAS
Total Hrs: 56 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
	INTRODUCTION TO SUBJECT	2 hours	11-09-2023 to 16-09-23	POs and Course Outcomes of the units discussed
Unit I, and IV (14 hours)	Short History of Sanskrit Literature	2		
	Vedas and vedangas	3 hours	19-09-23 to 23-09-23	Reading.Writing by students and Lecturing
	BASICS OF GRAMMAR- SANSKRIT ALPHABET S WRITING ,Types of Alphabits	1 hours		Chalk and Black board
	Ramayanam and Mahabharatam PanchaMahakavyani, Laghukavyani ,Stotrakavyani .	3 hours	25-09-23 to 30-09-23	Reading.Writing by students and Lecturing Chalk and Black board
	Types of swara and vyanjana	01 hours		
	Date ,place and works of Vyasa , Jevanavruttantah	2 hours	03-10-23 to 07-10-23	Reading.Writing by students and Lecturing

Unit II, (14 hours)	Bhagawad Gita Chapter 3 (1-05)Shlokas	**3 hours**	09-10-23 to 11-10-23	Reading.Writing by students and Lecturing
	Vocabulary building - SamskritaVyavaharaSahasri	**1 hours**		Chalk and Black board
	Bhagawad Gita Chapter 3 (6-10 Shlokas)	**3 hours**	12-10-23 to 13 -10-23	Reading.Writing by students and Lecturing
	Vocabulary building – Samskrita VyavaharaSahasri	**1 hours**		Chalk and Black board
	Bhagawad Gita Chapter 3 (11-15 Shlokas)	**4 hours**	16-10-23 to 21-10-23	Reading.Writing by students and Lecturing
				Chalk and Black board
	Bhagawad Gita Chapter 3 (16-20 Shlokas)	**4 hours**	25-10-23 to 27-10-23	Reading.Writing by students and Lecturing
Unit-III and IV **(14 hours)**	Karaka prakarana	**4 hours**	30-10-23 to 04-11-23	Reading.Writing by students and Lecturing
				Chalk and Black board
	Bhagawad Gita Chapter 3 (21-25 Shlokas)	**3** Hours	06-11-23 to 11-11-23	Reading.Writing by students and Lecturing
	Karaka prakarana	1 hours		Chalk and Black board
	Vocabulary building - SamskritaVyavaharaSahasri	4 hours	13-11-2023 to 14-11-	Chalk and Black board

			2023	
Unit-I & IV		1 hour	15-11-2023 To 18-11-2023	C1 Internal Test
Unit III and IV (14 hours)	Bhagawad Gita Chapter 3 (25-30 Shlokas)	4 hours	20-11-23 to 25-11-23	Reading.Writing by students and Lecturing Internal Test marks 22-11-23 Display of C1 on the notice board
	Bhagawad Gita Chapter 3 (31-35 Shlokas)	4 hours	27-11-23 to 02-12-23	Chalk and Black board
	Bhagawad Gita Chapter 3 (36-43 Shlokas) Karaka prakarana	4 hours	04-12-23 to 09-12-23	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	1 hour	11-12-23 to 16-12-23	Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			16.12.2023	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

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Course Plan of Odd Semester 2023-24

Department : SANSKRIT
Title of the Paper : Sanskrit Champu Kavya and Grammer **[Course Code – 21SAN309]**
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Dr.SHRINIVAS
Total Hrs: 56 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
	INTRODUCTION TO SUBJECT	2 hours	11-09-2023 to 16-09-23	POs and Course Outcomes of the units discussed
Unit I, and IV (14 hours)	Introduction to classical Sanskrit literature	2		
	Short History of Sanskrit Literature	3 hours	19-09-23 to 23-09-23	Reading.Writing by students and Lecturing
	Basics of Chandas	1 hours		Chalk and Black board
	Introduction to Author and Text	3 hours	25-09-23 to 30-09-23	Reading.Writing by students and Lecturing
	Types of chandas	01 hours		Chalk and Black board
	Date ,place and Works of Neelakantha Deekshitha	2 hours	03-10-23 to 07-10-23	Reading.Writing by students and Lecturing

Unit II, (14 hours)	नीलकण्ठविजय चम्पूः-तृतीयाश्वासः,10 श्लोक पर्यन्तम्	**3 hours**	09-10-23 to 11-10-23	Reading.Writing by students and Lecturing
	अनुष्टुप्	**1 hours**		Chalk and Black board
	नीलकण्ठविजय चम्पूः-तृतीयाश्वासः,15 श्लोक पर्यन्तम्	**3 hours**	12-10-23 to 13 -10-23	Reading.Writing by students and Lecturing
	अनुष्टुप् , तस्य उदाहरणानि	**1 hours**		Chalk and Black board
	नीलकण्ठविजय चम्पूः-तृतीयाश्वासः,20 श्लोक पर्यन्तम्	**4 hours**	16-10-23 to 21-10-23	Reading.Writing by students and Lecturing
				Chalk and Black board
	नीलकण्ठविजय चम्पूः-तृतीयाश्वासः,25 श्लोक पर्यन्तम्	**4 hours**	25-10-23 to 27-10-23	Reading.Writing by students and Lecturing
Unit-III and IV **(14 hours)**	Examples of इन्द्रवज्रा	**4 hours**	30-10-23 to 04-11-23	Reading.Writing by students and Lecturing
				Chalk and Black board
	नीलकण्ठविजय चम्पूः-तृतीयाश्वासः,30 श्लोक पर्यन्तम्	**3** Hours	06-11-23 to 11-11-23	Reading.Writing by students and Lecturing
	वसन्ततिलका	1 hours		Chalk and Black board
	Examples of वसन्ततिलका	4 hours	13-11-2023 to 14-11-	Chalk and Black board

			2023	
Unit-I & IV	मन्दाक्रान्ता	1 hours	15-11-2023 To 18-11-2023	C1 Internal Test
Unit III and IV (14 hours)	नीलकण्ठविजय चम्पूः-तृतीयाश्वासः,40 श्लोक पर्यन्तम्	4 hours	20-11-23 to 25-11-23	Reading.Writing by students and Lecturing Internal Test marks 22-11-23 Display of C1 on the notice board
	नीलकण्ठविजय चम्पूः-तृतीयाश्वासः,60 श्लोक पर्यन्तम्	4 hours	27-11-23 to 02-12-23	Chalk and Black board
	नीलकण्ठविजय चम्पूः-तृतीयाश्वासः,73 श्लोक पर्यन्तम्,	4 hours	04-12-23 to 09-12-23	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	1 hour	11-12-23 to 16-12-23	Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			16.12.2023	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

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Course Plan of Odd Semester 2023-24

Department : SANSKRIT
Title of the Paper : Sanskrit Champu Kavya and Grammer **[Course Code – 21SAN310]**
Term Period : 11.09.2023 to 16.12.2023
Faculty Name : Dr.SHRINIVAS
Total Hrs: 56 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
	INTRODUCTION TO SUBJECT	2 hours	11-09-2023 to 16-09-23	POs and Course Outcomes of the units discussed
Unit I, and IV (14 hours)	Introduction to classical Sanskrit literature	2		
	Short History of Sanskrit Literature	3 hours	19-09-23 to 23-09-23	Reading.Writing by students and Lecturing
	ALANKARA	1 hours		Chalk and Black board
	Introduction to Author and Text	3 hours	25-09-23 to 30-09-23	Reading.Writing by students and Lecturing
	Types of Alankara	01 hours		Chalk and Black board
	Date ,place and Works of King Bhoja	2 hours	03-10-23 to 07-10-23	Reading.Writing by students and Lecturing

Unit II, (14 hours)	भोजराजविरचित चम्पूरामायणम्	**3 hours**	09-10-23 to 11-10-23	Reading.Writing by students and Lecturing
	Upama Alankara	**1 hours**		Chalk and Black board
	भोजराजविरचित चम्पूरामायणम्-किष्किन्धाकाण्डः, 10 श्लोक पर्यन्तम्	**3 hours**	12-10-23 to 13 -10-23	Reading.Writing by students and Lecturing
	Upama Alankara तस्य उदाहरणानि	**1 hours**		Chalk and Black board
	भोजराजविरचित चम्पूरामायणम्-किष्किन्धाकाण्डः, 20 श्लोक पर्यन्तम्	**4 hours**	16-10-23 to 21-10-23	Reading.Writing by students and Lecturing
				Chalk and Black board
	भोजराजविरचित चम्पूरामायणम्-किष्किन्धाकाण्डः, 24 श्लोक पर्यन्तम्	**4 hours**	25-10-23 to 27-10-23	Reading.Writing by students and Lecturing
Unit-III and IV **(14 hours)**	Examples of रूपकालङ्कारः	**4 hours**	30-10-23 to 04-11-23	Reading.Writing by students and Lecturing
				Chalk and Black board
	भोजराजविरचित चम्पूरामायणम्-किष्किन्धाकाण्डः, 30 श्लोक पर्यन्तम्	**3** Hours	06-11-23 to 11-11-23	Reading.Writing by students and Lecturing
	रूपकालङ्कारः	1 hours		Chalk and Black board
	Examples of उपमालङ्कारः	4 hours	13-11-2023 to 14-11-	Chalk and Black board

			2023	
Unit-I & IV		1 hours	15-11-2023 To 18-11-2023	C1 Internal Test
Unit III and IV (14 hours)	भोजराजविरचित चम्पूरामायणम्-किष्किन्धाकाण्डः, 34 श्लोक पर्यन्तम् रूपकालङ्कारः,अनन्वयालङ्कारः उत्प्रेक्षालङ्कारः,श्लेषालङ्कारः	4 hours	20-11-23 to 25-11-23	Reading.Writing by students and Lecturing Internal Test marks 22-11-23 Display of C1 on the notice board
	भोजराजविरचित चम्पूरामायणम्-किष्किन्धाकाण्डः, 40 श्लोक पर्यन्तम्	4 hours	27-11-23 to 02-12-23	Chalk and Black board
	भोजराजविरचित चम्पूरामायणम्-किष्किन्धाकाण्डः, 48 श्लोक पर्यन्तम्	4 hours	04-12-23 to 09-12-23	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	1 hour	11-12-23 to 16-12-23	Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			16.12.2023	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

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Course Plan of EVEN Semester 2023-24

Department : SANSKRIT
Title of the Paper : Sanskrit Prose, Grammar and Translation [Course Code – 21SAN209**]**
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr.SHRINIVAS
Total Hrs: 56 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I and IV (14 hours)	INTRODUCTION TO SUBJECT	2 hours	12.02.2024 to 17.02.2024	POs and Course Outcomes of the units discussed
	Introduction to Sanskrit Gadya Literature	2		
	Origin and Development of Gadya Literature	3 hours	19.02.2024 to 24.02.2024	Reading.Writing by students and Lecturing
	Sanskrit Gadya sahitya parampara	1 hours		Chalk and Black board
	Sanskrit Gadya sahitya parampara Dandi	3 hours	26.02.2024 to 02.03.2024	Reading.Writing by students and Lecturing
	Sanskrit shabdah	01 hours		Chalk and Black board
	Sanskrit Gadya sahitya parampara Subandhu ,Bhana	2 hours	04.03.2024 to 09.03.2024	Reading.Writing by students and Lecturing
				Chalk and Black board

Unit II and IV (14 hours)	Date ,place and Works of Lakshmana Suri	**3 hours**	11.03.2024 to 16.03.2024	Reading.Writing by students and Lecturing
	Sanskrit shabdah, (Rama)	**1 hours**		Chalk and Black board
	Bharata Sangraha – By Lakshmana Suri – Adi Parva	**3 hours**	18.03.2024 to 23.03.2024	Reading.Writing by students and Lecturing
	Sanskrit shabdah, (Hari)	**1 hours**		Chalk and Black board
	Bharata Sangraha - Adi Parva	**3 hours**	25.03.2024 to 30.03.2024	Reading.Writing by students and Lecturing
	Sanskrit shabdah, (Ukaranta)	**1 hours**		Chalk and Black board
	Bharata Sangraha– Adi Parva	**3 hours**	01.04.2024 to 06.04.2024	Reading.Writing by students and Lecturing
	Sanskrit shabdah – Samskrit Shabdachandrika	**1 hours**		Chalk and Black board
Unit-III and IV (14 hours)	Bharata Sangraha – Sabha Parva.	**3 hours**	08.04.2024 to 13.04.2024	Reading.Writing by students and Lecturing
	Sanskrit Shabdachandrika	1 hours		Chalk and Black board
	Bharata Sangraha – Sabha Parva.	1 hours	15.04.2024	Reading.Writing by students and Lecturing
Unit I II & IV		1 hour	16.04.2024 TO 20.04.2024	C1 Internal Test
	Bharata Sangraha – Sabha Parva.	**3** Hours	22.04.2024 to 27.04.2024	Reading.Writing by students and Lecturing
	Sanskrit Shabdachandrika	1 hours		Chalk and Black board

Unit IV (14 hours)	Identifying Sandhi	3 hours	29.04.2024 to 04.05.2024	Reading.Writing by students and Lecturing
	Translation from Sanskrit to Kannada/English	1 hours		Internal Test marks 04.05.2024 Display of C1 on the notice board
	Identifying Sandhi	4 hours	06.05.2024 to 11.05.2024	Chalk and Black board
	Translation from Sanskrit to Kannada/English	4 hours	13.05.2024 to 18.05.2024	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	4 hours	20.05.2024 to 25.05.2024	Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			26.05.2024	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

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Course Plan of EVEN Semester 2023-24

Department : SANSKRIT
Title of the Paper : Sanskrit Prose, Grammar and Translation [Course Code – 21SAN210**]**
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr.SHRINIVAS
Total Hrs: 56 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I and IV (14 hours)	INTRODUCTION TO SUBJECT	2 hours	12.02.2024 to 17.02.2024	POs and Course Outcomes of the units discussed
	Introduction to Sanskrit Gadya Literature	2		
	Origin and Development of Gadya Literature	3 hours	19.02.2024 to 24.02.2024	Reading.Writing by students and Lecturing
	Sanskrit Gadya sahitya parampara	1 hours		Chalk and Black board
	Sanskrit Gadya sahitya parampara Dandi	3 hours	26.02.2024 to 02.03.2024	Reading.Writing by students and Lecturing
	Sanskrit shabdah	01 hours		Chalk and Black board
	Sanskrit Gadya sahitya parampara Subandhu ,Bhana	2 hours	04.03.2024 to 09.03.2024	Reading.Writing by students and Lecturing
				Chalk and Black board

Unit II and IV (14 hours)	Date ,place and Works of Lakshmana Suri	**3 hours**	11.03.2024 to 16.03.2024	Reading.Writing by students and Lecturing
	Sanskrit shabdah, (Rama)	**1 hours**		Chalk and Black board
	Bharata Sangraha – By Lakshmana Suri – Udyoga parva.	**3 hours**	18.03.2024 to 23.03.2024	Reading.Writing by students and Lecturing
	Sanskrit shabdah, (Hari)	**1 hours**		Chalk and Black board
	Bharata Sangraha - Udyoga parva.	**3 hours**	25.03.2024 to 30.03.2024	Reading.Writing by students and Lecturing
	Sanskrit shabdah, (Ukaranta)	**1 hours**		Chalk and Black board
	Bharata Sangraha– Udyoga parva.	**3 hours**	01.04.2024 to 06.04.2024	Reading.Writing by students and Lecturing
	Sanskrit shabdah – Samskrit Shabdachandrika	**1 hours**		Chalk and Black board
Unit-III and IV (14 hours)	Bharata Sangraha – Bhishma parva.	**3 hours**	08.04.2024 to 13.04.2024	Reading.Writing by students and Lecturing
	Sanskrit Shabdachandrika	1 hours		Chalk and Black board
	Bharata Sangraha – Bhishma parva.	1 hours	15.04.2024	Reading.Writing by students and Lecturing
Unit I II & IV		1 hour	16.04.2024 TO 20.04.2024	C1 Internal Test
	Bharata Sangraha – Bhishma parva.	**3** Hours	22.04.2024 to 27.04.2024	Reading.Writing by students and Lecturing
	Sanskrit Shabdachandrika	1 hours		Chalk and Black board

Unit IV (14 hours)	Identifying Sandhi	3 hours	29.04.2024 to 04.05.2024	Reading.Writing by students and Lecturing
	Translation from Sanskrit to Kannada/English	1 hours		Internal Test marks 04.05.2024 Display of C1 on the notice board
	Identifying Sandhi	4 hours	06.05.2024 to 11.05.2024	Chalk and Black board
	Translation from Sanskrit to Kannada/English	4 hours	13.05.2024 to 18.05.2024	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	4 hours	20.05.2024 to 25.05.2024	Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			26.05.2024	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

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Course Plan of EVEN Semester 2023-24

Department : SANSKRIT

Title of the Paper : Sanskrit Drama,Dramaturgy and छन्दः **[Course Code –** 22SAN409**]**

Term Period : 12.02.2024 to 25.05.2024

Faculty Name : Dr.SHRINIVAS

Total Hrs: 56 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I and IV (14 hours)	INTRODUCTION TO SUBJECT	2 hours	12.02.2024 to 17.02.2024	POs and Course Outcomes of the units discussed
	Introduction to Sanskrit Drama	2		
	Introduction to Sanskrit Drama and Dramaturgy	3 hours	19.02.2024 to 24.02.2024	Reading.Writing by students and Lecturing
	Origin and Development of Sanskrit Drama	1 hours		Chalk and Black board
	Dasarupakas and their lakshanas	3 hours	26.02.2024 to 02.03.2024	Reading.Writing by students and Lecturing
	Basics of Chandas and gana vibhag	01 hours		Chalk and Black board
	Important Drushya Kavyas (Dramas) and Dramatists in Sanskrit Literature	2 hours	04.03.2024 to 09.03.2024	Reading.Writing by students and Lecturing
				Chalk and Black board

Unit II and IV (14 hours)	Introduction to Author and Text Date ,place and Works of Bhasa	**3 hours**	11.03.2024 to 16.03.2024	Reading.Writing by students and Lecturing
	Types of chandas	**1 hours**		Chalk and Black board
	दूतवाक्यं -5 श्लोक पर्यन्तम्	**3 hours**	18.03.2024 to 23.03.2024	Reading.Writing by students and Lecturing
	अनुष्टुप्	**1 hours**		Chalk and Black board
	दूतवाक्यं - 15 श्लोक पर्यन्तम्	**3 hours**	25.03.2024 to 30.03.2024	Reading.Writing by students and Lecturing
	अनुष्टुप् , तस्य उदाहरणानि	**1 hours**		Chalk and Black board
	दूतवाक्यं - 25 श्लोक पर्यन्तम्	**3 hours**	01.04.2024 to 06.04.2024	Reading.Writing by students and Lecturing
	Examples of इन्द्रवज्रा	**1 hours**		Chalk and Black board
Unit-III and IV (14 hours)	दूतवाक्यं -26 श्लोकत: 30 श्लोक पर्यन्तम्	**3 hours**	08.04.2024 to 13.04.2024	Reading.Writing by students and Lecturing
	वसन्ततिलका	1 hours		Chalk and Black board
	दूतवाक्यं -31 श्लोकत: 40 श्लोक पर्यन्तम्	1 hours	15.04.2024	Reading.Writing by students and Lecturing
Unit I II & IV		1 hour	16.04.2024 TO 20.04.2024	C1 Internal Test
	दूतवाक्यं -41 श्लोकत: 50 श्लोक पर्यन्तम्	**3** Hours	22.04.2024 to 27.04.2024	Reading.Writing by students and Lecturing
	दूतवाक्यं -51 श्लोकत: 53 श्लोक पर्यन्तम्	1 hours		Chalk and Black board

Unit IV (14 hours)	Basics of Chandas, gana vibhaga	3 hours	29.04.2024 to 04.05.2024	Reading.Writing by students and Lecturing
	Examples of वसन्ततिलका	1 hours		Internal Test marks 04.05.2024 Display of C1 on the notice board
	Identifying chandas	4 hours	06.05.2024 to 11.05.2024	Chalk and Black board
	अनुष्टुप्, इन्द्रवज्रा, वसन्ततिलका,मालिनी,मन्दाक्रान्ता.	4 hours	13.05.2024 to 18.05.2024	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	4 hours	20.05.2024 to 25.05.2024	Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			26.05.2024	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

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Course Plan of EVEN Semester 2023-24

Department : SANSKRIT
Title of the Paper : Sanskrit Drama,Dramaturgy and छन्दः **[Course Code –** 22SAN410**]**
Term Period : 12.02.2024 to 25.05.2024
Faculty Name : Dr.SHRINIVAS
Total Hrs: 56 Hours (4 Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit I and IV (14 hours)	INTRODUCTION TO SUBJECT	2 hours	12.02.2024 to 17.02.2024	POs and Course Outcomes of the units discussed
	Introduction to Sanskrit Drama	2		
	Introduction to Sanskrit Drama and Dramaturgy	3 hours	19.02.2024 to 24.02.2024	Reading.Writing by students and Lecturing
	Origin and Development of Sanskrit Drama	1 hours		Chalk and Black board
	Dasarupakas and their lakshanas	3 hours	26.02.2024 to 02.03.2024	Reading.Writing by students and Lecturing
	Basics of Chandas and gana vibhag	01 hours		Chalk and Black board
	Important Drushya Kavyas (Dramas) and Dramatists in Sanskrit Literature	2 hours	04.03.2024 to 09.03.2024	Reading.Writing by students and Lecturing
				Chalk and Black board

Unit II and IV (14 hours)	Introduction to Author and Text Date ,place and Works of Bhasa	**3 hours**	11.03.2024 to 16.03.2024	Reading.Writing by students and Lecturing
	Types of chandas	**1 hours**		Chalk and Black board
	प्रतिमा नाटकं - भासः(प्रथमाङ्कः)	**3 hours**	18.03.2024 to 23.03.2024	Reading.Writing by students and Lecturing
	अनुष्टुप्	**1 hours**		Chalk and Black board
	प्रतिमा नाटकं - भासः(प्रथमाङ्कः)	**3 hours**	25.03.2024 to 30.03.2024	Reading.Writing by students and Lecturing
	अनुष्टुप् , तस्य उदाहरणानि	**1 hours**		Chalk and Black board
	प्रतिमा नाटकं - भासः(द्वितीय)	**3 hours**	01.04.2024 to 06.04.2024	Reading.Writing by students and Lecturing
	Examples of इन्द्रवज्रा	**1 hours**		Chalk and Black board
Unit-III and IV (14 hours)	**प्रतिमा नाटकं – भासः** **(द्वितीयाङ्कः)**	**3 hours**	08.04.2024 to 13.04.2024	Reading.Writing by students and Lecturing
	इन्द्रवज्रा	1 hours		Chalk and Black board
	प्रतिमा नाटकं – भासः **(द्वितीयाङ्कः)**	1 hours	15.04.2024	Reading.Writing by students and Lecturing
Unit I II & IV		1 hour	16.04.2024 TO 20.04.2024	C1 Internal Test
	प्रतिमा नाटकं – भासः **(द्वितीय-तृतीयाङ्कौ)**	**3** Hours	22.04.2024 to 27.04.2024	Reading.Writing by students and Lecturing
		1 hours		Chalk and Black board

Unit IV (14 hours)	Basics of Chandas, gana vibhaga	3 hours	29.04.2024 to 04.05.2024	Reading.Writing by students and Lecturing
	Examples of वसन्ततिलका	1 hours		Internal Test marks 04.05.2024 Display of C1 on the notice board
	Identifying chandas	4 hours	06.05.2024 to 11.05.2024	Chalk and Black board
	अनुष्टुप्, इन्द्रवज्रा, वसन्ततिलका,मालिनी,मन्दाक्रान्ता.	4 hours	13.05.2024 to 18.05.2024	Chalk and Black board
Unit I,II,III& IV	**Revision Classes**	4 hours	20.05.2024 to 25.05.2024	Doubt Clearing and Clarifications by students and Lecturing Submission of Assignment- C 2
			26.05.2024	Assignment marks on the notice board **Filling IA Marks to UUCMS Portal**

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Circular

13.02.2024

HoDs are hereby informed to mail the Course Plan for the academic year 2023-24 on or before 29.02.2023 to dean.fgc@mahajana.edu.in without fail. The commencement and the closure date of the semester is given below :

1. Odd Semester Term Dates – 11.09.2023 to 16.12.2023
2. C1 Test Dates – 15.11.2023 to 18.11.2023 (Theory & Practical)
3. Even Semester Term Dates – 12.02.2024 to 25.05.2024
4. C1 Test Dates – 16.04.2024 to 20.04.2024 (Theory & Practical)

(Dr. Sreedhara H) (Dr. B R Jayakumari)

Encl: A sample filled in format of the Course Plan

Course Plan of Odd Semester 2023-24

Department: Sociology
Title of the Paper: Understanding Sociology [Course Code –211151]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Smt. Geetha H J

Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Sociology as Science (17 hours)	**Chapter-1**: Sociology as a study of Groups and Social Interaction - Definition, Scope and Need; Sociology as Science Vs. Sociology as Social Reform.	4 hours	11-09-2023 to 16-09-23	Classroom teaching
	Chapter- 2: Foci of Sociology: Social Institutions, Social Inequality and Social Change.	4 hours	19-09-23 to 27-09-23	Chalk and Blackboard
	Chapter -3 (C) Sociological Eye (Randall Collins), Sociological Imagination (C Wright Mills' distinction between trouble i.e. personal in nature and issue, i.e. public in nature).	3 hours	29-09-23 to 07-10-23	Chalk and Blackboard
	Chapter- 4. Sociological Perspectives: Functionalist, Conflict, Symbolic Interactionist, Feminist	4 hours	09-10-23 to 20-10-23	Chalk and Blackboard
	Chapter No. 5 Social Construction of Reality.	2 hours	21-10-23 to 31-10-23	Chalk and Blackboard
Unit-2: Culture and Socialisation (14 hours)	**Chapter-6**. Culture: Definition and Elements of Culture; Comparison between Culture and Civilisation; Acculturation: Robert Ezra Park's idea of Melting Pot; Cultural Contact, Cultural Shock, Counter Culture and Contra Culture.	4 hours	02-11-23 to 10 -11-23	Chalk and Blackboard
	Revision class	1 hour	13-11-23	Timetable of Internal Test was displayed on the notice board

Unit-2: Culture and Socialisation (14 hours)	**Chapter-7**. Global Culture: Globalisation of Values; Cultural Imperialism.	2 hours	20-11-23 to 24-11-23	Chalk and Blackboard
	Chapter-8. Emerging Issues in Culture: Consumer Culture, Children as Consumers, Cyberculture, Netiquette in the Age of Digital Living and Digital Divide.	4 hours	27-11-23 to 04-12-23	Chalk and Blackboard
	Chapter-9 Socialisation: Theories of Self: Charles Horton Cooley and George Herbert Mead	4 hours	05-12-23 to 08-12-23	Chalk and Blackboard
Unit – 3 Social Change (11 hours)	**Chapter -10** Changes due to Industrialisation, Rationalisation, Globalisation, McDonaldization (George Ritzer), Urbanisation and Information Explosion.	6 hours	09-12-23 to 13-12-23	Chalk and Blackboard
	Chapter -11. Consequences of Change: Changing age Structure of Societies: Ageing and Ageism; Technological Impact on Social Life; Changing Environment.	5 hours	14-12-23 to 16-12-23	Chalk and Blackboard

Department: Sociology
Title of the Paper: Changing Social Institutions in India [Course Code –211152]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Smt. Deepu B G
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Family and Marriage (16 hours)	**Chapter 1**: Family - Definitions of Family and Household; Changing the structure of family; changes in size and composition.	3 hours	11-09-23 to 16-09-23	Classroom teaching
	Chapter 2: Weakening of gender and age stratification - the democratisation of relationships: between spouses, parent-children; step-parenting.	3 hours	19-09-23 to 23-09-23	Chalk and Blackboard
	Chapter 3: Changes in caregiving of children and elderly.	3 hours	25-09-23 to 29-09-23	Chalk and Blackboard
	Chapter 4: Marriage – Definition; changing patterns of marital relations - cohabitation, separation, divorce and remarriage	3 hours	30-09-23 to 06-10-23	Chalk and Blackboard
	Chapter 5: Changes in age of marriage, marriage decision making and regional variations	2 hours	07-10-23 to 12-10-23	Chalk and Blackboard
	Chapter 6: Decrease in the number of children and voluntary childlessness.	2 hours	13-10-23 to 18-10-23	Chalk and Blackboard
Unit-2: Religion and Education (13 hours)	**Chapter 7**: Definition; secularisation vs resurgence of religion in the modern world, Challenge of diversity - religious freedom vs state laws.	2 hours	19-10-23 to 27 -10-23	Chalk and Blackboard
	Chapter 8: Education: Definition; education as socialisation; types of education - formal and informal.	4 hours	28-10-23 to 04-11-23	Chalk and Blackboard
	Chapter 9: Functional view - manifest and latent functions; Conflict view - education as a tool for perpetuating inequality, Schooling and Life Chances (Max Weber's views) - increasing enrolment ratio	2 hours	06-11-23 to 08-11-23	Chalk and Blackboard

	Chapter-10: Education and Employability - Technology and Digital Divide	3 hours	09-11-23 to 11-11-23	Chalk and Blackboard
	Revision class	1 hour	13-11-23	13-11-23 Internal Test timetable was displayed on the noticeboard
	Internal assessment	1 hour	15-11-2023 to 18-11-23	15-11-2023 To 18-11-2023 C1 Internal Test was conducted
	IA Valuation and results announcements	1 hours	20-11-23 to 25-11-23	23-11-23 Marks sheet of C1 Internal Test was displayed on the notice board
Unit – 3: Economic and Political Institutions (13 hours)	**Chapter-11**: Definitions of Economy and Work, Gender stratification in work and its feminisation.	2 hours	20-11-23 to 23-11-23	Chalk and Blackboard
	Chapter-12: Job insecurity, Unemployment; Outsourcing - opportunities and threats; automation and advancement of technology	3 hours	24-11-23 To 28-11-23	Chalk and Blackboard
	Chapter-13: Definitions of Political Institution, Government, Governance and State	3 hours	29-11-23 To 05-12-23	Chalk and Blackboard
	Chapter-14: Status of Democracy in India, Challenges: Militancy, Fundamentalism, Regionalism	3 hours	06-12-23 To 11-12-23	Chalk and Blackboard
	Chapter-15: Globalisation and Social Welfare.	2 hours	12-12-23 To 16-12-23	Chalk and Blackboard

Department: Sociology
Title of the Paper: Indian Society: Continuity & Change- OE [Course Code –21OESOC101]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Smt. Deepu B G
Total Hrs: 39 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Tradition in Transition (13 hours)	**Chapter 1:** The Nature and Direction of Change in Indian Society	4 hours	11-09-23 to 16-09-23	Classroom teaching
	Chapter 2: The Changing Face of Indian Social Institutions: Family, Caste, Polity and Economy	4 hours	19-09-23 to 26-09-23	Chalk and Blackboard
	Chapter 3: The Rural-Urban Divide: Infrastructure, Education, Health and Local Governance.	3 hours	27-09-23 to 05-10-23	Chalk and Blackboard
Unit-2: Movements for Social Justice (13 hours)	**Chapter 4:** A Background View: Role of the Constitution of India and Legislation.	3 hours	06-10-23 to 13-10-23	Chalk and Blackboard
	Chapter 5: Backward Classes and Dalit Movements	4 hours	16-10-23 to 26-10-23	Chalk and Blackboard
	Chapter 6: New Social Movements: LGBTQ, Civil Rights, Ecological, Anticorruption Movements.	3 hours	27-10-23 to 11-11-23	Chalk and Blackboard
	Revision class	1 hour	13-11-23	Internal Test timetable was displayed on the noticeboard
	Internal Assessment		15-11-2023 To 18-11-2023	C1 Internal Test was conducted
Unit-2: Movements for Social Justice (13 hours)	**Chapter 7:** Opportunities for Social Mobility for Scheduled Castes, Scheduled Tribes and Women.	3 hours	20-11-23 to 25-11-23	Chalk and Blackboard

Unit – 3: India in the Globalization Era (13 hours)	**Chapter 8**: Globalization and Indian Culture: Impact on Food Habits, Language, Ideas and Life Styles.	7 hours	27-11-23 To 07-12-23	Chalk and Blackboard
	Chapter 9: Globalisation and Social Values: Impact on Youth and their World View, Changing Landscape of Love and Marriage, Impact on Familial Relationships and Understanding Others.	6 hours	08-12-23 To 16-12-23	Chalk and Blackboard

Department: Sociology
Title of the Paper: Social Stratification & Mobility [Course Code-221351]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Smt. Deepu B G
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Stratification - Features and Forms (14 hours)	**Chapter-1:** Basic Characteristics of Stratification: Melvin M Tumin.	4 hours	11-09-23 to 16-09-23	Classroom teaching
	Chapter-2: Forms of Social Stratification - Caste, Class, Estate.	5 hours	19-09-23 to 26-09-23	Chalk and Blackboard
	Chapter-3: Dimensions of Social Stratification - Income, Wealth, Power, Occupational Prestige, Schooling.	5 hours	27-09-23 to 07-10-23	Chalk and Blackboard
Unit-2: Perspectives on Stratification (14 hours)	**Chapter-4:** Functional Theory: Kingsley Davis and W E Moore's perspective and critique by Melvin M Tumin.	5 hours	09-10-23 to 17 -10-23	Chalk and Blackboard
	Chapter-5: Karl Marx's Theory: Class and Social Change.	5 hours	18-10-23 to 27-10-23	Chalk and Blackboard
	Chapter-6: Weber's Theory: Class, Status and Power.	4 hours	30-10-23 to 04-11-23	Chalk and Blackboard
Unit – 3: Social Mobility **(**14 hours)	**Chapter-7:** Meaning of social mobility; forms of social mobility: horizontal and vertical, intergenerational and intra-generational mobility.	5 hours	06-11-23 To 11-11-23	Chalk and Blackboard
	Revision class	1 hour	13-11-23	23-11-23 Internal Test timetable was displayed on the noticeboard

	Internal Assessment	1 h	15-11-2023 To 18-11-2023	C1 Internal Test was conducted
	IA Valuation and result announcement		20-11-23 to 25-11-23	Marks sheet of C1 Internal Test was displayed on the notice board
Unit – 3: Social Mobility **(**14 hours)	**Chapter-8.** Role of Education and Profession in the Rise of Middle Class.	5 hour	20-11-23 To 02-12-23	Chalk and Blackboard
	Chapter-9: Mobility in Caste in Contemporary India.	4 hour	04-12-23 To 16-12-23	Chalk and Blackboard

Department: Sociology
Title of the Paper: Sociology of Urban Life in India [Course Code-221352]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Smt. Geetha H J
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Introducing Urban Sociology (17 hours)	**Chapter-1:** Meaning of Urban Sociology and its importance; a brief history of Urban Sociology in India and the world.	6 hours	11-09-2023 to 20-09-23	Classroom teaching
	Chapter-2: Meaning of Urban, Urbanism and the City; Types of City: Metropolitan, Megacity and Global City.	6 hours	21-09-23 to 30-09-23	Chalk and Blackboard
	Chapter No.3. Urbanization and its Challenges: Rural-Urban Continuum, Suburbs, Urban Fringe, Urban Sprawl, Edge Cities.	5 hours	03-10-23 to 10-10-23	Chalk and Blackboard
Unit-2: Perspectives on Urban Society (9 hours)	**Chapter-4:** Ecological Theory (Chicago School)	2 hours	11-10-23 to 19 -10-23	Chalk and Blackboard
	Chapter-5: World and Global Cities (Saskia Sassen).	4 hours	20-10-23 to 30-10-23	Chalk and Blackboard
	Chapter-6: Spaces of Flows (Manuel Castells), Cities in the South.	2 hours	31-10-23 to 10-11-23	Chalk and Blackboard
	Revision Class	1 hour	13-11-23	23-11-23 Internal Test timetable was displayed on the noticeboard
	Internal Assessment			15-11-2023 To 18-11-2023 C1 Internal Test was conducted

	IA Valuation and result announcement		20-11-23 to 25-11-23	23-11-23 Marks sheet of C1 Internal Test was displayed on the notice board
Unit – 3: Urban Policy (16 hours)	**Chapter-7:** Inequalities: Caste, Class, Gated Communities and Social Exclusion.	6 hours	20-11-23 to 28-11-23	Chalk and Blackboard
	Chapter-8: Urban Governance: 74th Amendment to the Indian Constitution, Urban Development and Planning.	6 hours	29-11-23 to 7-12-23	Chalk and Blackboard
	Chapter-9: Urban Policy: Urbanization and Environmental Concerns, Smart cities.	4 hours	8-12-23 to 16-12-23	Chalk and Blackboard

Department: Sociology
Title of the Paper: Sociology of Tourism Management [Course Code-22OESOC301]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Smt. Deepu B G
Total Hrs: 39 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Sociology, Tourism, Tourists (14 hours)	**Chapter No. 1.** Definitions of Sociology, Culture, Tourism, Tourists, Tourist Gaze; Relation between Tourism, Leisure and Recreation; Sociology of Tourism.	5 hours	11-09-23 to 20-09-23	Classroom teaching
	Chapter No.2. Types of Tourism: Cultural, Heritage, Medical, Food, Sports and Eco-Tourism.	5 hours	21-09-23 to 30-09-23	Chalk and Blackboard
	Chapter No.3. Tourism and Locals; Hosts and Guests: Mutual Impact.	4 hours	03-10-23 to 10-10-23	Chalk and Blackboard
Unit-2: Tourism System (10 hours)	**Chapter No. 4.** Development and Structure of the Tourist System - Motivation and Role of Tourist.	4 hours	11-10-23 to 19-10-23	Chalk and Blackboard
	Chapter No.5. Impact of Tourism on Host Place: Social, Economic, Climate and Environmental.	3 hours	20-10-23 to 30-10-23	Chalk and Blackboard
	Chapter No.6. Sustainable Tourism: Definitions of Sustainable and Sustainable Tourism; Sustainability of Tourism.	3 hours	31-10-23 to 10-11-23	Chalk and Blackboard
	Extra Class	1 hour	11-11-23	Chalk and Blackboard
	Revision Class	1 hour	13-11-23	23-11-23 Internal Test timetable was displayed on the noticeboard

	Internal Assessment		15-11-2023 To 18-11-2023	C1 Internal Test was conducted
	Valuation & Result announcement		20-11-23 to 25-11-23	Marks sheet of C1 Internal Test was displayed on the notice board
Unit – 3: Tourism Management **(**15 hours)	**Chapter No.7.** Demand for Tourism at Individual and Market Level; Tourism Consumer Behaviour: Roles and Decision-Making Process; Accommodation: Definition and Management of Commercial Accommodation; Transportation as Tourist Product; Role of Intermediaries.	5 hours	20-11-23 To 28-11-23	Chalk and Blackboard
	Chapter No.8. Marketing for Tourism: Definition; Difference between Marketing and Selling; Tourism as a Service Industry: Product, Price, Promotion and Place.	5 hours	29-11-23 To 07-12-23	Chalk and Blackboard
	Chapter No.9. Information Technology and Tourism: ICT as a Business Tool; e-Tourism.	5 hours	08-12-23 To 16-12-23	Chalk and Blackboard

Department: Sociology
Title of the Paper: Social Entrepreneurship [Course Code-231551]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Smt. Geetha H J
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Fundamentals of Social Entrepreneurship (15 hours)	**Chapter-1:** Social Entrepreneurship: Meaning, Features and Relevance; Social Business: Meaning; Difference between Social Entrepreneurship and Social Business; Relation between Social Change and Social Entrepreneurship.	5 hours	11-09-23 to 16-09-23	Classroom teaching
	Chapter-2: Typology of Ventures: Social Purpose Ventures, Social Consequence Entrepreneurship, Enterprising Non-profits, Hybrid Models of Social Entrepreneurship.	5 hours	19-09-23 to 26-09-23	Chalk and Blackboard
	Chapter-3: Identifying Social Business Opportunities.	5 hours	27-09-23 to 07-10-23	Chalk and Blackboard
Unit-2: Establishment of Non-Profit Organisations (15 hours)	**Chapter-4:** Concept (includes Government Organisations), Objectives and establishment of Non-Profit organisations (NPOs)	5 hours	09-10-23 to 16-10-23	Chalk and Blackboard
	Chapter-5: Legal Procedure for the establishment of NPOs: Societies Registration Act, Indian Companies Act, Charitable Endowments Act, Foreign Contribution (Regulation) Act (FCRA); Available Tax Reliefs	5 hours	17-10-23 to 26-10-23	Chalk and Blackboard
	Chapter 6: Social Values of NPOs: Mission and Vision; MoA and Bye-Laws.	5 hours	27-10-23 to 06-11-23	Chalk and Blackboard

	Chapter 7: Human Resource Management: Staffing Plan, Social Security of Workers: Provisions and Benefits of Gratuity Act; Rules and Regulations of EPF Scheme	5 hours	07-11-23 to 11-11-23	Chalk and Blackboard
	Revision	1 hour	13-11-23	23-11-23 Internal Test timetable was displayed on the noticeboard
	Internal Assessment			15-11-2023 To 18-11-2023 C1 Internal Test was conducted
	Valuation & Result announcement		20-11-23 to 25-11-23	23-11-23 Marks sheet of C1 Internal Test was displayed on the notice board
	Chapter 8: Project Management: Definition of Concept; Identification of Project; Proposal Development: Basic Factors, Project Proposal Guide; Budget, Rationale for sending Project Proposal to the Donor; Proposal Writing; Do's and Don'ts of a Project Proposal	5 hours	20-11-23 to 28-11-23	Chalk and Blackboard
	Chapter 9: Financing: Sources of Finance: Government, Donors, International Agencies; Documents Used in Fund Raising; Due Diligence; Campaigns; Internal Income Generation.	5 hours	29-11-23 to 8-12-23	Chalk and Blackboard
Unit-4: Case Studies (15 hours)	**Chapter-10:** Pratham, RUDSET,Vivekananda Girijana Kalyana Kendra, BRHills	5 hours	9-12-23 to 16-12-23	Chalk and Blackboard

	Chapters-11 & 12: Students should study the functioning of a local NPO, present their ideas in a seminar and submit a report (For example working in the areas of Sanitation, Rural Development, and (Women Empowerment)		Between 20-10-23 to 16-12-23	

Department: Sociology
Title of the Paper: Society & Tribes [Course Code-231552]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Smt. Deepu B G
Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit – 1: Concepts and Categories (15 Hours)	**Chapter 1:** Tribes and Indigenous People; Scheduled Tribes, Primitive Tribes, De-Notified or ex-criminal Tribes in India; Geographical Distribution of Tribes in India	5 hours	11-09-2023 to 16-09-23	Classroom teaching
	Chapter-2: Meaning of: Hadis, Rules of Marriage, Clan, Lineage, Consanguinity and Affinity; Male-Female relations	5 hours	19-09-23 to 25-09-23	Chalk and Blackboard
	Chapter-3: Social System, Legal System, Political System, Economic System, Religion and Magic.	5 hours	26-09-23 to 04-10-23	Chalk and Blackboard
Unit – 2: Changes and Development Issues (15 Hrs)	**Chapter-4:** Social Mobility :Types, Tribes and Caste, Tribe-Caste-Peasant Continuum, Sanskritisation.	2 hours	05-10-23 to 13-10-23	Chalk and Blackboard
	Chapter-5: Tribalisation, Detribalisation, Retribalisation.	4 hours	16-10-23 to 21-10-23	Chalk and Blackboard
	Chapter 6: Tribal Development and Welfare: Approaches - Assimilationist and Isolationist; Problems of Exploitation, Land Alienation, Unemployment, Cultural Transformation, Scheduled Areas, Tribal Justice and Modern Law.	2 hours	25-10-23 to 31-10-23	Chalk and Blackboard
Unit -3:	**Chapter-7:** Tradition of Fieldwork: History and Significance; Ethics of Fieldwork; Etic and Emic	5 hours	02-11-23 To 11-11-23	Chalk and Blackboard

	Perspectives			
	Revision Class	1 hour	13-11-23	23-11-23 Internal Test timetable was displayed on the noticeboard
	Internal Assessment			15-11-2023 To 18-11-2023 C1 Internal Test was conducted
	Valuation & Result announcement	2 hours	20-11-23 to 25-11-23	23-11-23 Marks sheet of C1 Internal Test was displayed on the notice board
	Chapter-8: Sources of Data: Primary and Secondary	5 hours	20-11-23 To 29-11-23	Chalk and Blackboard
	Chapter-9: Participatory Method, Case Studies, Sample Surveys, Genealogies	5 hours	01-12-23 To 12-12-23	Chalk and Blackboard
Unit-4: Field Work (15 Hrs)	Students have to takeup field work in any nearby tribal settlement and present their findings in a Seminar and written report.		13-12-23 To 16-12-23	

Department: Sociology
Title of the Paper: Statistics for Sociological Research [Course Code-231553]
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Smt. Deepu B G
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit – 1 Sociological Research (15 Hrs)	**Chapter 1:** Meaning of Science, Social Science, Research, Research Design	5 hours	11-09-2023 to 16-09-23	Classroom teaching
	Chapter 2: Steps for Conducting Research: Choosing Research Topic, Literature Review, Sources of Data (Primary, Secondary)	5 hours	19-09-23 to 27-09-23	Chalk and Blackboard
	Chapter 3: Meaning of- Concept, Assumption, Hypothesis; Formulating a Hypothesis; Independent Variable, Dependent Variable; Drawing Conclusion.	5 hours	29-09-23 to 06-10-23	Chalk and Blackboard
Unit – 2 Methods of Sociological Research (15 Hrs)	**Chapter 4:** Qualitative and Quantitative Methods: Meaning, Differences.	5 hours	07-10-23 to 11 -10-23	Chalk and Blackboard
	Chapter 5: Survey Methods: Sampling, Questionnaire, Interview	5 hours	12-10-23 to 19-10-23	Chalk and Blackboard
	Chapter-6: Observation: Participant, Non-participant Observation.	5 hours	20-10-23 to 27-10-23	Chalk and Blackboard
Unit-3: Social Statistics	Chapter 7: What is Social Statistics? Need for Studying Social Statistics.	5 hours	30-10-23 to 04-11-23	Chalk and Blackboard
	Chapter 8: Definition of - Population, Sample, Count, Fractions, Constant, Variable;	5 hours	06-11-23 to 11-11-23	Chalk and Blackboard

	Types of Statistics: Descriptive Statistics, Inferential Statistics			
	Revision	1 hour	13-11-23	23-11-23 Internal Test timetable was displayed on the noticeboard
	Internal Assessment			15-11-2023 To 18-11-2023 C1 Internal Test was conducted
	Valuation & Result announcement		20-11-23 to 25-11-23	23-11-23 Marks sheet of C1 Internal Test was displayed on the notice board
Unit-3: Social Statistics (15 Hrs)	**Chapter 9:** Meaning of Frequency Distribution; Construction of Frequency Tables; Diagrammatic and Graphical Representation of Grouped Data: Advantages; Types: Pie Charts, Bar Charts, Histograms, Frequency Curve.	5 hours	20-11-23 to 25-11-23	Chalk and Blackboard
Unit-4: Methods of Statistical Measurement (15 Hrs)	**Chapter-10:** Measures of Central Tendency: Merits, Demerits; Arithmetic Mean: Merits, Demerits; Median and Mode-Merits, Demerits	5 hours	27-11-23 to 02-12-23	Chalk and Blackboard
	Chapter-11 : Measures of Dispersion: Range,Standard Deviation,Mean Deviation, Quartile Deviation	5 hours	04-12-23 to 09-12-23	Chalk and Blackboard
	Chapter12: Correlation:Pearson's Correlation,Rank Correlation.	5 hours	11-12-23 to 16-12-23	Chalk and Blackboard

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Circular

13.02.2024

HoDs are hereby informed to mail the Course Plan for the academic year 2023-24 on or before 29.02.2023 to dean.fgc@mahajana.edu.in without fail. The commencement and closure date of the semester is given below:

1. Odd Semester Term Dates – 11.09.2023 to 16.12.2023
2. C1 Test Dates – 15.11.2023 to 18.11.2023 (Theory & Practical)
3. Even Semester Term Dates – 12.02.2024 to 25.05.2024
4. C1 Test Dates – 16.04.2024 to 20.04.2024 (Theory & Practical)

(Dr. Sreedhara H) (Dr. B R Jayakumari)

Encl: A sample filled-in format of the Course Plan

Course Plan of Even Semester 2023-24

Department: Sociology
Semester: II Sem BA
Title of the Paper: Foundations of Sociological Theories [Course Code- 211251]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Deepu B G

Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Auguste Comte & Herbert Spencer (14 hours)	**Chapter-1**: Auguste Comte- a. Intellectual Context. b. Positivism. c. Law of Three Stages. d. Classification of Sciences.	7 hours	12-2-2024 to 27-2-2024	Classroom teaching
	Chapter-2: Herbert Spencer- a. Theory of Social Evolution. b. Organic Analogy. c. Types of Society.	7 hours	28-2-2024 to 13-3-2024	Chalk and Blackboard
Unit-2: Karl Marx & George Simmel (14 hours)	**Chapter-3:** Karl Marx- a. Dialectical Materialism. b. Economic Determinism. c. Class Struggle. d. Alienation.	7 hours	14-3-2024 to 06-4-2024	Chalk and Blackboard
	Chapter-4: George Simmel- a. Formal Sociology. b. Theory of Sociation. c. Theory of Conflict.	7 hours	8-4-2024 to 13-4-2024	Chalk and Blackboard
	Revision class	1 hour	15-4-2024	For internal Assessment
	Internal Assessment		16-4-2024 to 20-4-2024	C2 Test conducted
	Unit-1 and Unit-2 assessed for C2 (IA Evaluation)		22-4-2024 to 25-4-2024	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board
Unit-3: Emile Durkheim & Max Weber (14 hours)	**Chapter-5: Emile Durkheim**- a. Social Facts. b. Division of Labour in Society. c. Suicide. d. Sociology of Religion.	7 hours	22-4-2024 to 9-5-2024	Chalk and Blackboard

	Chapter-6: Max Weber- a. Social Action. b. Ideal Types. c. Bureaucracy. d. Types of Authority. e. Protestant Ethics & Spirit of Capitalism.	7 hours	13-5-2024 to 25-5-2024	Chalk and Blackboard

Course Plan of Even Semester 2023-24

Department: Sociology
Semester: II Sem BA
Title of the Paper: Sociology of Rural Life in India [Course Code- 211252]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Geetha H J

Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Rural and Agrarian Social Structure (16 hours)	**Chapter-1**: Social Construction of Rural Societies: Myth and Reality (M N Srinivas)	5 hours	12-2-2024 to 27-2-2024	Classroom teaching
	Chapter-2: Agrarian Social Structure: Land Tenure Systems (Colonial Period); Post-Independence Indian Land Reform Laws.	7 hours	28-02-2024 to 13-3-2024	Chalk and Blackboard
	Chapter-3: Commercialisation of Agriculture, Commodification of Land.	4 hours	14-03-2024 to 06-04-2024	
Unit-2: Themes of Rural Society in India (14 hours)	**Chapter-4:** Rural Caste and Class Structure.	3 hours	8-02-2024 to 13-02-2024	Chalk and Black board
	Chapter-5: Gender and Agrarian Relations.	2 hours		Chalk and Black board
	Chapter-6: Impact of Panchayat Raj System and Rural Politics.	3 hours		
	Chapter-7: Actors in Market - Weekly Fairs, Trading Castes, Emerging Trading Classes and Key Role of Intermediaries.	3 hours		
	Chapter-8: Emergence of Online and Virtual Commodity Markets - Features and Impact on Traditional Sellers and Buyers.	3 hours		
	Revision class	1 hour	15-04-24	For internal Assessment
	Internal Assessment		16-04-2024 to 20-04-2024	C2 Test conducted
			22-04-2024 to	25-04-24 Marks sheet of

	Unit- 1 and Unit-2 assessed for C2 (IA Evaluation)		25-4-2024	C1 Internal Test was displayed on the notice board
Unit-3: Rural Development (12 hours)	**Chapter-9:** Induced Intervention: PURA, MGNREGA, Swach Bharat Abhiyan, Akshara Dasoha, Water and Land Development Efforts	6 hours	22-4-2024 to 9-5-2024	Chalk and Blackboard
	Chapter-10: Challenges to Sustainable Rural Development: Casteism, Factional Politics, Natural Calamities (Droughts and Floods), Utilisation of Water, Fertilisers and Pesticides	6 hours	13-5-2024 to 25-5-2024	Chalk and Blackboard

Course Plan of Even Semester 2023-24

Department: Sociology
Semester: II Sem Open Elective-II
Title of the Paper: Social Development in India [Course Code- 211252]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Deepu B G & Smt. Geetha H J

Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Social Change and Development (16 hours)	**Chapter-1**: Rethinking Development: From economic development to social development and Human Development Index (HDI).	4 hours	12-2-2024 to 19-2-2024	Classroom teaching
	Chapter-2: Development: Concept - changes in values and social relations as development; S.C. Dube's contributions; Importance of Social Development.	4 hours	20-2-2024 to 29-2-2024	Chalk and Blackboard
	Chapter-3: Indian thinking about Social Development - Swami Vivekananda, Ravindranath Tagore, M.K. Gandhi and Dr B. R. Ambedkar.	8 hours	1-3-2024 to 13-3-2024	Chalk and Blackboard
Unit-2: Components of Social Development (13 hours)	**Chapter-4:** Political Freedom, Economic Facilities.	7 hours	14-03-2024 to 06-04-2024	Chalk and Blackboard
	Chapter-5: Social Opportunities, Transparency, Security.	7 hours	8-02-2024 to 13-02-2024	Chalk and Blackboard
	Revision class	1 hour	15-04-24	For internal Assessment
	Internal Assessment		16-04-2024 to 20-04-2024	C2 Test conducted
	Unit- 1 and Unit-2 assessed for C2 (IA Evaluation)		22-04-2024 to 25-04-2024	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice

				board
Unit-3: Challenges to Social Development (13hours)	**Chapter-6:** Sustainable and Inclusive Development, Environmental Sustainability.	6 hours	22-04-2024 to 9-05-2024	Chalk and Blackboard
	Chapter-7: Responsible Private Corporations, Redressing Regional Imbalance, Harnessing Demographic Dividend.	7 hours	13-05-2024 to 25-05-2024	Chalk and Blackboard

Course Plan of Even Semester 2023-24

Department: Sociology
Semester: IV Sem
Title of the Paper: Sociology of Marginalized Groups [Course Code- 221451]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Deepu B G

Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Introduction (16 hours)	**Chapter-1**: Marginalization: Meaning and Nature; Types of Marginalization: Social, Political, Economic; Relationship between Marginalization and Social Exclusion.	6 hours	12-2-2024 to 19-2-2024	Classroom teaching
	Chapter-2: Causes of Marginalization; Marginalized Groups: Caste, Gender, People with Disabilities, Minorities, Tribes and Elderly.	6 hours	20-02-2024 to 28-2-2024	Chalk and Blackboard
	Chapter-3: Socio-economic Indices of Marginalization: Poverty, Relative Deprivation, Exploitation, Discrimination, Educational Backwardness, Inequality and Untouchability.	4 hours	29-02-2024 to 14-03-2024	Chalk and Blackboard
Unit-2: Marginalization and Affirmative Action (14 hours)	**Chapter-4:** Views of Dr B R Ambedkar and Affirmative Principle in the Constitution of India (Constitutional Provisions).	4 hours	15-03-2024 to 22-03-2024	Chalk and Blackboard
	Chapter-5: Scheduled Castes, Scheduled Tribes and Status of Women in these groups; Status of Transgenders.	4 hours	23-03-2024 to 28-3-2024	Chalk and Blackboard
	Chapter-6: Status of Landless Agricultural Labourers, Status of Land Ownership among Scheduled Caste and Scheduled Tribes.	5 hours	2-04-2024 to 14-04-2024	Chalk and Blackboard
	Revision class	1 hour	15-04-24	For internal Assessment
	Internal Assessment		16-04-2024 to 20-04-2024	C2 Test conducted

	Unit- 1 and Unit-2 assessed for C2 (IA Evaluation)		22-04-2024 to 25-04-2024	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board
Unit-3: Marginalized Groups and Social Change (12 hours)	**Chapter-7:** Social Mobility among Marginalized Groups: Education, Employment, Political Participation, Conversion, Migration.	4 hours	22-04-2024 to 30-04-2024	Chalk and Blackboard
	Chapter-8: Challenges of Privatization and Response by Marginalized Groups.	4 hours	2-05-2024 to 15-05-2024	Chalk and Blackboard
	Chapter-9: Social Justice in the context of Globalization	4 hours	16-05-2024 to 25-05-2024	Chalk and Blackboard

Course Plan of Even Semester 2023-24

Department: Sociology
Semester: IV Sem BA
Title of the Paper: Population and Society [Course Code-221452]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Geetha H J
Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Introduction (14 hours)	**Chapter-1**: Relationship between society and population.	4 hours	12-2-2024 to 19-2-2024	Classroom teaching
	Chapter-2: Global Population Trends: role of fertility, mortality and migration; Power of Doubling.	5 hours	20-02-2024 to 28-2-2024	Chalk and Blackboard
	Chapter-3: Age and Sex Composition in India and its Impact; Demographic Dividend.	5 hours	29-02-2024 to 14-03-2024	Chalk and Blackboard
Unit-2: Sources of Demographic Data (14 hours)	**Chapter-4:** Population Census: Uses and Limitations; Indian Censuses.	5 hours	15-03-2024 to 22-03-2024	Chalk and Blackboard
	Chapter-5: Vital Registration System .	5 hours	23-03-2024 to 28-3-2024	Chalk and Blackboard
	Chapter-6: National Sample Survey; Sample Registration System; National Family Health Surveys (NFHS).	4 hours	2-04-2024 to 14-04-2024	Chalk and Blackboard
	Revision class	1 hour	15-04-24	For internal Assessment
	Internal Assessment		16-04-2024 to 20-04-2024	C2 Test conducted
	Unit-1 and Unit-2 assessed for C2 (IA Evaluation)		22-04-2024 to 25-04-2024	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board
Unit-3: Population Theories and	**Chapter-7:** Population Theories: Malthusian Theory, Optimum Theory of Population and Demographic Transition Theory.	6 hours	22-04-2024 to 30-04-2024	Chalk and Blackboard

Policy (14 hours)	**Chapter-8:** Need of Population Policy; Millennium Development Goals and Sustainable Development Goals.	5 hours	2-05-2024 to 15-05-2024	Chalk and Blackboard
	Chapter-9: Population Policy of India; Programmes and their Evaluation	3 hours	16-05-2024 to 25-05-2024	Chalk and Blackboard

Course Plan of Even Semester 2023-24 OE-4

Department: Sociology
Semester: IV Sem Open Elective-4
Title of the Paper: Sociology of Food Culture [Course Code-22OESOC402]
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Deepu B G & Smt. Geetha H J

Total Hrs: 42 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Introduction (14 hours)	**Chapter-1**: Sociological nature of Food and Eating; Sacred and Taboo Food, Sociality and Social Change.	6 hours	12-2-2024 to 20-2-2024	Classroom teaching
	Chapter-2: Determinants of Food Consumption- Types of Food; Vegetarian, Non-Vegetarian, Vegan and Flexitarian.	6 hours	21-02-2024 to 02-03-2024	Chalk and Blackboard
	Chapter-3: Local Food Culture and Taste for Exotic.	4 hours	04-03-2024 to 14-03-2024	Chalk and Blackboard
Unit-2: Food from Domestic to Industry (14 hours)	**Chapter-4:** Industrialization of Food Production and Distribution.	5 hours	15-03-2024 to 23-03-2024	Chalk and Blackboard
	Chapter-5: Hotels, Restaurants and Catering Sectors.	5 hours	25-03-2024 to 01-04-2024	Chalk and Blackboard
	Chapter-6: Cooking as duty and cooking for self-pleasure.	4 hours	02-04-2024 to 14-04-2024	Chalk and Blackboard
	Revision class	1 hour	15-04-24	For internal Assessment
	Internal Assessment		16-04-2024 to 20-04-2024	C2 Test conducted
	Unit-1 and Unit-2 assessed for C2 (IA Evaluation)		22-04-2024 to 25-04-2024	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board

Unit-3: Food and Risk Society (14 hours)	**Chapter-7:** Diet and Body: Social Appearance and Beauty.	5 hours	22-04-2024 to 30-04-2024	Chalk and Blackboard
	Chapter-8: Global Overview: Consumption: Pattern and Reasons; overeating, Undereating and Hunger.	4 hours	2-05-2024 to 15-05-2024	Chalk and Blackboard
	Chapter-9: GM FoodS, Organic Foods and Modern food practices as a risk factor.	5 hours	16-05-2024 to 25-05-2024	Chalk and Blackboard

Course Plan of Even Semester 2023-24

Department: Sociology
Semester: VI Sem BA
Title of the Paper: Sociological Perspectives [Course Code-231651**]**
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Deepu B G

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Basics of Theory (15 hours)	**Chapter-1**: Theory: Meaning and Features.Meaning of Social Theory.Types of Theory: Macro, Meso, Micro	5 hours	12-2-2024 to 20-2-2024	Classroom teaching
	Chapter-2: Building Blocks: Concept, Assumption, Hypothesis, Model; Need for Theoretical Thinking	5 hours	21-02-2024 to 29-2-2024	Chalk and Blackboard
	Chapter-3: Meaning of induction, Deduction, Fact, Causal Relation, Correlation, Constant, Variable, Generalisation.	5 hours	01-03-2024 to 13-03-2024	Chalk and Blackboard
Unit-2: Structural-Functional Perspective (15 hours)	**Chapter-4:** Origin of Functionalism and Structuralism; Meaning of: SocialStructure,Social System, Function, Integration, Social Equilibrium, Social Order, Dysfunction	5 hours	14-03-2024 to 23-03-2024	Chalk and Blackboard
	Chapter-5: Postulates of Functional Analysis	5 hours	25-03-2024 to 30-3-2024	Chalk and Blackboard
	Chapter-6: Neo-functionalism	5 hours	01-04-2024 to 04-04-2024	Chalk and Blackboard
Unit-3: Conflict Perspective (15 hours)	**Chapter-7:** Origin of Conflict Perspective; Meaning of Conflict, Social Inequality, Power, Dominance, Authority, Class Struggle, Hegemony	5 hours	05-04-2024 to 15-04-2024	Chalk and Blackboard
	Revision class	1 hour	15-04-24	For internal Assessment
	Internal Assessment		16-04-2024 to 20-04-2024	C2 Test conducted
	Unit-1 and Unit-2 assessed for C2 (IA Evaluation)		22-04-2024 to	25-04-24 Marks sheet of

			25-04-2024	C1 Internal Test was displayed on the notice board
	Chapter-8: Process of Social Conflict and Social Change;	5 hours	22-04-2024 to 27-04-2024	Chalk and Blackboard
	Chapter-9: Functions of Social Conflict.	5 hours	29-04-2024 to 02-05-2024	Chalk and Blackboard
Unit-4: Symbolic Interaction Perspective (15 hours)	**Chapter-10:** Origin of Symbolic Interaction Perspective; Meaning of Symbol, Interaction, Social Construction of Reality, Interpretation, Reflexivity, Negotiation	5 hours	03-05-2024 to 09-05-2024	Chalk and Blackboard
	Chapter-11: Importance of Meaning; Definition of Situation	5 hours	13-05-2024 to 18-05-2024	Chalk and Blackboard
	Chapter-12: Dramaturgy and Everyday Life.	5 hours	20-05-2024 to 25-05-2024	Chalk and Blackboard

Course Plan of Even Semester 2023-24

Department: Sociology
Semester: VI Sem BA
Title of the Paper: Sociology of Health [Course Code-231652**]**
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Deepu B G

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Introduction (15 hours)	**Chapter-1**: Sociology of Health: Meaning ,Nature and Need; Scope: Sociology in Medicine and Sociology of Medicine.	5 hours	12-2-2024 to 20-2-2024	Classroom teaching
	Chapter-2: Emergence and Development of Sociology of Health in World and India	5 hours	21-02-2024 to 29-2-2024	Chalk and Blackboard
	Chapter-3: Actors: Doctors-Nurses and Paramedical Staff-Patients and their relationship.	5 hours	01-03-2024 to 07-03-2024	Chalk and Blackboard
Unit-2: Determinants of Health (15 hours)	**Chapter-4:** Social Determinants: Class, Caste, Power, Gender, Social Cohesion	5 hours	11-03-2024 to 16-03-2024	Chalk and Blackboard
	Chapter-5: Cultural Determinants: Beliefs, Nutrition, Environment	5 hours	18-03-2024 to 23-3-2024	Chalk and Blackboard
	Chapter-6: Economic Determinants: Poverty, Homelessness, Living Conditions, Neighbourhood	5 hours	25-04-2024 to 03-04-2024	Chalk and Blackboard
Unit-3: Models of Health (14 hours)	**Chapter-7:** Systems of Medicine (BiomedicineandAYUSH); Dominance of Bio-medical Model	5 hours	04-04-2024 to 14-04-2024	Chalk and Blackboard
	Revision class	1 hour	15-04-2024	For internal Assessment
	Internal Assessment		16-04-2024 to 20-04-2024	C2 Test conducted
	Unit-1 and Unit-2 assessed for C2 (IA Evaluation)		22-04-2024 to 25-04-2024	25-04-24 Marks sheet of C1 Internal Test was displayed on

				the notice board
	Chapter-8: Sick Role and Experiencing Illness	5 hours	22-04-2024 to 27-04-2024	Chalk and Blackboard
	Chapter-9: Hospital as Social Organisation.	5 hours	29-04-2024 to 04-05-2024	Chalk and Blackboard
Unit-4: Health Care Reform (15 hours)	**Chapter-10:** Medicalisation and Pharamceuticalisation of Health	5 hours	06-05-2024 to 14-05-2024	Chalk and Blackboard
	Chapter-11& 12: Learning from the Field: Report on Health Services or Functioning of Health Organisations or Selected Health Programmes at State Level.	5 hours	15-05-2024 to 25-05-2024	Chalk and Blackboard
		5 hours		Chalk and Blackboard

Course Plan of Even Semester 2023-24

Department: Sociology
Semester: VI Sem BA
Title of the Paper: Society in Karnataka [Course Code-231653**]**
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Smt. Geetha H J

Total Hrs: 60 Hours

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit-1: Features of Karnataka (15 hours)	**Chapter 1**: Overview of Karnataka's History: Antiquity of Land and Language Social Composition: Religion, Language, Caste, Tribe, Class as per latest Census/ Sample Surveys; HDI and Regional Disparities.	5 hours	12-2-2024 to 20-2-2024	Classroom teaching
	Chapter 2: Geography and Politics: Spatial Features: Plains, Coastal and Malnad; Old Mysuru, Hyderabad Karnataka, Bombay Karnataka and present-day administrative division (Mysuru, Bengaluru, Kalyana Karnataka and Kittur Karnataka); Political Landscape since Independence	5 hours	21-02-2024 to 29-2-2024	Chalk and Blackboard
	Chapter 3: Economic Profile: Developments in Agriculture, Industry and Service Sectors.	5 hours	01-03-2024 to 13-03-2024	Chalk and Blackboard
Unit-2: Social Organisation (15 hours)	**Chapter 4:** Religions, Languages, Castes, Tribes and Classes as per latest Census/Sample Survey	5 hours	14-03-2024 to 23-03-2024	Chalk and Blackboard
	Chapter 5: Education: Growth of STEM Courses, Status of Social Sciences.	5 hours	25-03-2024 to 30-3-2024	Chalk and Blackboard
	Chapter 6: HDI and Regional Disparities.	5 hours	01-04-2024 to 04-04-2024	Chalk and Blackboard
Unit-3: Social Movements of Karnataka (15hours)	**Chapter-7:** Unification of Karnataka, Save Kannada and Gokak Movements.	5 hours	05-04-2024 to 15-04-2024	Chalk and Blackboard
	Revision class	1 hour	15-04-24	For internal Assessment

	Internal Assessment		16-04-2024 to 20-04-2024	C2 Test conducted
	Unit-1 and Unit-2 assessed for C2 (IA Evaluation)		22-04-2024 to 25-04-2024	25-04-24 Marks sheet of C1 Internal Test was displayed on the notice board
	Chapter-8: Environment Movements: Chipko and Appiko, Sahyadri Mining Protest, Sea-bird Naval Base, Movement Against Social Forestry.	5 hours	22-04-2024 to 27-04-2024	Chalk and Blackboard
	Chapter-9: Socio-Religious Movements: Veerashaiva, Non-Brahmin, Dalit Movements.	5 hours	29-04-2024 to 02-05-2024	Chalk and Blackboard
Unit-4: Studies on Karnataka Society (15 hours)	**Chapter-10:** Contributions of M N Srinivas, S Parvathamma, Hiremallur Ishwaran	5 hours	03-05-2024 to 09-05-2024	Chalk and Blackboard
	Chapter-11: Fieldwork report on Changing Social Institutions and their Impact on Social Life.	5 hours	13-05-2024 to 18-05-2024	Chalk and Blackboard
	Chapter-12: Fieldwork report on Changing Social Institutions and their Impact on Social Life.	5 hours	20-05-2024 to 25-05-2024	Chalk and Blackboard

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Course Plan of Odd Semester 2023-24

Department : Physical Education
Title of the Paper : Health, Wellness and Yoga **[Course Code – 22HWY94]**
Term Period : 12.02.2024 to 25/05/2024
Faculty Name : Dr. H.N.Bhaskar and Madhusudana.PS
Total Hrs: 56 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1:	**Unit 1: Introduction** a. Meaning, Definition and Importance of Health & Wellness b. Dimensions of Health and Wellness c. Factors Influencing Health & Wellness Physical Fitness, Nutrition, Habits, Age, Gender, Lifestyle d. Health & Wellness through Physical Activities Sports, Games, Yoga, Recreation and Leisure Time Activities e. Causes of Stress and Stress relief through Exercise and Yoga	**16**	**12/02/2024 to 20/03/2024**	POs and Course Outcomes of the units discussed **PPT and Lecture**
Unit 2:	**Unit 2: Practical – Exercises for Health and Wellness** a. Warm-Up and Cool-Down – General and Specific Exercises b. Physical Fitness Activities c. Stretching Exercises d. Strengthening Exercises e. Cardiovascular Exercises f. Flexibility and Agility Exercises g. Assessment of BMI Relaxation Techniques	**16**	**21/03/2024 to 18/04/2024**	**Lecture and Practical** Chalk and Black board

Unit 3:	**Unit 3: Yoga** • Shitalikarna Vyayama • Suryanamaskara • Basic Set of Yoga Asanas Basic Set of Pranayama & Meditation	**16**	**18/04/2024 to 16/05/2024**	**PPT, Lecture and Practical**
	Revision	**08**	**17/05/2024 to 25/05/2024**	**Group Discussion**

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Course Plan of Odd Semester 2023-24

Department : Physical Education
Title of the Paper : Sports [Course Code – Sports 22SPO94]
Term Period : 12.02.2024 to 25/05/2024
Faculty Name : Dr. H.N.Bhaskar and Madhusudana.PS
Total Hrs: 56 Hours (4Hrs/Week)

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit 1:	**Physical Education & Sports** • Conditioning Exercises • Aerobics & Calisthenics • One Major Game and One Indigenous Game (Basic Skills) • One Track/Field Event • Intramural Competitions • Project/Record • Proficiency in Particular Sport Rules & Regulations, Marking and Ground Management, Officiating	**48**	**12/02/2024 to 11/05/2024**	POs and Course Outcomes of the units discussed **PPT and Lecture**
	Revision	**08**	**13/05/2024 to 25/05/2024**	**Group Discussion**

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Course Plan of Odd Semester 2023-24

Department: Rangers and Rovers
Subject: (SEC) - Rangers and Rovers [Course code: 22RNR94 **]**
Term Period: 11.09.2023 to 16.12.2023
Faculty Name: Sunitha MH

Total Hrs: 56

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit- I	**Introduction and Knowledge** - Rovering and Rangering, Prayer & Flag Song, Flags, Promise and Law, Discipline and Uniform, First Aid, Knots, Make a scarf using the material available at your home.	16	11-09-2023 To 11-10-23	Lecture and Practical
Unit- II	**Skills :** Team building and leadership skills- Campfire/ Local Handicraft/ College level cleanliness drive/ rope work/ cooking/ first aid/ signaling/ skill oriented Games- In-door and Outdoor Games ,etc	20	12-10-2023 to 11-11-2023	Lecture and Practical
				12-10-2023 C1 (Unit- I,II) - Assignments
				20-10-2023 Submission of C1- Assignments
				25-10-2023 Display of C1 - Assignments marks on the notice board

Unit- III	**Group activities**: Community service-sustainable development/Bore well recharge / Food save warriors / Organize science exhibition /Road Safety awareness/Rain Water Harvesting/Local Festivals service/Prepare Seed Balls/Teaching Game etc.	20	13-11-2023 To 16-12-2023	Practical and Field studies
				25-11-2023 C2(Unit- III) - Assignments
				8-12-2023 Submission of C2- Assignments
				11-12-2023 Display of C2 - Assignments marks on the notice board

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Course Plan of Even Semester 2023-24

Department: Rangers and Rovers
Subject: (SEC) - Rangers and Rovers [Course code: 22RNR94 **]**
Term Period: 12.02.2024 to 25.05.2024
Faculty Name: Sunitha MH

Total Hrs: 56

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment and Remarks
Unit- I	**Introduction and Knowledge** - Rovering and Rangering, Prayer & Flag Song, Flags, Promise and Law, Discipline and Uniform, First Aid, Knots, Make a scarf using the material available at your home.	16	12-02-2024 to 16-03-2024	Lecture and Practical
Unit- II	**Skills :** Team building and leadership skills- Campfire/ Local Handicraft/ College level cleanliness drive/ rope work/ cooking/ first aid/ signaling/ skill oriented Games- In-door and Outdoor Games ,etc	20	18-03-2024 to 15-04-2024	Lecture and Practical
				23-03-2024 C1 (Unit- I ,II) - Assignments
				10-03-2024 Submission of C1- Assignments
				15-04-2024 Display of C1 - Assignments marks on the notice

				board
Unit- III	**Group activities**: Community service-sustainable development/Bore well recharge / Food save warriors / Organize science exhibition /Road Safety awareness/Rain Water Harvesting/Local Festivals service/Prepare Seed Balls/Teaching Game etc.	20	22-04-2024 to 25-05-24	Practical and Field studies
				22-04-2024 C2(Unit- III) - Assignments
				11-05-2024 Submission of C2-Assignments
				15-05-2024 Display of C2 - Assignments marks on the notice board

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INDIA

POST-GRADUATE PROGRAMMES

Lesson Plan

2023-2024

SBRR Mahajana First Grade College (Autonomous), PG Wing
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DEPARTMENT OF STUDIES IN COMPUTER SCIENCE
Lesson Plan for I Semester MCA Programme
Lesson Plan: 2023-24
Batch 2023-25

Title of the Course: MATHEMATICAL FOUNDATIONS FOR COMPUTER APPLICATIONS
Name of the Faculty: Prof. Ganesh H T and Mrs. Yashaswini J
Course Code: 23BH01
Credits: L:T:P: 4:0:0

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I: Mathematical Logic: Statements and Notations, Connectives, Well-formed Formulas, Tautologies, equivalence of Formulas, Duality law, Normal Forms, The Predicate Calculus.	Mathematical Logic: Statements and Notations, Connectives	03	4/3/2024 5/3/2024 7/3/2024	Lecture, PPT Presentation and Student Interaction
	Well-formed Formulas, Tautologies	02	11/3/2024 14/3/2024	Lecture, PPT Presentation and Student Interaction
	equivalence of Formulas, Duality law	03	15/3/2024 18/3/2024 19/3/2024	Lecture, PPT Presentation and Student Interaction
	Normal Forms	03	21/3/2024 22/3/2024 26/3/2024	Lecture, PPT Presentation and Student Interaction
	The Predicate Calculus	03	28/3/2024 1/4/2024 4/4/2024	Lecture, PPT Presentation and Student Interaction
Unit II: Set Theory Basic concepts, Some operations on Sets, Venn Diagrams,	Basic concepts, Some operations on Sets, Venn Diagrams, Cartesian Products	03	8/4/2024 12/4/2024 15/4/2024	Lecture, PPT Presentation and Student

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DEPARTMENT OF STUDIES IN COMPUTER SCIENCE
Lesson Plan for I Semester MCA Programme
Lesson Plan: 2023-24
Batch 2023-25

Cartesian Products, Relations and Ordering, Functions, Definition, Composition of functions, Inverse functions, Natural Numbers, Recursion, Recursion in Programming Languages.				Interaction
	Relations and Ordering	03	16/4/2024 18/4/2024 19/4/2024	Lecture, PPT Presentation and Student Interaction
	Functions, Definition, Composition of functions, Inverse functions	03	22/4/2024 23/4/2024 25/4/2024	Lecture, PPT Presentation and Student Interaction
	Natural Numbers, Recursion, Recursion in Programming Languages	03	26/4/2024 29/4/2024 30/4/2024	Lecture, PPT Presentation and Student Interaction
Unit III: Algebraic Structures Algebraic Systems, Examples and General Properties, Grammars and Languages, Polish Expressions and Their Compilation, Groups, Definitions and Examples, Subgroups and Homomorphism's.	Algebraic Systems, Examples and General Properties	03	2/5/2024 3/5/2024 6/5/2024	Lecture, PPT Presentation and Student Interaction
	Grammars and Languages	03	7/5/2024 9/5/2024 10/5/2024	Lecture, PPT Presentation and Student Interaction
	Polish Expressions and Their Compilation	03	13/5/2024 14/5/2024 16/5/2024	Lecture, PPT Presentation and Student Interaction
	Groups, Definitions and Examples, Subgroups and Homomorphism's	03	17/5/2024 20/5/2024 21/5/2024	Lecture, PPT Presentation and Student Interaction
Unit IV An Introduction to	Graph Theory: Graph, directed graph,	02	24/5/2024 27/5/2024	Lecture, PPT

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DEPARTMENT OF STUDIES IN COMPUTER SCIENCE
Lesson Plan for I Semester MCA Programme
Lesson Plan: 2023-24
Batch 2023-25

Graph Theory: Definitions and examples Sub graphs, Complements, and Graph Isomorphism, Vertex Degree : Euler Trails and Circuits. Definitions, Properties and examples rooted trees, Trees and sorting. Weighted Trees and Prefix codes. Spanning trees-minimal spanning tree by Prim's and Krushkal's Algorithm.	Undirected graph, Walk- Open Walk: Trail and Path, Closed Walk: Circuit and Cycle			Presentation and Student Interaction
	Subgraph, Complement graph, Graph Isomorphism: Examples	02	28/5/2024 30/5/2024	Lecture, PPT Presentation and Student Interaction
	Vertex Degree, Euler Trails and Circuits	02	31/5/2024 3/6/2024	Lecture, PPT Presentation and Student Interaction
	Trees- Definition, Properties and examples, Rooted Trees: Examples	02	4/6/2024 6/6/2024	Lecture, PPT Presentation and Student Interaction
	Trees and sorting, Weighted Trees and Prefix codes	01	7/6/2024	Lecture, PPT Presentation and Student Interaction
	Spanning trees-minimal spanning tree by Prim's and Krushkal's Algorithm- Examples	03	11/6/2024 13/6/2024 14/6/2024	Lecture, PPT Presentation and Student Interaction
Total Hours		**50**		

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DEPARTMENT OF STUDIES IN COMPUTER SCIENCE
Lesson Plan for I Semester MCA Programme
Lesson Plan: 2023-24
Batch 2023-25

Title of the Course: DATA STRUCTURES AND ALGORITHMS
Name of the Faculty: Dr. Anisha Kumar, Mrs Shobha
Course Code: 23BH03
Credits: L:T:P: 3:0:1

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I: Basics of Data Structures and Algorithms Introduction to Data Structures: Basic Data Types - Abstract Data Types; Structure, operations on them and Implementation. Introduction to Algorithms: Fundamentals of Algorithmic problem solving, Problem types - Analysis of Algorithm Efficiency: Analysis framework - Orders of growth, asymptotic notations and basic efficiency classes.	Introduction to Data Structures: Basic Data Types - Abstract Data Types; Structure, operations on them and Implementation.	05	4-3-2024 5-3-2024 12-3-2024 14-3-2024 14-3-2024	Lecture Method, PPT and student Interaction
	Introduction to Algorithms: Fundamentals of Algorithmic problem solving .	03	18-3-2024 27-3-2024 28-3-2024	
	Problem types - Analysis of Algorithm Efficiency.	03	1-4-2024 2-4-2024 4-4-2024	
	Analysis framework - Orders of growth, asymptotic notations and basic efficiency classes.	03	4-4-2024 5-4-2024 5-4-2024	
Unit II: Stacks, Queues and Lists Arrays: Single and Two dimensional - Stacks: Array	Arrays: Single and Two dimensional .	03	6-4-2024 7-4-2024 7-4-2024	

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DEPARTMENT OF STUDIES IN COMPUTER SCIENCE
Lesson Plan for I Semester MCA Programme
Lesson Plan: 2023-24
Batch 2023-25

representation, Expression evaluation, recursion – Queues: Linear queue, priority queues (heap), Linked lists: Singly linked, Doubly linked, Memory representation of lists.	Stacks: Array representation, Expression evaluation, Recursion .	03	14-4-2024 14-4-2024 15-4-2024	Lecture Method, PPT and student Interaction
	Queues: Linear queue, priority queues (heap) .	04	15-4-2024 16-4-2024 19-4-2024 22-4-2024	
	Linked lists: Singly linked, Doubly linked, Memory representation of lists.	04	23-4-2024 24-4-2024 2-5-2024 3-5-2024	
Unit III: Trees and Graphs Trees: Basic Terminologies, Binary Trees and their memory representation, Binary Search Trees Graphs: Directed and Undirected graphs, Definitions, Representations, Weighted graphs, Traversals and searching BFS and DFS.	Trees: Basic Terminologies, Binary Trees and their memory representation, Binary Search Trees .	03	3-5-2024 6-5-2024 6-5-2024	Lecture Method, PPT and student Interaction
	Graphs: Directed and Undirected graphs, Definitions, Representations, Weighted graphs.	03	9-5-2024 16-5-2024 18-5-2024	
	Traversals and searching BFS and DFS.	03	21-5-2024 23-5-2024 23-5-2024	
Unit IV: Algorithm Design Divide and Conquer: General method, Binary search, Merge	Divide and Conquer: General method, Binary search, Merge sort, Quick sort .	03	27-5-2024 28-5-2024 31-5-2024	Lecture Method, PPT and student Interaction

sort, Quick sort, Greedy Method General Method, Knapsack Problem, Minimum-Cost Spanning Trees - Kruskal's and Prim's algorithm, Single-Source Shortest Path Problem, Dijkstra's algorithm, Dynamic Programming : General Method, All Pair Shortest Paths(Floyd-Warshall algorithm); Travelling Salesman Problems.	Greedy Method General Method, Knapsack Problem, Minimum-Cost Spanning Trees .	03	6-6-2024 9-6-2024 9-6-2024	
	Kruskal's and Prim's algorithm, Single-Source Shortest Path Problem, Dijkstra's algorithm .	03	8-6-2024 14-6-2024 15-6-2024	
	Dynamic Programming : General Method, All Pair Shortest Paths(Floyd-Warshall algorithm); Travelling Salesman Problems.	03	18-6-2024 18-6-2024 20-6-2024	
Data Structures And Algorithms Practical.	LAB Component : Implementing Data Structures And Algorithms Using C Programming Language.	20	14-3-2024 21-3-2024 28-3-2024 4-4-2024 18-4-2024 9-5-2024 15-5-2024 16-5-2024 23-5-2024 30-5-2024	PPT and student Interaction (2Hours each day)
Total Hours		**69**		

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Title of the Course: SOFTWARE ENGINEERING **Course Code: 23BH05**

Name of the Faculty: Ms. Likhitha M M **Credits: L:T:P: 3:1:0**

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I: Software, Software Engineering and Process Models The Nature of Software, The Unique Nature of WebApps, Software Engineering, The Software Process, Software Engineering Practice, Software Myths, Prescriptive Process Models.	The Nature of Software	02	4/3/2024 5/3/2024	Lecture Method, PPT and student Interaction
	The Unique Nature of WebApps	02	7/3/2024 11/3/2024	
	Software Engineering	02	14/3/2024 15/3/2024	
	The Software Process	02	18/3/2024 19/3/2024	
	Software Engineering Practice Software Myths	02	21/3/2024 22/3/2024	
	Prescriptive Process Models.	02	26/3/2024 28/3/2024	
Unit II: Agile Development Agile process model, Agility and Cost of Change, Agile Process, Extreme Programming, User stories, Brief introduction to Scrum.	Agile process model	02	1/4/2024 4/4/2024	Lecture Method, PPT and student Interaction
	Agile Process	02	8/4/2024 12/4/2024	
	Extreme Programming	02	15/4/2024 16/4/2024	
	User stories	02	18/4/2024 19/4/2024	
	Brief introduction to Scrum.	02	22/4/2024 23/4/2024	
Unit III: Requirements Modelling &	Requirements Analysis	02	25/4/2024 26/4/2024	Lecture Method, PPT and student
	Scenario – Based Modelling UML Models that	02	29/4/2024 30/4/2024	

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Design Requirements Analysis, Scenario – Based Modelling, UML Models that supplement the Use Case, Data Modelling Concepts, Requirements Modelling Strategies, Flow-oriented Modelling, Creating a behavioural model, Design concepts, Design Model.	supplement the Use Case			Interaction
	Data Modelling Concepts, Requirements Modelling Strategies, Flow-oriented Modelling	03	2/5/2024 3/5/2024 6/5/2024	
	Creating a behavioral model, Design concepts, Design Model.	03	7/5/2024 9/5/2024 10/5/2024	
Unit IV: Software Quality Assurance & Testing Software Quality Assurance: Elements of Software Quality Assurance, SQA Tasks, Goals, Metrics, Formal Approaches to SQA, Statistical SQA, Software Reliability. Software Testing : Verification & Validation, Software Testing	Software Quality Assurance: Elements of Software Quality	02	13/5/2024 14/5/2024	Lecture Method, PPT and student Interaction
	Assurance SQA Tasks Goals Metrics	02	16/5/2024 17/5/2024	
	Formal Approaches to SQA Statistical SQA, Software Reliability	02	20/5/2024 21/5/2024	
	Software Testing: Verification & Validation, Software	02	24/5/2024 27/5/2024	
	Testing Strategy—The Big Picture Test strategies for conventional software OO software and WebApps	03	28/5/2024 30/5/2024 31/5/2024	

Strategy—The Big Picture, Test strategies for conventional software, OO software and WebApps, Validation Testing, System testing, The Debugging process, White box testing, Black box testing.	Validation Testing System testing The Debugging process White box testing, Black box testing.	03	3/6/2024 4/6/2024 6/6/2024	
Total Hours		**46**		

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Title of the Course: DATA COMMUNICATION AND NETWORKS
Name of the Faculty: Mrs. Eswin Pria Angel Sushmita Sheeba Dsa
Course Code: 23BS01
Credits: L:T:P: 3:1:0

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I: Data Communications Components, data Representation Direction of Data Flow, Networks – Network Criteria and Network Types, TCP/IP Protocol suite, OSI Model, Multiplexing, Transmission media-Guided and Unguided media.	Components, data representation Direction of Data Flow	02	6/3/2024-8/3/2024	Lecture Method, PPT and student Interaction
	Networks –Network Criteria and Network Types	03	13/3/2024-15/3/2024	Lecture Method, PPT and student Interaction
	TCP/IP Protocol suite	03	20/3/2024-22/3/2024	Lecture Method, PPT and student Interaction
	OSI Model, Multiplexing,	02	27/3/2024	Lecture Method, PPT, student Interaction
	Transmission media-Guided and Unguided media.	02	28/3/2024-3/4/2024	Lecture Method, PPT and student Interaction
Unit II: Data link layer Introduction, Data-Link Control-Framing, Error control, Protocols-Noiseless Channels and Noisy Channels, Medium Access Sub	Introduction , framing flow and Error control	03	5/4/2024-10/4/2024	Lecture Method, PPT and student Interaction
	Protocols- Noiseless Channels and Noisy Channels	02	12/4/2024-17/4/2024	Lecture Method, PPT and student Interaction

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Layer-ALOHA, CSMA/CD, Wired LAN – Ethernet, Wireless LAN – IEEE 802.11	Medium Access Sub Layer-ALOHA, CSMA/CD,	03	18/4/2023-24/4/2024	Lecture Method, PPT and student Interaction
	Wired LAN – Ethernet, Wireless LAN – IEEE 802.11	03	24/4/2024-2/45/2024	Lecture Method, PPT and student Interaction
Unit III: Network layer Network Layer: Internet Protocol – IPv4, Ipv6, IPv4 addresses, IPv6 addresses, Transition from IPv4 to IPv6, Routing algorithms, Unicast Routing protocols-Internet Structure, Brief introduction to RIP, OSPF and BGP, Unicasting vs. Multicasting.	Network Layer: Internet Protocol – IPv4, Ipv6, IPv4 addresses, IPv6 addresses	03	3/5/2024-16/5/2024	Lecture Method, PPT and student Interaction
	Transition from IPv4 to IPv6	01	17/5/2024	Lecture Method, PPT and student Interaction
	Routing algorithms	02	20/5/2024-22/5/2024	Lecture Method, PPT and student Interaction
	Unicast Routing protocols-Internet Structure,	02	23/5/2024-28/5/2024	Lecture Method, PPT and student Interaction
	Brief introduction to RIP, OSPF and BGP	02	29/5/2024-30/5/2024	Lecture Method, PPT and student Interaction
	Unicasting vs. Multicasting	01	31/5/2024	Lecture Method, PPT and student Interaction
Unit IV: Transport Layer and Application Layer Transport layer	Transport layer services- Process to process communication	02	5/6/2024	Lecture Method, PPT and student Interaction

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services- Process to process communication, Addressing, Transport layer protocolsServices, Port numbers, UDP and TCP, Application Layer: Client/Server Paradigm, Standard Applications : WWW and HTTP, FTP, Electronic Mail, TELNET, SSH, DNS, Introduction to P2P networks.	Addressing, Transport layer protocols Services	02	6/6/2024	Lecture Method, PPT and student Interaction
	Port numbers, UDP and TCP	02	15/6/2024-20/6/2024	Lecture Method, PPT and student Interaction
Total Hours		**40**		

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Title of the Course: COMMUNICATION SKILLS
Name of the Faculty: Mrs. Rachana C.R & Mrs. Preethi Lakshmi R
Course Code: 23BS18
Credits: L:T:P: 3:1:0

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I Importance of communication, its basic model, formal and informal communications, barriers to communication, feedback and its effectiveness, Non-Verbal communication.	Importance of communication, its basic model	03	5/03/24-5/03/2024-7/03/24	Lecture Method, PPT presentations
	formal and informal communication	02	12/03/24-12/03/24	
	barriers to communication	03	19/03/24-19/03/24-19/03/24	
	Feedback and its effectiveness, Non-Verbal communication.	02	28/03/24 - 2/04/24	
Unit II Oral communication, Speaking: Paralanguage: Sounds, stress, intonation- Art of conversation – Presentation skills, – Public speaking- Expressing Techniques, understanding your audience, importance of listening, role of visual aids, persuasive communication.	Oral communication, Speaking: Paralanguage: Sounds, stress, intonation	02	2/04/24 - 2/04/24	PPT and student seminars
	Art of conversation	02	3/04/24 - 4/04/24	
	Presentation skills	05	16/04/24-16/04/24-16/04/24-18/04/24-23/04/24	
	Public speaking- Expressing Techniques,		23/04/24-2/05/24	

	understanding your audience	06		
	importance of listening, role of visual aids,		14/05/24-16/05/24	
	persuasive communication.		21/05/24-21/05/24	
Unit III Written communication – Good writing – Styles and Principles – Text, Email, Memorandums, reports, Letters, resume writing.	Written communication – Good writing	02	23/05/24-28/05/24	Student writing exercises, PPT and student Interaction
	Styles and Principles – Text, Email, Memorandums	03	28/05/24-29/05/24	
	reports, Letters, resume writing	03	1/06/24-6/06/24-7/06/24	
Unit IV Group Discussion, Interview skills- types of interviews, telephonic interview, Time management, Stress management.	Group Discussion	03	8/06/24-10/06/24-11/06/24	PPT and student Interaction
	Interview skills- types of interviews	03	11/06/24-12/06/24-13/06/24	
	telephonic interview	03	14/06/24-17/06/24-17/06/24	
	Time management, Stress management	03	18/06/24-18/06/24-18/06/24	
Total Hours		**45**		

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Title of the Course: OPERATING SYSTEM

Name of the Faculty: Ms. Likhitha M M & Mrs. R. Eswin Pria Angel

Course Code: 23BH04

Credits: L:T:P: 3:1:0

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I: Introduction -Computer System Organization – Computer system architecture – Operating system operations - Operating systems services- System calls- Types of system calls – Operating system structure. Processes- process concept- process scheduling- operation on processes. Threads – Overview, Multithreading models – Threading issues.	Introduction -Computer System Organization	02	31/7/2024 1/8/2024	Lecture Method, PPT and student Interaction
	Computer system architecture – Operating system operations	02	7/8/2024 8/8/2024	
	Operating systems services- System calls- Types of system calls	02	14/8/2024 21/8/2024	
	Operating system structure. Processes-process concept- process scheduling-operation on processes	05	22/8/2024 28/8/2024 29/8/2024 4/9/2024 5/9/2024	
	Threads – Overview, Multithreading models – Threading issues.	03	11/8/2024 12/8/2024 18/9/2024	
Unit II: Process Scheduling - Scheduling criteria- Scheduling algorithms – Thread scheduling - Multiple- processor scheduling. Process Synchronization – Critical Section	Process Scheduling , Scheduling criteria	02	19/9/2024 25/9/2024	Lecture Method, PPT and student Interaction
	Scheduling algorithms	01	26/9/2024	
	Thread scheduling – Multiple-processor scheduling.	02	3/10/2024 3/10/2024	
	Process Synchronization – Critical Section problem – Peterson's solution	04	9/10/2024 10/10/2024 16/10/2024 17/10/2024	

problem – Peterson's solution – Semaphores Classical problems of synchronization - critical regions – Introduction to Monitors.	Semaphores Classical problems of synchronization	02	23/10/2024 23/10/2024	
	Critical regions – Introduction to Monitors.	03	24/10/2024 30/10/2024 30/10/2024	
Unit III: Deadlocks – System model - Deadlock Characterization - Deadlock handling - Deadlock Prevention - Deadlock avoidance - Deadlock Detection - Deadlock Recovery. Memory Management – Swapping - Contiguous Memory allocation - Segmentation Paging. Virtual Memory Management - Demand paging – Copy on write - Page Replacement - Thrashing.	Deadlocks – System model - Deadlock Characterization	02	29/7/2024 30/7/2024	Lecture Method, PPT and student Interaction
	Deadlock handling - Deadlock Prevention	02	5/8/2024 6/8/2024	
	Deadlock avoidance - Deadlock Detection , Deadlock Recovery	03	12/8/2024 13/8/2024 19/8/2024	
	Memory Management – Swapping - Contiguous Memory allocation, Segmentation Paging	02	20/8/2024 26/8/2024	
	Virtual Memory Management - Demand paging	02	27/8/2024 2/9/2024	
	Copy on write - Page Replacement - Thrashing	02	9/9/2024 10/9/2024	
Unit IV: File System – File concept – Access methods – Directory structure – Directory and disk structure - File Systems structures - Directory Implementation - Allocation Methods - Free Space management. Linux	File System – File concept – Access methods	02	16/9/2024 17/9/2024	Lecture Method, PPT and student Interaction
	Directory structure – Directory and disk structure	01	23/9/2024	
	File Systems structures - Directory Implementation	02	30/9/2024 1/10/2024	
	Allocation Methods - Free Space management.	01	7/10/2024	
	Linux System – Linux history	01	8/10/2024	
	Design Principles, Kernel modules	02	14/10/2024 15/10/2024	

System – Linux history, Design Principles, Kernel modules.				
Total hours		**50**		

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Title of the Course: OBJECT ORIENTED PROGRAMMING WITH JAVA

Name of the Faculty: Mrs. Meghana J and Ms Sushmita Sheeba Dsa

Course Code: 23BH06

Credits: L:T:P: 3:0:1

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit – I An Overview of Java: Object-Oriented Programming, A First Simple Program, A Second Short Program, Two Control Statements, Using Blocks of Code, Lexical Issues, The Java Class Libraries, Data Types, Variables, and Arrays: Java Is a Strongly Typed Language, The Primitive Types, Integers, Floating-Point Types, Characters, Booleans, A Closer Look at Literals, Variables, Type Conversion and Casting, Automatic Type Promotion in Expressions, Arrays, A Few Words About Strings.	An Overview of Java: Object-Oriented Programming	1	29/07/2024	Lecture Method, PPT and Student Interaction
	A First Simple Program, A Second Short Program	1	29/07/2024	
	Two Control Statements, Using Blocks of Code, Lexical Issues, The Java Class Libraries	1	30/07/2024	
	Data Types, Variables, and Arrays: Java Is a Strongly Typed Language, The Primitive Types, Integers, Floating-Point Types, Characters, Booleans	2	1/08/2024-3/08/2024	
	A Closer Look at Literals, Variables, Type Conversion and Casting, Automatic Type Promotion in Expressions	2	3/08/2024-3/08/2024	
	Arrays, A Few Words About Strings.	2	5/08/2024-8/08/2024	

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Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit II : Introducing Classes: Class Fundamentals, Declaring Objects, Assigning Object Reference Variables, Introducing Methods, Constructors, The this Keyword, Garbage Collection, The finalize() Method, A Stack Class, A Closer Look at Methods and Classes: Overloading Methods, Using Objects as Parameters, A Closer Look at Argument Passing, Returning Objects, Recursion, Introducing Access Control, Understanding static, Introducing final, Arrays Revisited, Inheritance: Inheritance Basics, Using super, Creating a Multilevel Hierarchy, Constructors, Method Overriding, Dynamic Method Dispatch, Using Abstract Classes, Using final with Inheritance.	Introducing Classes: Class Fundamentals, Declaring Objects, Assigning Object Reference Variables	2	12/08/2024-12/08/2024	Lecture Method, PPT and Student Interaction
	Introducing Methods, Constructors, The this Keyword, Garbage Collection, The finalize() Method, A Stack Class	2	19/08/2024-19/08/2024	
	A Closer Look at Methods and Classes: Overloading Methods, Using Objects as Parameters	2	20/08/2024-22/08/2024	
	A Closer Look at Argument Passing, Returning Objects, Recursion	2	26/08/2024-2/09/2024	
	Introducing Access Control, Understanding static, Introducing final, Arrays Revisited	2	2/09/2024-3/09/2024	
	Inheritance: Inheritance Basics, Using super, Creating a Multilevel Hierarchy	2	3/09/2024-5/09/2024	
	Constructors, Method Overriding, Dynamic Method Dispatch, Using Abstract Classes, Using final with Inheritance.	2	9/09/2024-9/09/2024	
Unit III : **Packages and Interfaces:** Packages, Access Protection,	Packages, Access Protection	2	12/09/2024-13/09/2024	Lecture Method, PPT and Student

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Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Importing Packages, Interfaces, Exception Handling: Exception-Handling Fundamentals, Exception Types, Uncaught Exceptions, Using try and catch, Multiple catch Clauses, Nested try Statements, throw, throws, finally, Java's Built-in Exceptions, Creating Your Own Exception Subclasses, Chained Exceptions, Using Exceptions.	Access Protection, Importing Packages, Interfaces	2	14/09/2024-17/09/2024	Interaction
	Exception-Handling Fundamentals	2	18/09/2024-19/09/2024	
	Exception Types, Uncaught Exceptions,	1	20/09/2024	
	Using try and catch, Multiple catch Clauses, Nested try Statements,	2	21/09/2024-23/09/2024	
	throw, throws, finally	1	24/09/2024	
	Creating Your Own Exception Subclasses,	2	25/09/2024-26/09/2024	
	Chained Exceptions, Using Exceptions.	2	27/09/2024-28/09/2024	
Unit IV : Multithreaded Programming: The Java Thread Model, The Main Thread, Creating a Thread, Creating Multiple Threads, Using isAlive() and join(), Thread Priorities, Synchronization. I/O Basics, Reading Console Input, Writing Console Output, The PrintWriter Class, Reading and Writing Files.	Chained Exceptions, Using Exceptions.	2	30/09/2024-1/10/2024	Lecture Method, PPT and Student Interaction
	The Main Thread, Creating a Thread,	2	3/10/2024-4/10/2024	
	Creating Multiple Threads, Using isAlive() and join(), Thread Priorities, Synchronization.	2	7/10/2024-10/10/2024	
	/O Basics, Reading Console Input, Writing Console Output, The Print Writer Class, Reading and Writing Files.	2	14/10/2024-19/10/2024	

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Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Practical:	Implementing Java Programs on data types, control statements, Demonstrating Inheritance, Method Overloading, Overriding, Abstract class, Interfaces, Packages, Exception Handling, Threads, Multi threads, File Handling	20	07/08/2024-26/10/2024	Lecture Method, PPT and Student Interaction
Total Hours:		**65**		

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Title of the Course: WEB TECHNOLOGIES

Name of the Faculty: Mrs. Rachana C R & Ms. Likhitha M M

Course Code: 23BH08

Credits: L:T:P: 2:1:1

Prescribed Curriculum	Topics to be covered	No. of Hours required	A SECTION Date	Method of Deployment
Unit I Introduction to Internet, WWW, Web Browsers, and Web Servers, URLs, MIME, HTTP, Security. Quick introduction to HTML5 : basic text formatting, presentation elements, phrase elements, lists, Tables – attributes, grouping elements, basic links, email link, Image, Audio, Video, image maps , Forms.	Introduction to Internet WWW Web Browsers and Web Servers	02	29/07/2024, 30/07/2024	Lecture Method, PPT and student Interaction
	URLs MIME HTTP Security	02	07/08/2024 09/08/2024	
	Quick introduction to HTML5: basic text formatting presentation elements phrase elements	02	13/08/2024 14/08/2024	
	Lists Tables – attributes grouping elements	02	19/08/2024 20/08/2024	
	basic links email link Image Audio Video	02	21/08/2024 02/08/2024	
	Image maps Forms	02	22/08/2024 26/08/2024	
Unit II Cascading Style Sheet: Introduction, Levels of Style Sheet and specification formats, embedded style sheet, External Style Sheet, inline Style Sheet, Box Model,	Introduction Levels of Style Sheet and specification formats External Style Sheet, Embedded style sheet, Inline Style Sheet	03	30/08/2024 02/09/2024 03/09/2024	Lecture Method, PPT and student Interaction
	Selector forms Box Model	02	04/09/2024 09/09/2024	
	Class and ID method, DIV and SPAN tags	02	11/09/2024	

selector forms, Class and ID method, DIV and SPAN tags, Inheritance with CSS.	Inheritance with CSS	01	14/10/2024	
Unit III JavaScript: JavaScript in HTML, Language Basics – Variables, operators, statements, functions, Data type conversions, reference types, Document object Model : methods, HTML DOM Elements, changing HTML and CSS, Events and event handling, event listener, form validation. Browser Object Model: Window, screen, history, popup alert, timing, cookies.	JavaScript in HTML Language Basics – Variables, Operators, Statements, Functions.	02	30/08/2024, 31/08/2024	Lecture Method, PPT and student Interaction
	Data type conversions, reference types	01	01/08/2024	
	Document object Model: methods HTML DOM Elements, changing HTML and CSS, Events and event handling, event listener, form validation	04	02/08/2024 05/08/2024 07/08/2024 08/08/2024	
	Browser Object Model: Window, Screen, history, popup alert, Timing cookies.	03	14/08/2024 19/08/2024 19/08/2024	
Unit IV Brief introduction to Web Frameworks, MVC pattern, Push-based vs. pull-based, Three-tier organization, Examples for General-purpose website frameworks. Brief introduction to Content Management System,	Brief introduction to Web Frameworks	02	22/08/2024 23/08/2024	Lecture Method, PPT and student Interaction
	MVC pattern, Push-based vs. pull-based, Three-tier organization	01	26/08/2024	
	Examples for General-purpose website frameworks	01	02/09/2024	
	Brief introduction to Content Management System, Advantages of CMS, Examples of widely used CMS, Creation of a simple website using	06	05/09/2024 09/09/2024 12/09/2024 07/10/2024 08/10/2024 10/10/2024	

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Advantages of CMS, Examples of widely used CMS, Creation of a simple website using WordPress.	WordPress			
Web Technologies Practical.	Creating web pages using HTML (07) CSS (05) JS (05) CMS (03)	20	13/08/2024 to 29/10/2024	Practical
Total hours		**60**		

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Title of the Course: Artificial Intelligence

Name of the Faculty: Mrs. Yashaswini J and Mrs. Meghana J

Course Code: 23BS22

Credits: L:T:P: 3:1:0

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit-I: INTRODUCTION Introduction to AI, The Foundations of AI, AI Technique -Tic-Tac-Toe. Problem characteristics, Production system characteristics, Production systems: 8-puzzle problem. Intelligent Agents: Agents and Environments, Good Behavior: The concept of rationality – The nature of Environments, The Structure of Agents.	Introduction to AI, The Foundations of AI	2	31/07/24-2/08/24	Lecture Method, PPT and Student Interaction
	AI Technique -Tic-Tac-Toe	2	5/08/24-5/08/24	
	Problem characteristics, Production system characteristics.	2	7/08/24-9/08/24	
	Production systems: 8-puzzle problem, Good Behavior	2	19/08/24-20/08/24	
	Intelligent Agents: Agents and Environments.	2	21/08/24-23/08/24	
	The Structure of Agents.	2	26/08/24-2/09/24	
Unit-II: LOCAL SEARCH ALGORITHM Searching: Uninformed search strategies – Breadth first search, depth first search. Generate and Test, Hill climbing, simulated annealing search, Constraint satisfaction problems, Greedy best first search, A* search, AO* search.	Searching: Uninformed search strategies	2	4/09/24-9/09/24	Lecture Method, PPT and Student Interaction
	Breadth first search, depth first search	2	9/09/24-11/09/24	
	Generate and Test, Hill climbing	2	12/09/24-13/09/24	
	Simulated annealing search, Constraint satisfaction problems	2	17/09/24-18/09/24	
	Greedy best first search, A* search, AO* search.	2	18/09/24-19/09/24	

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Unit-III : KNOWLEDGE REPRESENTATION Propositional logic - syntax & semantics - First order logic. Inference in first order logic, propositional Vs. first order inference, unification & lifts, Clausal form conversion, Forward chaining, Backward chaining, Resolution.	Propositional logic - syntax & semantics	2	20/09/24-23/09/24	Lecture Method, PPT and Student Interaction
	First order logic	2	24/09/24-26/09/24	
	Inference in first order logic	2	26/09/24-28/09/24	
	propositional Vs. first order inference	1	30/09/24	
	unification & lifts	1	1/10/24	
	Clausal form conversion	1	3/10/24	
	Forward chaining, Backward chaining,	2	5/10/24-5/10/24	
	Resolution	1	7/10/24	
Unit-IV: GAME PLAYING, PLANNING and NLP Overview, Minimax algorithm, Alpha-Beta pruning, Additional Refinements. Classical planning problem, Natural Language Processing: Language Models, Text classification, Information Retrieval, Information Extraction.	Overview	1	9/10/24	Lecture Method, PPT and Student Interaction
	Minimax algorithm	2	10/10/24-11/10/24	
	Alpha-Beta pruning	2	14/10/24-15/10/24	
	Additional Refinements, Classical planning problem	2	16/10/24-18/10/24	
	Natural Language Processing: Language Models	1	21/10/24	
	Text classification	1	22/10/24	

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Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
	Information Retrieval	1	24/10/24	
	Information Extraction	1	30/10/24	
Total Hours:		**45**		

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Title of the Course: CLOUD COMPUTING
Name of the Faculty: DrAnisha Kumar & Ms SushmitaSheebaDsa
Course Code: 23BS03
Credits: L:T:P: 2:1:0

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I : Introduction Cloud Computing in a Nutshell, Layers and Types of Clouds, Desired Features of Cloud, Cloud Infrastructure Management, Challenges and Risks. Migrating into a Cloud- The Seven-Step Model of Migration into a Cloud.	Cloud Computing in a Nutshell	1	31/7/2024	Lecture Method, PPT and student Interaction
	Layers and Types of Clouds	3	2/8/2024 4/8/2024 5/8/2024	
	Desired Features of Cloud	2	7/8/2024 7/8/2024	
	Cloud Infrastructure Management	2	9/8/2024 9/8/2024	
	Challenges and Risks	1	19/8/2024	
	Migrating into a Cloud- The Seven-Step Model of Migration into a Cloud.	2	19/8/2024- 20/8/2024	
Unit II: Software as a Service (SaaS): Evolution of SaaS, Challenges of SaaS Paradigm, New Integration Scenarios, SaaS Integration of Products and Platforms, SaaS Integration Services, Business – to Business Integration Services. Infrastructure As a	Software as a Service (SaaS): Evolution of SaaS, Challenges of SaaS Paradigm	3	21/8/2024 22/8/2024 23/8/2024	Lecture Method, PPT and student Interaction
	Challenges of SaaS Paradigm, New Integration Scenarios	3	26/8/2024 27/8/2024 2/9/2024	
	SaaS Integration of Products and Platforms, SaaS Integration Services, Business – to Business Integration Services.	4	4/9/2024- 7/92024	

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Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Services (IaaS): Introduction, Background & Related Work, Virtual Machines Provisioning and Manageability, Virtual Machine Migration Services, Provisioning in a Cloud Context-Amazon Elastic Computer Cloud, Aneka. Platform As a service (PaaS): Aneka Cloud Platform, Hybrid Cloud Implementation, Aneka Hybrid Cloud Architecture	Infrastructure As a Services (IaaS): Introduction, Background & Related Work, Virtual Machines Provisioning and Manageability, Virtual Machine Provisioning in a Cloud Context-Amazon Elastic Computer Cloud, Aneka. Platform As a service (PaaS): Aneka Cloud Platform, Hybrid Cloud Implementation, Aneka Hybrid Cloud Architecture	4	9/9/2024-12/9/2024	
Unit III : The Enterprise Cloud Computing Paradigm-Background, Business Drivers Toward a Marketplace for Enterprise Cloud Computing, The Cloud Supply Chain.	The Enterprise Cloud Computing Paradigm-Background	3	13/9/2024 17/9/2024 18/9/2024	Lecture Method, PPT and student Interaction
	Business Drivers Toward a Marketplace for Enterprise Cloud Computing	3	19/9/2024 20/9/2024 20/9/2024	
	The Cloud Supply Chain.	3	23/9/2024 24/9/2024 26/9/2024	
Unit IV : Data Security in the Cloud Introduction, Current	Introduction, Current State,	2	30/9/2024 1/10/2024	Lecture Method, PPT and student

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Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
State, Cloud Computing and Identity, The Cloud, Digital Identity, and Data Security. Cloud Data Security – Case Study.	Cloud Computing and Identity	2	3/10/2024 4/10/2024	Interaction
	Data Security.	2	7/10/2024 9/10/2024	
	Cloud Data Security – Case Study.	3	14/10/2024 15/10/2024 16//102024	
Total Hours:		**47**		

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Title of the Course: CYBER SECURITY

Name of the Faculty: Dr. Anisha Kumar & Mrs. R. Eswin Pria Angel

Course Code: 22BS21

Credits: L:T:P: 3:1:0

Prescribed Curriculum	Topics to be covered	No. of Hours required	Dates	Method of Deployment
Unit I: Cybercrime and Cyber offenses Cybercrime: Introduction, Cybercrime definition and origins of the word, Cybercrime and information security, who are Cybercriminals, Classifications of cybercrimes, Cybercrime: The legal perspectives, Cybercrimes: An Indian perspective, Cybercrime and the Indian ITA 2000, a global Perspective on cybercrimes. Cyber offenses: Introduction, How criminal plan the attacks, Social Engineering, Cyber stalking, Cybercafé and Cybercrimes, Botnets : the Fuel for Cybercrime.	Cybercrime: Introduction, Cybercrime definition and origins of the word, Cybercrime and information security, who are Cybercriminals.	03	29/7/24 30/7/24 31/7/24	Lecture Method, PPT and student Interaction
	Classifications of cybercrimes, Cybercrime: The legal perspectives.	03	1/8/24 2/8/24 3/8/24	
	Cybercrimes: An Indian perspective, Cybercrime and the Indian ITA 2000, a global Perspective on cybercrimes. Cyber offenses: Introduction, How criminal plan the attacks.	04	5/8/34 6/8/24 7/8/24 8/8/24	
	Social Engineering, Cyber stalking, Cybercafé and Cybercrimes, Botnet : the Fuel for Cybercrime.	04	9/8/24 10/8/24 12/8/24 13/8/24	

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Unit II: Cybercrime: Mobile And Wireless Devices Cybercrime: Mobile and Wireless Devices: Introduction, Proliferation of Mobile and Wireless Devices, Trends in Mobility, Credit Card Frauds in Mobile and Wireless Computing Era, Security Challenges Posed by Mobile Devices, Registry Settings for Mobile Devices, Authentication Service Security, Attacks on Mobile/Cell Phones, Mobile Devices: Security Implications for Organizations, Organizational Measures for Handling Mobile Devices-	Cybercrime: Mobile and Wireless Devices: Introduction, Proliferation of Mobile and Wireless Devices, Trends in Mobility, Credit Card Frauds in Mobile and Wireless Computing Era,	04	16/8/24 17/8/24 19/8/24 20/8/24	Lecture Method, PPT and student Interaction
	Security Challenges Posed by Mobile Devices, Registry Settings for Mobile Devices, Authentication Service Security, Attacks on Mobile/Cell Phones,	04	21/8/24 22/8/24 23/8/24 24/8/24	
	Mobile Devices: Security, Implications for Organizations, Organizational Measures for Handling Mobile Devices-Related Security Issues, Organizational Security Policies and Measures in Mobile Computing Era, Laptops.	04	26/8/24 31/8/24 2/9/24 5/9/24	

Related Security Issues, Organizational Security Policies and Measures in Mobile Computing Era, Laptops.				
Unit III: Tools and Methods Used in Cybercrime: Introduction, Phishing, Password Cracking, Key loggers and Spywares, Virus and Worms, Trojan Horses and Backdoors, Steganography, DoS and DDoS Attacks, SQL Injection, Buffer Overflow, Attacks on Wireless Networks.	Tools and Methods Used in Cybercrime: Introduction, Phishing, Password Cracking, Key loggers and Spywares,	04	5/9/24 9/9/24 12/9/24 14/9/24	Lecture Method, PPT and student Interaction
	Virus and Worms, Trojan Horses and Backdoors, Steganography.	04	12/9/24 18/9/24 21/9/24 23/9/24	
	DoS and DDoS Attacks, SQL Injection, Buffer Overflow, Attacks on Wireless Networks.	04	28/9/24 30/9/24 1/10/24 4/10/24	
Unit IV: Computer Forensics Introduction, Historical background of cyber forensics, Digital forensics science, the	Introduction, Historical background of cyber forensics, Digital forensics science, the need for computer forensics.	04	7/10/24 8/10/24 10/10/24 15/10/24	Lecture Method, PPT and student Interaction

need for computer forensics, cyber forensics and digital evidence, forensics analysis of email, digital forensics life cycle, computer forensics and steganography, Forensics and social networking: The security/privacy threats, Challenges in computer forensics.	Cyber forensics and digital evidence, forensics analysis of email, digital forensics life cycle.	04	16/10/24 18/10/24 21/10/24 23/10/24	
	Computer forensics and steganography . Forensics and social networking: The security/privacy threats, Challenges in computer forensics.	04	24/10/24 25/10/24 28/10/24 30/10/24	
Total Hours:		**50**		

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Title of the Course: OFFICE AUTOMATION
Name of the Faculty: Ms. Likhitha M M & Mrs. R. Eswin Pria Angel
Course Code: 23BE03
Credits: L:T:P: 3:1:0
Department: Opted by M.Sc Bio Technology, Bio Chemistry

Prescribed Curriculum	Topics to be covered	No. of Hours required	Dates	Method of Deployment
Unit I: Introduction to Computers, Basic Anatomy of Computers and Introduction to MS-Office.	Introduction to Computers.	03	17/05/2024 17/05/2024 18/05/2024	Lecture Method, PPT, student Interaction and hands on work
	Basic Anatomy of Computers.	03	18/05/2024 24/05/2024 24/05/2024	Lecture Method, PPT, student Interaction and hands on work
	Introduction to MS-Office.	02	25/05/2024 25/05/2024	Lecture Method, PPT, student Interaction and hands on work
Unit II: MS-Word – Word Basics, Formatting Features, Menu, Commands, Tool Bars and their Icons, Mail Merge and Macros Creating Tables.	MS-Word – Word Basics, Formatting.	04	31/05/2024 31/05/2024 01/06/2024 01/06/2024	Lecture Method, PPT, student Interaction and hands on work
	Features, Menu, Commands.	03	07/06/2024 07/06/2024 08/06/2024	Lecture Method, PPT, student Interaction and hands on work
	Tool Bars and their Icons.	04	08/06/2024 14/06/2024 14/06/2024 15/06/2024	Lecture Method, PPT, student Interaction and hands on work

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	Mail Merge and Macros.	02	15/06/2024 21/06/2024	Lecture Method, PPT, student Interaction and hands on work
	Creating Tables.	02	21/06/2024 22/05/2024	Lecture Method, PPT, student Interaction and hands on work
Unit III : Ms-Excel-Introduction, Menu, Commands, Tool Bars and their Icons, Function	MS-Excel – Introduction.	03	22/06/2024 28/06/2024 28/06/2024	Lecture Method, PPT, student Interaction and hands on work
	Menu, Commands.	02	29/06/2024 29/06/2024	Lecture Method, PPT, student Interaction and hands on work
	Tool Bars and their Icons.	04	05/07/2024 05/07/2024 06/07/2024 06/07/2024	Lecture Method, PPT, student Interaction and hands on work
	Functions.	02	12/07/2024 13/07/2024	Lecture Method, PPT, student Interaction and hands on work
Unit IV: MS-Power Point – Menu, Toolbar, Navigating in PowerPoint, Working with PowerPoint and Introduction to MS-Access.	MS-Power Point – Menu.	03	19/07/2024 19/07/2024 20/07/2024	Lecture Method, PPT, student Interaction and hands on work
	Toolbar.	03	20/05/2024 21/05/2024 21/05/2024	Lecture Method, PPT, student Interaction and hands on work
	Navigating in PowerPoint.	02	21/05/2024 26/07/2024	Lecture Method, PPT, student Interaction and hands on work

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	Working with PowerPoint.	03	26/07/2024 27/07/2024 27/07/2024	Lecture Method, PPT, student Interaction and hands on work
Total Hours:		**45**		

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Title of the Course: ADVANCED COMPUTER NETWORKS
Course Code: 22BH02
Name of the Faculty: Smt. Eswin Pria Angel and Smt .Yashaswini J
Credits: L:T:P: 3:1:0

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I: Introduction Uses of Computer Networks, Network Hardware, Network Software, Reference Models- OSI, TCP/IP	Uses of Computer Networks	2	5/12/2023 7/12/2023	Lecture, PPT Presentation
	Network Hardware	3	8/12/2023 9/12/2023 13/12/2023	Lecture, PPT Presentation
	Network Software	3	20/12/2023 - 22/12/2023	Lecture, PPT Presentation
	Reference Models- OSI, TCP/IP	6	1/1/2024 - 6/1/2024	Lecture, PPT Presentation
Unit II: Transport Layer The Transport Service, Congestion Control, History of TCP/IP, TCP Applications and Services, Motivation for Performance Study of TCP/IP, What Do We Mean by TCP Performance?, TCP/IP Fundamentals, TCP, UDP, IP, Performance Measurements of TCP/IP Networks	The Transport Service, Congestion Control	3	8/1/2024 9/1/2024 10/1/2024	Lecture, PPT Presentation
	History of TCP/IP, TCP Applications and Services	2	17/1/2024 18/1/2024	Lecture, PPT Presentation
	Motivation for Performance Study of TCP/IP, What Do We Mean by TCP Performance?	2	20/1/2024 22/1/2024	Lecture, PPT Presentation
	TCP/IP Fundamentals, TCP	2	23/1/2024 24/1/2024	Lecture, PPT Presentation
	UDP	2	29/1/2024 30/1/2024	Lecture, PPT Presentation
	IP	2	31/1/2024 1/2/2024	Lecture, PPT Presentation

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	Performance Measurements of TCP/IP Networks	2	2/2/2024 3/2/2024	Lecture, PPT Presentation
Unit III: TCP/IP TCP/IP Performance over Wireless Networks, Wireless Networks, Generic characteristics, Wireless Local Area Networks, Cellular Communications Networks, TCP Performance Issues over Wireless Links, Inappropriate Reduction of Congestion Window, Throughput Loss in WLANs, Throughput Loss in Cellular Communication Systems, ImprovingTCP Performance over Wireless Links, Splitting TCP Connections, Snooping TCP at Base Stations, Notifying the Causes of Packet Loss, Adding Selective Acknowledgments to TCP	TCP/IP Performance over Wireless Networks, Wireless Networks, Generic characteristics	2	5/2/2024 6/2/2024	Lecture, PPT Presentation
	Wireless Local Area Networks, Cellular Communications Networks	2	8/2/2024 9/2/2024	Lecture, PPT Presentation
	TCP Performance Issues over Wireless Links, Inappropriate Reduction of Congestion Window, Throughput Loss in WLANs, Throughput Loss in Cellular Communication Systems	3	19/2/2024 - 21/2/2024	Lecture, PPT Presentation
	Improving TCP Performance over Wireless Links, Splitting TCP Connections, Snooping TCP at Base Stations, Notifying the Causes of Packet Loss, Adding Selective Acknowledgments to TCP	3	22/2/2024 - 24/2/2024	Lecture, PPT Presentation
Unit IV: IP & System Security	Overview	2	28/2/2024 29/2/2024	Lecture, PPT Presentation
	IP Security Policy	2	1/3/2024	Lecture, PPT

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Overview, IP Security Policy, Encapsulating Security Payload, Combining Security Associations- Authentication Plus Confidentiality, Basic Combinations of Security Associations, Malicious Software, Types, Viruses, Antivirus Approaches, Distributed denial of service (DDoS) attacks			2/3/2024	Presentation
	Encapsulating Security Payload	2	4/3/2024 5/3/2024	Lecture, PPT Presentation
	Combining Security Associations- Authentication Plus Confidentiality, Basic Combinations of Security Associations	2	6/3/2024 7/3/2024	Lecture, PPT Presentation
	Malicious Software - Types	2	11/3/2024 12/3/2024	Lecture, PPT Presentation
	Viruses	2	14/3/2024 15/3/2024	Lecture, PPT Presentation
	Antivirus Approaches	2	16/3/2024 18/3/2024	Lecture, PPT Presentation
	Distributed denial of service (DDoS) attacks	2	20/3/2024 21/3/2024	Lecture, PPT Presentation
Total		**55**		

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Title of the Course: PYTHON PROGRAMMING
Name of the Faculty: Smt. Rachana C R and Smt .Yashaswini J
Course Code: 22BS14
Credits: L:T:P: 3:0:1

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I INTRODUCTION TO PYTHON Structure of Python Program, Branching and Looping, Functions, Lists, tuples, string functions, list comprehensions.	Structure of Python Program, Operators, data types	**2**	01/12/2023 08/12/2023	PPT, simple exercises and student Interaction
	Branching and Looping,	**2**	12/12/2023 15/12/2023	PPT, program illustrations and student Interaction
	Functions, Lists, tuples,	**2**	16/12/2023 22/12/2023	PPT and student Interaction
	String functions, list comprehensions.	**3**	29/12/2023 30/12/2023 30/12/2023	PPT and student Interaction
Unit II: SEQUENCE DATATYPES AND OBJECT-ORIENTED PROGRAMMING Sets, Dictionaries, Classes: Classes and Instances, Inheritance, Exceptional Handling, Modules, Introduction to Regular Expressions using "re" module.	Sets, Dictionaries	**3**	01/01/2024 08/01/2024 08/01/2024	PPT and student Interaction
	Classes and Instances, Inheritance	**3**	19/01/2024 21/01/2024 22/01/2024	PPT and student Interaction
	Exceptional Handling, Modules	**3**	20/01/2024 25/01/2024 27/01/2024	Lecture Method, PPT and student Interaction
	Introduction to Regular Expressions using "re" module.	**2**	02/02/2024 03/02/2024	Lecture Method, PPT and student Interaction

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Unit III: USING NUMPY & PANDAS Basics of NumPy, Computation on NumPy, Aggregations, Computation on Arrays, Comparisons, NumPy's Structured Array. Introduction to Pandas Objects, Data indexing and Selection, Operating on Data in Pandas, Handling Missing Data, Combining Data Sets.	Basics of NumPy	**2**	05/02/2024 05/02/2024	Lecture Method – PPT presentation and student interaction
	Computation on NumPy	**2**	09/02/2024 09/02/2024	Lecture Method – PPT presentation and student interaction
	Aggregations, Computation on Arrays, Comparisons, NumPy's Structured Array	**3**	10/02/2024 – 12/02/2024	Lecture Method – PPT presentation and student interaction
	Introduction to Pandas Objects	**2**	16/02/2024 16/02/2024	Lecture Method – PPT presentation
	Data indexing and Selection	**2**	17/02/2024 17/02/2024	Lecture Method – PPT presentation
	Operating on Data in Pandas	**2**	19/02/2024 19/02/2024	Lecture Method – PPT presentation and student interaction
	Handling Missing Data	**2**	23/03/2024 23/03/2024	Lecture Method – PPT presentation and student interaction
	Combining Data Sets	**2**	07/03/2024 07/03/2024	Lecture Method – PPT presentation and student interaction

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Unit IV: VISUALIZATION AND MATPLOTLIB Basic functions of matplotlib-Simple Line Plot, Scatter Plot-Density and Contour Plots Histograms, Binnings and Density-Customizing Plot Legends, Colour Bars-Three-Dimensional Plotting in Matplotlib	Basic functions of matplotlib-Simple Line Plot, Scatter Plot-Density and Contour Plots Histograms	**3**	09/03/2024 13/03/2024 13/03/2024	Lecture Method – PPT presentation and student interaction.
	Binnings and Density-Customizing Plot Legends	**3**	15/03/2024 15/03/2024 16/03/2024	Lecture Method, PPT and student Interaction
	Colour Bars-Three-Dimensional Plotting in Matplotlib	**2**	18/03/2024 18/03/2024	Lecture Method, PPT and student Interaction
Practical Hours	Unit I, II, III, IV	**20**	12/12/2023 – 12/03/2024	Programs will be executed in the lab.
Total:		**65**		

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Title of the Course: SYSTEM ANALYSIS AND DESIGN **Course Code: 22BS04**
Name of the Faculty: Dr. Anisha Kumar, Mrs Preethi **Credits: L:T:P: 3:1:0**

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I: System Concept: Definition, Characteristics, Elements of system, Physical and abstract system, open & closed system and man-made information systems. System Development Life Cycle: Various phases of system development, Considerations for system planning and control for system success. Initial Investigation: Determining user's requirements and analysis, fact finding process and techniques. Feasibility study: Determination of feasibility study, Technical, Operational & Economic Feasibilities, System performance constraints, identification of system objectives and feasibility report.	System Concept: Definition, Characteristics, Elements of system, Physical and abstract system, open & closed system and man-made information systems.	03	16-12-2023 20-12-2023 20-12-2023	Lecture Method, PPT and student Interaction
	System Development Life Cycle: Various phases of system development, Considerations for system planning and control for system success.	03	21-12-2023 28-12-2023 30-12-2023	
	Initial Investigation: Determining user's requirements and analysis, fact finding process and techniques.	04	3-1-2024 20-1-2024 20-1-2024 24-1-2024	
	Feasibility study: Determination of feasibility study, Technical, Operational & Economic Feasibilities, System performance constraints, identification of system objectives and feasibility report.	04	25-1-2024 27-1-2024 29-1-2024 29-1-2024	

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Unit II: Cost/Benefit Analysis: Data analysis cost and benefit analysis of a new system and categories determination. Tools of structured Analysis: Logical and Physical models, context, diagram, data dictionary, data diagram, IPO and HIPO charts, Gantt charts and pseudo codes. Flow charts- system flow chart, run flow charts etc., decision tree and decision tables.	Cost/Benefit Analysis: Data analysis cost and benefit analysis of a new system and categories determination.	04	1-2-2024 3-2-2024 7-2-2024 7-2-2024	Lecture Method, PPT and student Interaction
	. Tools of structured Analysis: Logical and Physical models, context diagram.	04	8-2-2024 8-2-2024 10-2-2024 13-2-2024	
	Data dictionary, data diagram, IPO and HIPO charts, Gantt charts and pseudo codes.	04	14-2-2024 14-2-2024 15-2-2024 15-2-2024	
	Flow charts- system flow chart, run flow charts etc., decision tree and decision tables.	04	17-2-2024 17-2-2024 21-2-2024 21-2-2024	
Unit III: Input/ Output and Form Design: Input and output form design methodologies, menu, screen design and layout consideration. Management standards:	Input/ Output and Form Design: Input and output form design methodologies, menu, screen design and layout	03	22-2-2024 22-2-2024 23-2-2024	Lecture Method, PPT and student Interaction

Programming and operating standards. Documentation standards: User and programming manual. System testing & quality: System testing, quality assurance and software maintenance.	consideration.			
	Management standards: Programming and operating standards.	02	26-2-2024 27-2-2024	
	Documentation standards: User and programming manual.	02	28-2-2024 28-2-2024	
	System testing & quality: System testing, quality assurance and software maintenance.	03	29-2-2024 29-2-2024 1-3-2024	
Unit IV: System security: Data Security, Disaster/ recovery and ethics in system development. Organization of EDP: Introduction, Job Responsibilities & duties of EDP Personnel- EDP manager, System Analyst, Programmers, Operators etc. Selection of Data Processing Resources: purchase, lease, rent-advantages and disadvantages.	System security: Data Security, Disaster/ recovery and ethics in system development.	04	2-3-2024 2-3-2024 4-3-2024 4-3-2024	Lecture Method, PPT and student Interaction
	Organization of EDP: Introduction, Job Responsibilities & duties of EDP Personnel- EDP manager, System Analyst, Programmers, Operators etc.	04	5-3-2024 5-3-2024 6-3-2024 6-3-2024	
	Selection of Data Processing Resources: purchase, lease, rent-advantages and disadvantages.	04	7-3-2024 9-3-2024 13-3-2024 13-3-2024	

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Total Hours	**52**		

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Title of the Course: WEB TECHNOLOGIES **Course Code: 22BS05**
Name of the Faculty: Ms. Likhitha M M **Credits: L:T:P: 2:1:1**

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I Introduction to Internet, WWW, Web Browsers, and Web Servers, URLs, MIME, HTTP, Security. Quick introduction to HTML5: basic text formatting, presentation elements, phrase elements, lists, Tables – attributes, grouping elements, basic links, email link, Image, Audio, Video, image maps, Forms.	Introduction to Internet WWW Web Browsers and Web Servers	02	04/12/2023 05/12/2023	Lecture Method, PPT and student Interaction
	URLs MIME HTTP Security	02	6/12/2023 11/12/2023	
	Quick introduction to HTML5: basic text formatting presentation elements phrase elements	02	12/12/2024 13/12/2024	
	Lists Tables – attributes grouping elements	02	18/12/2024 19/12/2024	
	basic links email link Image Audio Video	02	20/12/2024 26/12/2024	
	Image maps Forms	02	27/12/2024 28/12/2024	
Unit II Cascading Style Sheet: Introduction, Levels of Style Sheet and specification formats, embedded style sheet, External Style Sheet, inline Style Sheet, Box Model, selector forms, Class and ID method, DIV and SPAN tags, Inheritance with CSS.	Introduction Levels of Style Sheet and specification formats External Style Sheet, Embedded style sheet, Inline Style Sheet	03	03/01/2024 04/01/2024 08/01/2024	Lecture Method, PPT and student Interaction
	Selector forms Box Model	02	09/01/2024 10/01/2024	
	Class and ID method, DIV and SPAN tags	03	11/01/2024 16/01/2024 18/01/2024	

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	Inheritance with CSS	01	22/01/2024	
Unit III JavaScript: JavaScript in HTML, Language Basics – Variables, operators, statements, functions, Data type conversions, reference types, Document object Model : methods, HTML DOM Elements, changing HTML and CSS, Events and event handling, event listener, form validation. Browser Object Model: Window, screen, history, popup alert, timing, cookies.	JavaScript in HTML Language Basics – Variables Operators Statements Functions.	03	23/01/2024 24/01/2024 29/01/2024	Lecture Method, PPT and student Interaction
	Data type conversions reference types	01	30/01/2024	
	Document object Model: methods HTML DOM Elements changing HTML and CSS Events and event handling event listener form validation	04	31/01/2024 01/02/2024 05/02/2024 06/02/2024	
	Browser Object Model: Window Screen history popup alert Timing cookies.	04	07/02/2024 08/02/2024 12/02/2024 13/02/2024	
Unit IV PHP: Forms PHP, Form Handling, PHP MySQL connectivity. Brief introduction to Web Frameworks and Content Management System, creation of a simple website using WordPress.	Forms PHP Form Handling	02	14/02/2024 15/02/2024	Lecture Method, PPT and student Interaction
	PHP MySQL connectivity.	01	21/02/2024	
	Brief introduction to Web Frameworks and Content Management System	02	22/02/2024 26/02/2024	
	creation of a simple website using WordPress.	02	27/02/2024 28/02/2024	

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Web Technologies Practical.	Creating web pages using HTML (10) CSS (10) JS (10) PHP and CMS (05) A small responsive web application (01)	20	04/12/2023 04/3/2023	Practical
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Title of the Course: BIG DATA ANALYTICS **Course Code: 22BS13**
Name of the Faculty: Mrs.R. Eswin Pria Angel **Credits: L:T:P: 3:0:1**

Prescribed Curriculum	Topics to be covered	No. of Hours required	Dates	Method of Deployment
Unit I: Introduction to Big data Analytics Big data Overview, State of the Practice in Analytics, Key roles for the New Big Data Ecosystem, Examples of Big Data Analytics, Data analytics lifecycle Overview, Phase 1: Discovery, Phase 2: Data preparation, Phase 3: Model planning, Phase 4: Model building, Phase 5: Communicate results, Phase 6: Operationalize	Big data Overview, State of the Practice in	2	4/12/2023 5/12/2023	PPT and Student Interaction
	Key roles for the New Big Data Ecosystem, Examples of Big Data Analytics	2	8/12/2023 9/12/2023	
	Data analytics lifecycle Overview, Phase 1: Discovery	2	12/12/2023 13/12/2023	
	Phase 2: Data preparation	2	15/12/2023 16/12/2023	
	Phase 3: Model planning, Phase 4: Model building	2	19/12/2023 20/12/2023	
	Phase 5: Communicate results, Phase 6: Operationalize	2	27/12/2023 28/12/2023	
Unit II: Introduction to Hadoop Introduction to Hadoop, Why Hadoop?, Why not RDBMS?, RDBMS versus Hadoop, Distributed Computing Challenges, History of Hadoop, Hadoop Overview, Use	Introduction to Hadoop, Why Hadoop?, Why not RDBMS?;			
		2	5/1/2024 6/1/2024	
	RDBMS versus Hadoop, Distributed Computing Challenges,	2	9/1/2024 10/1/2024	

case of Hadoop, Hadoop distributors, HDFS(Hadoop Distributed File System), Processing data with Hadoop, Managing Resources and Applications with Hadoop YARN (Yet Another Resource Negotiator), Interacting with Hadoop Ecosystem	Histroy of Hadoop, Hadoop Overview	2	12/1/2024 13/1/2024	PPT and Student Interaction
	Use case of Hadoop, Hadoop distributors	2	16/1/2024 17/1/2024	
	HDFS(Hadoop Distributed File System)	2	19/1/2024 20/1/2024	
	Processing data with Hadoop	2	24/1/2024 25/1/2024	
	Managing Resources and Applications with Hadoop YARN (Yet Another Resource Negotiator),	2	29/1/2024 30/1/2024	
	Interacting with Hadoop Ecosystem	2	1/2/2024 2/2/2024	
Unit III: Introduction to MAPREDUCE Programming and Mongo DB Introduction, Mapper, Reducer, Combiner, partitioner, Searching, Sorting, Compression, Mongo DB: Uses of MongoDB, Terms used in RDBMS and MongoDB, Data types in MongoDB, MongoDB- Query Language	Introduction, Mapper,	2	5/2/2024 6/2/2024	PPT and Student Interaction
	Combiner, Partitioner	2	8/2/2024 9/2/2024	
	Searching, Sorting,	2	12/2/2024 13/2/2024	
	Compression,	2	15/2/2024 16/2/2024	
	MongoDB, Terms used in RDBMS and MongoDB	3	19/2/2024 - 21/2/2024	
	Data types in MongoDB,	3	22/2/2024 - 24/2/2024	
	MongoDB- Query	3	28/2/2024 -	

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	Language		1/3/2024	
Unit 4: Review of Basic Data Analytic Methods using R Introduction to R Exploratory data analysis	Introduction to R	2	6/3/2024 7/3/2024	PPT and Student Interaction
	Exploratory data analysis	3	11/3/2024 - 13/3/2024	
Total hours		**50**		

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Title of the Course: CYBER SECURITY **Course Code: 22BS21**
Name of the Faculty: Dr. Anisha Kumar **Credits: L:T:P: 3:1:0**

Prescribed Curriculum	Topics to be covered	No. of Hours required	Dates	Method of Deployment
Unit I: Cybercrime and Cyber offenses Cybercrime: Introduction, Cybercrime definition and origins of the word, Cybercrime and information security, who are Cybercriminals, Classifications of cybercrimes, Cybercrime: The legal perspectives, Cybercrimes: An Indian perspective, Cybercrime and the Indian ITA 2000, a global Perspective on cybercrimes. Cyber offenses: Introduction, How criminal plan the attacks, Social Engineering, Cyber stalking, Cybercafé and Cybercrimes, Botnets : the Fuel for Cybercrime.	Cybercrime: Introduction, Cybercrime definition and origins of the word, Cybercrime and information security, who are Cybercriminals.	03	4-12-2023 6-12-2023 8-12-2023	Lecture Method, PPT and student Interaction
	Classifications of cybercrimes, Cybercrime: The legal perspectives.	03	9-12-2023 11-12-2023 12-12-2023	
	Cybercrimes: An Indian perspective, Cybercrime and the Indian ITA 2000, a global Perspective on cybercrimes. Cyber offenses: Introduction, How criminal plan the attacks.	04	13-12-2023 15-12-2023 18-12-2023 19-12-2023	
	Social Engineering, Cyber stalking, Cybercafé and Cybercrimes, Botnet : the Fuel for Cybercrime.	04	20-12-2023 20-12-2023 22-12-2023 22-12-2023	
Unit II: Cybercrime: Mobile And Wireless Devices Cybercrime: Mobile and Wireless Devices: Introduction, Proliferation of Mobile and Wireless Devices, Trends in Mobility,	Cybercrime: Mobile and Wireless Devices: Introduction, Proliferation of Mobile and Wireless Devices, Trends in Mobility, Credit Card Frauds in Mobile and Wireless Computing Era, Discussion on case studies.	05	23-12-2023 27-12-2023 27-12-2023 28-12-2023 28-12-2023	Lecture Method, PPT and student Interaction

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Credit Card Frauds in Mobile and Wireless Computing Era, Security Challenges Posed by Mobile Devices, Registry Settings for Mobile Devices, Authentication Service Security, Attacks on Mobile/Cell Phones, Mobile Devices: Security Implications for Organizations, Organizational Measures for Handling Mobile Devices-Related Security Issues, Organizational Security Policies and Measures in Mobile Computing Era, Laptops.	Security Challenges Posed by Mobile Devices, Registry Settings for Mobile Devices, Authentication Service Security, Attacks on Mobile/Cell Phones.	05	29-12-2023 29-12-2023 2-1-2024 2-1-2024	
	Mobile Devices: Security Implications for Organizations, Organizational Measures for Handling Mobile Devices-Related Security Issues.	04	3-1-2024 4-1-2024 5-1-2024 8-1-2024	
	Organizational Security Policies and Measures in Mobile Computing Era, Laptops.	04	9-1-2024 16-1-2024 19-1-2024 19-1-2024	
Unit III: Tools and Methods Used in Cybercrime Introduction, Phishing, Password Cracking, Key loggers and Spywares, Virus and Worms, Trojan Horses	Introduction, Phishing, Password Cracking, Key loggers and Spywares.	02	23-1-2024 24-1-2024	Lecture Method, PPT and student Interaction
	Virus and Worms, Trojan Horses and Backdoors.	02	30-1-2024 5-2-2024	

and Backdoors, Steganography, DoS and DDoS Attacks, SQL Injection, Buffer Overflow, Attacks on Wireless Networks.	Steganography, DoS and DDoS Attacks.	03	7-2-2024 9-2-2024 12-2-2024	
	SQL Injection, Buffer Overflow, Attacks on Wireless Networks.	03	14-2-2024 16-2-2024 20-2-2024	
Unit IV: Computer Forensics Introduction, Historical background of cyber forensics, Digital forensics science, the need for computer forensics, cyber forensics and digital evidence, forensics analysis of email, digital forensics life cycle, computer forensics and steganography, Forensics and social networking: The security/privacy threats, Challenges in computer forensics.	Introduction, Historical background of cyber forensics, Digital forensics science, the need for computer forensics.	04	23-2-2024 27-2-2024 28-2-2024	Lecture Method, PPT and student Interaction
	Cyber forensics and digital evidence, forensics analysis of email, digital forensics life cycle.	04	3-3-2024 5-3-2024 6-3-2024 6-3-2024	
	Computer forensics and steganography . Forensics and social networking: The security/privacy threats, Challenges in computer forensics.	04	12-3-2024 13-3-2024 15-3-2024 18-3-2024	
Total Hours		**54**		

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Title of the Course: ARTIFICIAL INTELLIGENCE **Course Code: 22BS23**
Name of the Faculty: Ms Sushmita Sheeba Dsa **Credits: L:T:P: 3:1:0**

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit-I: INTRODUCTION Introduction to AI, The Foundations of AI, AI Technique -Tic-Tac-Toe. Problem characteristics, Production system characteristics, Production systems: 8-puzzle problem. Intelligent Agents: Agents and Environments, Good Behaviour: The concept of rationality – The nature of Environments, The Structure of Agents	Introduction to AI, The Foundations of AI	02	2/12/23 - 5/12/23	Lecture Method, PPT and student Interaction
	AI Technique -Tic-Tac-Toe	02	6/12/23 - 9/12/23	
	Production system,	02	12/12/23 - 13/12/23	
	Problem characteristics: Problem characteristics,	02	14/12/23 - 16/12/23	
	Intelligent Agents: Agents and Environments	02	9/12/23 - 20/12/23	
	The concept of rationality – The nature of Environments, The Structure of Agents	02	21/12/23 - 23/12/23	
Unit-II: LOCAL SEARCH ALGORITHM Searching: Uninformed search strategies – Breadth first search, depth first search. Generate and Test, Hill climbing, simulated annealing search, Constraint satisfaction problems, Greedy best first search, A* search, AO* search.	Searching: Uninformed search strategies – Breadth first search, depth first search	03	26/12/23 ,27/12/23, 28/12/23	Lecture Method, PPT and student Interaction
	Generate and Test	02	29/12/23 - 2/1/24	
	Hill climbing, simulated annealing search, Constraint satisfaction problems, Greedy best first search, A* search,	05	2/1/24- 20/1/24	
Unit-III : KNOWLEDGE REPRESENTATION Propositional logic - syntax & semantics -	Propositional logic - syntax & semantics	02	23/1/24- 25/1/24	Lecture Method, PPT and student Interaction
	First order logic, Inference in first order logic	02	30/1/24- 31/1/24	

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Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
First order logic. Inference in first order logic, propositional Vs. first order inference, unification & lifts, Clausal form conversion, Forward chaining, Backward chaining, Resolution.	propositional Vs. first order inference,	02	2/2/24-03/2/24	
	unification & lifts	01	7/2/24	
	Clausal form conversion, Forward chaining, Backward chaining, Resolution.	03	8/2/24-10/2/24	
Unit IV: GAME PLAYING, PLANNING and NLP Overview, Minimax algorithm, Alpha-Beta pruning, Additional Refinements. Classical planning problem, Natural Language Processing: Language Models, Text classification, Information Retrieval, Information Extraction	Overview, Minimax algorithm	02	13/2/24-14/2/24	Lecture Method, PPT and student Interaction
	Alpha-Beta pruning,	02	15/2/24-17/2/24	
	Classical planning problem,	02	20/2/24-21/2/24	
	Natural Language Processing: Language Models, Text classification, Information Retrieval, Information Extraction	04	22/2/24-05/3/24	
Total Hours:		**42**		

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Title of the Course: FUNDAMENTALS OF INTERNET OF THINGS
Course Code: 22BS09
Name of the Faculty: Sushmita Sheeba Dsa **Credits: L:T:P: 3:1:0**

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I: Basics of IoT Introduction to IoT, Genesis of IoT, IoT and Digitization, IoT Impact, Convergence of IT and OT, IoT Challenges, IoT Network Architecture and Design, Drivers Behind New Network Architectures, A Simplified IoT Architecture, The Core IoT Functional Stack..	Introduction to IoT, Genesis of IoT,	02	4/05/2024	Lecture Method, PPT and student Interaction
	IoT and Digitization IoT Impact, Convergence of IT and OT, IoT Challenges	03	7/05/2024-11/05/2024	Lecture Method, PPT and student Interaction
	Architecture and Design, Drivers Behind New Network Architectures	02	13/05/2024-16/05/2024	Lecture Method, PPT and student Interaction
	A Simplified IoT Architecture	02	18/05/2024	Lecture Method, PPT, student Interaction
	The Core IoT Functional Stack..	03	21/05/2024 23/05/2024, 25/05/2024	Lecture Method, PPT and student Interaction
Unit II: Smart Objects and Access Technologies Smart Objects: The "Things" in IoT, Sensors, Actuators, and Smart Objects,	Smart Objects: The "Things" in IoT	02	28/05/2024-30/05/2024	Lecture Method, PPT and student Interaction
	Sensors, Actuators, and Smart Objects	04	1/06/2024 4/06/2024, 6/06/2024, 8/06/2024	Lecture Method, PPT and student Interaction

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Sensor Networks, Connecting Smart Objects, Communications Criteria, IoT Access Technologies (Any Three)	Networks, Connecting Smart Objects	03	11/06/2024 13/06/2024, 15/06/2024	Lecture Method, PPT and student Interaction
	Communications Criteria IoT Access Technologies (Any Three)	08	18/06/2024-29/06/2024	Lecture Method, PPT and student Interaction
Unit III: IoT in Industry IoT in Industry: Smart and Connected Cities-An IoT Strategy for Smarter Cities, Smart City IoT Architecture, Smart City Security Architecture, Smart City Use-Case Examples-Smart Traffic Control..	IoT in Industry: Smart and Connected Cities	01	2/7/2024	Lecture Method, PPT and student Interaction
	An IoT Strategy for Smarter Cities	02	5/7/2024	Lecture Method, PPT and student Interaction
	Smart City IoT Architecture	02	6/7/2024	Lecture Method, PPT and student Interaction
	Smart City Security Architecture	01	9/7/2024	Lecture Method, PPT and student Interaction
	City Use-Case Examples-Smart Traffic Control..	01	11/7/2024	Lecture Method, PPT and student Interaction
Unit IV: Public Safety Overview of Public safety, An IoT Blueprint for public safety, Emergency Response IoT	Overview of Public safety,	02	12/7/2024	Lecture Method, PPT and student Interaction
	An IoT Blueprint for public safety,	02	13/7/2024-	Lecture Method, PPT and student Interaction

Architecture, IoT Public Safety Information Processing..	Emergency Response IoT Architecture	02	18/7/2024	Lecture Method, PPT and student Interaction
	IoT Public Safety Information Processing..	02	20/7/2024	Lecture Method, PPT and student Interaction
Total Hours		**44**		

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Title of the Course: THEORY OF LANGUAGES **Course Code: 22J3H1**

Name of the Faculty: Mrs. Yashaswini J **Credits: L:T:P: 3:1:0**

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I: Introduction to Automata and Languages Brief introduction to Formal Proof: Deductive Proofs, Proving equivalences about sets, the contra positive, Proof by contradiction, Counterexamples, Central concepts of automata theory: Alphabets, strings, languages. Finite Automata: Deterministic Finite Automata, Nondeterministic Finite Automata, Equivalence of DFA and NFA, Finite Automata with Epsilon transitions.	Brief introduction to Formal Proof: Deductive Proofs	02	04/12/2023 - 05/12/2023	Lecture Method, PPT and student Interaction
	Proving equivalences about sets, the contra positive, Proof by contradiction, Counterexamples, Proof by Induction	03	6/12/2023 – 12/12/2023	
	Central concepts of automata theory: Alphabets, strings, languages	02	13/12/2023 – 14/12/2024	
	Finite Automata: Deterministic Finite Automata	05	15/12/2024 – 27/12/2024	
	Nondeterministic Finite Automata, Equivalence of DFA and NFA	04	29/12/2024 – 03/01/2024	
	Finite Automata with Epsilon transitions	04	09/01/2024 – 19/01/2024	
Unit II: Regular Expression and Regular	Regular Expressions	02	22/01/2024	
	Finite Automata and Regular Expressions:	03	23/01/2024 –	

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Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Languages Regular Expressions, Finite Automata and Regular Expressions: Converting DFAs to regular expressions by eliminating states, converting regular expressions to automata, Applications of regular expressions, Brief overview of algebraic laws of regular expressions. Properties of Regular Languages : The pumping lemma for regular languages, Applications of the pumping lemma, Closure properties and decision properties of regular languages (proofs not necessary), Minimization of DFAs.	Converting DFAs to regular expressions by eliminating states		24/01/2024	Lecture Method, PPT and student Interaction
	Converting regular expressions to automata	02	25/01/2024	
	Applications of regular expressions, Brief overview of algebraic laws of regular expressions	02	29/01/2024	
	Properties of Regular Languages : The pumping lemma for regular languages	02	30/01/2024	
	Applications of the pumping lemma	02	31/01/2024	
	Closure properties and decision properties of regular languages	02	01/02/2024	
	Minimization of DFAs	03	05/02/2024 – 07/02/2024	
Unit III: Context Free Grammars	Context-Free Grammars	03	09/02/2024 – 12/02/2024	Lecture Method, PPT and

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Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Context-Free Grammars, Parse Trees, Applications of context-free grammars, Ambiguity in grammars and languages. Normal Forms of Context-free grammars.	Parse Trees	02	14/02/2024	student Interaction
	Applications of context-free grammars	01	19/02/2024	
	Ambiguity in grammars and languages	03	19/02/2024 – 20/02/2024	
	Normal Forms of Context-free grammars	03	21/02/2024 – 23/02/2024	
Unit IV: Pushdown Automata and Context Free Languages Pushdown Automata : Definition, Languages of a PDA, Equivalence of PDAs and CFGs, Deterministic Pushdown Automata. The pumping lemma for context-free languages, Closure properties of context-free languages (proofs not needed).	Pushdown Automata : Definition, Languages of a PDA	04	27/02/2024 – 28/02/2024	Lecture Method, PPT and student Interaction
	Equivalence of PDAs and CFGs	04	05/03/2024 – 12/03/2024	
	Deterministic Pushdown Automata	03	14/02/2024 - 18/03/2024	
	The pumping lemma for context-free languages	02	19/03/2024	
	Closure properties of context-free languages	02	20/03/2024	
Total Hours		**65**		

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Lesson Plan: 2023-24
Batch 2022-24

Title of the Course: MACHINE LEARNING **Course Code: 22J3H2**

Name of the Faculty: Ms Sushmita Sheeba Dsa **Credits: L:T:P: 3:0:1**

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I : Introduction to machine learning Introduction to analytics and machine learning , Need for machine leaning, Framework for developing machine learning machine learning models, Using Python for Machine Learning, Python stack for Data Science. Getting started for Anaconda Platform , Introduction to Python Descriptive Analytics : Working with Pandas Data Frames in python, Handling Missing Values , Exploration of data using Visualization	Introduction to analytics and machine learning, Need for machine leaning	04	4/12/2023-11/12/2023	Lecture Method, PPT and student Interaction
	Framework for developing machine learning machine learning models	02	13/12/2023	
	Using Python for Machine Learning, Python stack for Data Science.	01	14/12/2023	
	Getting started for Anaconda Platform , Introduction to Python	02	18/12/2023	
	Descriptive Analytics : Working with Pandas Data Frames in python	02	20/12/2023-21/12/2023	
	Handling Missing Values, Exploration of data using Visualization	02	28/12/2023-29/12/2023	
Unit II : Linear Regression Simple Linear Regression, Steps in building a regression Model, Building Simple linear regression model	Simple Linear Regression	02	1/1/2024	Lecture Method, PPT and student Interaction
	Steps in building a regression Model	02	03/1/2024	
	Building Simple linear regression model	05	4/1/2024-11/1/2024	

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Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit III : Classification Problems Classification Overview, Binary logistic Regression, Gain chart and lift chart, Classification Tree	Classification Overview	02	24/1/2024	Lecture Method, PPT and student Interaction
	Binary logistic Regression	02	25/1/2024	
	Gain chart and lift chart	03	1/2/2024-5/2/2024	
	Classification Tree	05	7/2/2024-19/2/2024	
Unit IV : Advanced Machine learning and clustering Scikit-learn library for machine learning advanced machine leaning algorithms. Clustering: Overview How does clustering work? K-means clustering, hierarchical clustering.	Scikit-learn library for machine learning	02	21/2/2024	Lecture Method, PPT and student Interaction
	Advanced machine leaning algorithms.	02	22/2/2024-	
	Clustering: **Overview** How does clustering work?	02	28/2/2024-29/2/2024	
	K-means clustering, hierarchical clustering.	04	6/03/2024-26/03/2024	
Machine Learning with Python Practical	Implement Algorithms using Python Programming	20	11/12/2023-22/03/2024	Practical
Total Hours:		**64**		

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DEPARTMENT OF STUDIES IN COMPUTER SCIENCE
Lesson Plan for III Semester M.Sc. (CS) Programme
Lesson Plan: 2023-24
Batch 2022-24

Title of the Course: ARTIFICIAL INTELLIGENCE **Course Code: 22J3S1**

Name of the Faculty: Mrs. Shobha D **Credits: L:T:P: 3:1:0**

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I: Introduction AI Problems, AI Techniques, Defining the Problem as State Space Search, Production Systems, Problem Characteristics, Production System Characteristics, Issues in the Design of Search Programs.	History Definition Intelligent program. Applications of artificial intelligence.	03	04/12/2023 05/12/2023 06/12/2023	Lecture Method, PPT and student Interaction
	Problems and difficulty in solving What is intelligence? Test of intelligence	02	07/12/2023 11/12/2023	
	Intelligence AI technique Level of modeling human intelligence Intelligent program Tic-Tac-Toe example: Program 1	03	12/12/2023- 14/12/2024	
	Level of modeling Water jug problem State Space Search Notations Properties of search algorithms Problems and Problem Spaces and its characteristics	03	18/12/2024- 20/12/2024	
	production system basic components: A set of rules One or more knowledge databases A control strategy A rule applier	03	29/12/2024 – 03/01/2024	
	Types of production systems Production systems characteristics Issues in the design of search	02	09/01/2024 – 10/01/2024	

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Lesson Plan: 2023-24
Batch 2022-24

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
	programs			
Unit II: Heuristic Search Techniques and Knowledge Representation Generate and Test, Hill climbing, BFS, DFS, Knowledge Representation Issues, Approaches to Knowledge Representation, Procedural Versus Declarative Knowledge, Inferential Versus Inheritable Knowledge, Normal Forms in Predicate Logic and Clausal Forms, Introduction to Non-monotonic Reasoning, Logics for Non-monotonic Reasoning.	CLASSIFICATION OF SEARCH ALGORITHMS Blind Search strategies or uninformed search Informed Search Constraint Satisfaction Search Adversary Search	02	11/01/2024 16/01/2024	Lecture Method, PPT and student Interaction
	Depth first search Breadth first search Iterative deepening search Iterative broadening search Generate and Test, Hill climbing,	03	18/01/2024 – 22/01/2024	
	Knowledge Representation Characteristics of knowledge representation Knowledge representation techniques Approaches to knowledge representation system Knowledge representation schemes	03	23/01/2024 – 25/01/2024	
	Four types of Knowledge representation Relational Knowledge. Inheritable Knowledge. Inferential Knowledge. Declarative/Procedural. Normal Forms in Predicate Logic and Clausal Forms	04	29/01/2024 – 2/02/2024	

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Lesson Plan: 2023-24
Batch 2022-24

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
	Introduction to Non-monotonic Reasoning, Logics for Non-monotonic Reasoning.	03	5/02/2024 – 7/02/2024	
Unit III: Knowledge Representational Structures Weak Slot and Filler Structures: Semantic Nets, Frames. Strong Slot and Filler Structure: Conceptual Dependency, Scripts.	Knowledge representation techniques, Properties for knowledge representation systems	02	8/02/2024 – 12/02/2024	Lecture Method, PPT and student Interaction
	Weak Slot and Filler Structures Lists, trees, schemas, frames, scripts, rule-based representations, logic-based representations	02	13/02/2024 – 14/02/2024	
Unit IV: Game Playing, Planning and Expert Systems Game Playing: Minimax Search Procedure, Adding Alpha-Beta Cut Offs, Planning-Goal Stack Planning, Expert Systems: Expert	Fundamental concept of Game playing, State of the art	02	15/02/2024 19/02/2024	Lecture Method, PPT and student Interaction
	Min-max search procedures (or min-max search algorithm, Alpha-beta cut offs, Min-Max Theorem	02	20/02/2024 – 21/02/2024	
	Planning ,A planning paradigm A simple planning agent: ,Means-ends analysis (mea)	02	22/02/2024 – 26/02/2024	

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Lesson Plan: 2023-24
Batch 2022-24

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
System Versus Conventional Computer, Expert System Shells, and Explanation Based Learning.	Systems: Expert System Versus Conventional Computer, Expert System Shells, and Explanation Based Learning.	02	4/03/2024 – 5/03/2024	
Total Hours:		**43**		

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DEPARTMENT OF STUDIES IN COMPUTER SCIENCE
Lesson Plan for III Semester M.Sc. (CS) Programme
Lesson Plan: 2023-24
Batch 2022-24

Title of the Course: SOFTWARE ENGINEERING **Course Code: 22J3S5**

Name of the Faculty: Ms. Likhitha M M **Credits: L:T:P: 3:1:0**

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit I: Software, Software Engineering and Process Models The Nature of Software, The Unique Nature of WebApps, Software Engineering, The Software Process, Software Engineering Practice, Software Myths, Prescriptive Process Models.	The Nature of Software	02	04/12/2023 05/12/2023	Lecture Method, PPT and student Interaction
	The Unique Nature of WebApps	02	6/12/2023 7/12/2023	
	Software Engineering	02	11/12/2023 12/12/2024	
	The Software Process	02	13/12/2024 14/12/2024	
	Software Engineering Practice Software Myths	02	18/12/2024 19/12/2024	
	Prescriptive Process Models.	02	20/12/2024 21/12/2024	
Unit II: Agile Development Agile process model, Agility and Cost of Change, Agile Process, Extreme Programming, User stories, Brief introduction to Scrum.	Agile process model	02	26/12/2024 27/12/2024	Lecture Method, PPT and student Interaction
	Agile Process	02	28/12/2024 02/01/2024	
	Extreme Programming	02	03/01/2024 04/01/2024	
	User stories	02	08/01/2024 09/01/2024	
	Brief introduction to Scrum.	02	10/01/2024 11/01/2024	
Unit III: Requirements Modelling & Design Requirements Analysis, Scenario – Based	Requirements Analysis	02	16/01/2024 18/01/2024	Lecture Method, PPT and student Interaction
	Scenario – Based Modelling UML Models that	02	22/01/2024 23/01/2024	

Modelling, UML Models that supplement the Use Case, Data Modelling Concepts, Requirements Modelling Strategies, Flow-oriented Modelling, Creating a behavioural model, Design concepts, Design Model.	supplement the Use Case			
	Data Modelling Concepts, Requirements Modelling Strategies, Flow-oriented Modelling	03	24/01/2024 29/01/2024 30/01/2024	
	Creating a behavioral model, Design concepts, Design Model.	03	31/01/2024 01/02/2024 05/02/2024	
Unit IV: Software Quality Assurance & Testing Software Quality Assurance: Elements of Software Quality Assurance, SQA Tasks, Goals, Metrics, Formal Approaches to SQA, Statistical SQA, Software Reliability. Software Testing : Verification & Validation, Software Testing Strategy—The Big Picture, Test strategies for conventional software, OO software and	Software Quality Assurance: Elements of Software Quality	02	06/02/2024 07/02/2024	Lecture Method, PPT and student Interaction
	Assurance SQA Tasks Goals Metrics	02	08/02/2024 12/02/2024	
	Formal Approaches to SQA Statistical SQA, Software Reliability	02	13/02/2024 14/02/2024	
	Software Testing: Verification & Validation, Software	02	15/02/2024 19/02/2024	
	Testing Strategy—The Big Picture Test strategies for conventional software OO software and WebApps	03	20/02/2024 21/02/2024 22/02/2024	

WebApps, Validation Testing, System testing, The Debugging process, White box testing, Black box testing.	Validation Testing System testing The Debugging process White box testing, Black box testing.	03	26/02/2024 27/02/2024 28/02/2024	
Total Hours		**46**		

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DEPARTMENT OF STUDIES IN COMPUTER SCIENCE
Lesson Plan for III Semester M.Sc. (CS) Programme
Lesson Plan: 2023-24
Batch 2022-24

Title of the Course: E-COMMERCE **Course Code: 22J3E1**

Name of the Faculty: Ms. Likhitha M M and Ms Sushmita Sheeba Dsa

Credits: L:T:P: 3:1:0

Prescribed Curriculum	Topics to be covered	No. of Hours required	Date	Method of Deployment
Unit 1: Introduction to E-Commerce Definition, Scope of E-Commerce, Hardware requirements, E-Commerce and Trade Cycle, Electronic Markets, Electronic Data Interchange and Internet Commerce.	Definition	01	08/12/2023	Lecture Method, PPT and student Interaction
	Scope of E-Commerce, Hardware	03	09/12/2023 15/12/2023 16/12/2023	
	E-Commerce and Trade Cycle	03	22/12/2023 13/12/2023 29/12/2023	
	Electronic Markets	01	30/12/2023	
	Electronic Data Interchange	01	5/1/2023	
	Internet Commerce	01	6/1/2023	
Unit 2: Business to Business E-Commerce Electronic Markets, Electronic Data Interchange (EDI): Technology, Standards (UN/EDIFACT), Communications, Implementations, Agreements, Security, EDI and Business, Inter-Organizational Ecommerce. Business models for E-commerce, Business Process Re-Engineering.	Electronic Markets	01	12/1/2023	Lecture Method, PPT and student Interaction
	Electronic Data Interchange (EDI): Technology, Standards (UN/EDIFACT)	03	19/1/2023 20/1/2023 27/1/2023	Lecture Method, PPT and student Interaction
	Communications, Implementations, Agreements	02	2/2/2023 3/2/2023	
	Security, EDI and Business	02	9/2/2023 10/2/2023	
	Inter-Organizational Ecommerce	02	16/2/2023 17/2/2023	
	Business models for E-commerce,	02	23/2/2023 24/2/2023	

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Lesson Plan: 2023-24
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	Business Process Re-Engineering			
	Inter-Organizational Ecommerce	02	1/3/2023 2/3/2023	
Unit 3: Business to Consumer E-Commerce and E-Business Consumer trade transaction, Web metrics, Elements of E-Commerce, Industry impacts of Ebusiness. Integrating Intranet and internet web applications across multiple networks. Internet bookshops, Software supplies and support, Electronic Newspapers, Internet Banking, Virtual Auctions, Online Share Dealing, Gambling on the net, E-Diversity, Case studies through internet.	Consumer trade transaction, Web metrics	01	08/12/2023	Lecture Method, PPT and student Interaction
	Elements of E-Commerce, Industry impacts of Ebusiness	02	09/12/2023 15/12/2023	
	Integrating Intranet and internet web applications across multiple networks.	02	16/12/2023 22/12/2023	
	Internet bookshops, Software supplies and support	02	13/12/2023 29/12/2023	
	Electronic Newspapers, Internet Banking, Virtual Auctions	03	30/12/2023 5/1/2023 6/1/2023 12/1/2023	
	Online Share Dealing, Gambling on the net, E-Diversity, Case studies through internet	02	19/1/2023 20/1/2023	
Unit 4: Security Issues How criminals plan attacks, passive attack, Active attacks, cyber stalking, Secure Electronic Transaction (SET) Protocol, Electronic cash over internet, Internet Security, Search engines, Intelligent agents in E-Commerce Electronic	How criminals plan attacks, passive attack, Active attacks	02	27/1/2023 2/2/2023	
	Cyber stalking, Secure Electronic Transaction (SET) Protocol	03	3/2/2023 9/2/2023 10/2/2023	
	Electronic cash over internet, Internet Security, Search engines	03	16/2/2023 17/2/2023 23/2/2023	

payment systems.	Intelligent agents in E-Commerce Electronic payment systems	02	1/3/2023 2/3/2023	
Total Hours		**44**		

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Department of Studies in Commerce
Lesson Plan and Curriculum Deployment
FIRST Semester M. Com 2023-24
Subject: ADVANCED ACCOUNTING (HC01)

Name of the Faculty: Ms. BOJAMMA M N
Total No. of working hours available – 60 Hours/Week: 5

Prescribed Curriculum	Topics	No hours required to complete	Date	Method of Deployment
Module-1: **Accounting Standards:** Objectives, Benefits, Scope Accounting Bodies-International Accounting Standards Board- Institute of Chartered Accountants of India-Accounting Standards Boards (IASB)- Financial Accounting Standards Board‘s (FASB)- Stages and Process of Standards settings in India-Accounting Standards issued by ICAI-Compliance and Applicability of Accounting Standards in India.	Objectives, Benefits, Scope of Accounting Bodies	2	15-11-2023 to 16-11-2023	• Lecture • Case study • Data collection • Discussion.
	International Accounting Standards Board	2	17-11-2023 to 18-11-2023	
	Institute of Chartered Accountants of India-Accounting Standards Boards (IASB)	2	20-11-2023 to 21-11-2023	
	Financial Accounting Standards Board‘s (FASB)	3	22-11-2023 to 24-11-2023	
	Stages and Process of Standards settings in India	2	27-11-2023 to 28-11-2023	
	Accounting Standards issued by ICAI	2	29-11-2023 to 30-11-2023	
	Compliance and Applicability of Accounting Standards in India.	2	04-12-2023 to 05-12-2023	
Module-2: **Ind AS on General and Assets of Financial Statements:** AS	AS 1Presentation of Financial Statement	2	06-12-2023 to 07-12-2023	• Lecture • Case study
	AS 2 Inventories	2	11-12-2023 to 12-12-2023	

1Presentation of Financial Statement-AS2 Inventories- AS 7 Statement of Cash Flow- AS 8 Disclosure-AS 11 Construction Contracts- - AS 16 Property Plant and Equipment- AS 17 Lease- - AS 23 Borrowing Cost- AS-33 Earning Per Share.AS 36 Impairments of Assets-AS 38 Intangible Assets-AS 116 Lease	AS 7 Statement of Cash Flow	2	13-12-2023 to 14-12-2023	• Problem-solving • Discussion.
	AS 8 Disclosure	1	15-12-2023	
	AS 11 Construction Contracts	2	18-12-2023 to 19-12-2023	
	AS 16 Property Plant and Equipment	1	20-12-2023	
	AS 17 Lease	2	21-12-2023 to 22-12-2023	
	AS 23 Borrowing Cost	2	25-12-2023 to 26-12-2023	
	AS 33 Earning Per Share	1	27-12-2023	
	AS 36 Impairments of Assets	2	28-12-2023 to 29-12-2023	
	AS 38 Intangible Assets	2	02-01-2024 to 03-01-2024	
	AS 116 Lease	1	04-01-2024	
Module-3: **Ind AS on Liabilities, Impacting and Disclosures in Financial statement:** AS 12 Income Taxes- AS 19 Employee Benefits- AS 21 The Effects of Changes in Foreign Exchange Rates- AS 33 Earning Per Share.	Liabilities, Impacting and Disclosures in Financial statement	2	08-01-2024 to 09-01-2024	• Lecture • Case study • Problem-solving • Discussion.
	AS 12 Income Taxes	2	10-01-2024 to 11-01-2024	
	AS 19 Employee Benefits	2	16-01-2024 to 17-01-2024	
	AS 21 The Effects of Changes in Foreign Exchange Rates	2	18-01-2024 to 19-01-2024	
	AS 33 Earning Per Share	2	22-01-2024 to 23-01-2024	
Module-4: **Financial Disclosures and Reporting:** Objectives and Concepts-	Financial Disclosures and Reporting: Objectives and Concepts	2	24-01-2024 to 25-01-2024	• Lecture • Case study • Problem-solving.
	Developments on Financial Reporting Objectives	2	29-01-2024 to 30-01-2024	

Developments on Financial Reporting Objectives- True Blood Report, Corporate Report- Stamp Report- Corporate Annual Report-Segment Reporting and Interim Financial Reporting.	True Blood Report	2	05-02-2024 to 06-02-2024	• Discussion.
	Corporate Report	2	07-02-2024 to 08-02-2024	
	Stamp Report	2	12-02-2024 to 13-02-2024	
	Corporate Annual Report	2	14-02-2024 to 15-02-2024	
	Segment Reporting and Interim Financial Reporting.	3	19-02-2024 to 21-02-2024	

References: -

1. Indian Accounting Standards- Asish K Bhattacharjee- Tata Mc Graw Hill.
2. Taxman Accounting Standards- Rawat D S-Taxmann Publication.
3. Accounting Standards- Vijayakumar M.P -Snow White Publication.
4. Corporate Financial Reporting Theory and Practice - Jawaharlal- Taxman Publication.

Lesson Plan and Curriculum Deployment
First Semester M. Com 2022-2023
Subject: Financial Management (HC02)

Name of the Faculty: SHREENIDHI N V

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No of hours required to complete	Date	Method of deployment
Module 1: Capital Budgeting and Dividend Policy: Importance , Challenges dependence and independence of cash flows in evaluating projects - Measures of risk and returns - NCF estimation DCF Techniques NPV vs. IRR Conflicts - Fisher's rate of intersection - Multiple IRRs – MIRR – Capital Rationing- Dividend Policy Theories	Capital Budgeting Importance, Challenges dependence and independence of cash flows in evaluating projects	3	13/11/2023 to 16/11/2023	• Lecture • Tutorial • Case study • Group discussion
	Measures of risk and returns	2	17/11/2023 to 18/11/2023	
	NCF estimation DCF Techniques NPV vs. IRR Conflicts	6	20/11/2023 to 27/11/2023	
	Fisher's rate of intersection	1	28/11/2023	
	Multiple IRRs – MIRR – Capital Rationing	3	29/11/2023 to 1/12/2023	
Module 2: Risk Analysis in Capital Budgeting: Inflation in capital budgeting - real vs. nominal discount rates. Approaches to risk absorption - Expected Net Present Value (ENPV) - Payback method - Risk-Adjusted Discount rate - Use of Normal Distributions - Sensitivity analysis - Measurement of Project Risk- Risk analysis of Project Portfolios	Inflation in capital budgeting - real vs. nominal discount rates	2	2/12/2023 to 04/12/2023	• Lecture • Tutorial • Case study • Presentation
	Approaches to risk absorption - Expected Net Present Value (ENPV) - Payback method - Risk-Adjusted Discount rate	6	05/12/2023 to 11/12/2023	
	Use of Normal Distributions - Sensitivity analysis	4	12/12/2023 to 15/12/2023	

	Measurement of Project Risk- Risk analysis of Project Portfolios	3	16/12/2023 to 19/12/2023	
Module 3: **Cost of Capital**: Long-term financing, Public issue of debt, Preferred stock and Common stock, Term loans - Cost of equity – Cost of preferred capital - Cost of debt- Cost of retained earnings – WACC- Marginal cost of capital - The CAPM approach - Adjusting WACC for risk.	Cost of Capital- Long-term financing, Public issue of debt, Preferred stock and Common stock, Term loans	4	20/12/2023 to 23/12/2023	• Lecture • Tutorial • Case study
	Cost of equity – Cost of preferred capital - Cost of debt- Cost of retained earnings – WACC	6	26/12/2023 to 01/1/2024	
	Marginal cost of capital - The CAPM approach - Adjusting WACC for risk.	5	2/1/2024 to 06/1/2024	
Module 4: **Capital Structures Theories**: Traditional view vs MM hypothesis, MM position I &II - Capital structure designing in practice – EBIT- EPS analysis - the pecking order theory - Factors impacting leverage decision. Contemporary issues and challenges in Financial Management.	Capital Structures Theories- Traditional view vs MM hypothesis	4	15/01/2024 to 20/01/2024	• Lecture • Tutorial • Presentation • Case study
	MM position I &II - Capital structure designing in practice	2	22/01/2024 to 23/01/2024	
	EBIT- EPS analysis-the pecking order theory - Factors impacting leverage decision.	4	29/01/2024 to 03/02/2024	
	Contemporary issues and challenges in Financial Management.	5	07/02/2024 to 12/02/2024	

Reference Books:

1. Financial Management and Policy- Text and Cases: V K Bhalla.
2. Financial Management- Prasanna Chandra
3. Financial Management -Sudarshan Reddy

Lesson Plan and Curriculum Deployment
First Semester M. Com 2022-2023
Subject: Marketing Management (HC03)

Name of the Faculty: Dr. UMA K

Hours/Week: 5 **Total Hours: 56**

Prescribed Curriculum	Topics	No hours required to complete	DATE	Method of Deployment
Module 1: Marketing Concepts and Tools: Introduction to Marketing-- Evaluation of marketing concepts and its stages – objectives of marketing –Scope of marketing - Core concepts of marketing — Building Customer Satisfaction, Value and Retention. Understanding the Value Philosophy -Direct Marketing Vis-À-Vis Digital Marketing: Online Marketing – Advantages and Dis-Advantages of Direct Marketing and Online Marketing -Major channels of Direct Marketing – Marketing in 21st century –E-Commerce- Case studies.	Introduction to the course and the faculty	2	13/11/2023 to 15/11/2023	• Lecture • Group Discussion • Case study
	Introduction to Marketing-- Evaluation of marketing concepts and its stages	2	16/11/2023 to 17/11/2023	
	objectives of marketing – Scope of marketing - Core concepts of marketing	2	18/11/2023 to 20/11/2023	
	Building Customer Satisfaction, Value and Retention. Understanding the Value Philosophy	2	21/11/2023 to 22/11/2023	
	Direct Marketing Vis-À-Vis Digital Marketing: Online Marketing – Advantages and Dis-Advantages of Direct Marketing and Online Marketing	4	23/11/2023 to 25/11/2023	

	Major channels of Direct Marketing – Marketing in 21st century –E-Commerce- Case studies.	2	25/11/2023 to 27/11/2023	
Module 2: Marketing Environment: Scanning of marketing environment - Analysis of needs and trends in macro and the microenvironment – classification of macro environment- classification of micro environmental factors. classification of macro environment- classification of micro environmental factors. Marketing environment of India - Marketing Intelligence system - Marketing Research system-- Case studies.	Scanning of marketing environment - Analysis of needs and trends in macro and the microenvironment.classification of macro environment- classification of micro environmental factors.	3	28/11/2023 to 01/12/2023	• Lecture • Group Discussion • Case study
	classification of macro environment- classification of micro environmental factors.	2	02/12/2023 to 06/12/2023	
	Marketing environment of India	2	07/12/2023 to 08/12/2023	
	Marketing Intelligence system -	2	11/12/2023 to 14/12/2023	
	Marketing Research system-- Case studies.	3	15/12/2023 to 19/12/2023 12	
Module 3: Market-oriented Strategic Planning - Corporate and Division Strategic Planning – Business Strategic Planning - Elements of Marketing Mix Strategy - Price or Differentiation Oriented Strategies - Stages of New Product Development- - Case Studies.	Corporate Strategic Planning	2	20/12/2023 to 22/12/2023	• Lecture • Group Discussion • Case study
	Division Strategic Planning –	2	29/12/2023 to 01/01/2024	
	Business Strategic Planning	2	02/01/2024	
	Elements of Marketing Mix Strategy	2	03/01/2024	

	Price or Differentiation Oriented Strategies	2	04/01/2024	
	Stages of New Product Development-	2	05/01/2024 to 09/01/2024	
	Case Studies.	2	10/01/2024 to 12/01/2024	
Module 4: Developing Marketing Strategies - Product Life Cycle -Marketing Strategies - Designing Competitive Strategies - Differentiation tools, - Positioning Strategy - Positioning the product - Product line Decisions - Brand Decisions - Pricing Decisions - Promotion Decisions and Channel Decisions- - Case studies.	**Introduction to** Product Life Cycle -Marketing Strategies	3	16/01/2024 to 19/01/2024	• Lecture • Group Discussion • Case study
	Designing Competitive Strategies	2	22/01/2024 to 25/01/2024	
	Differentiation tools,	2	29/01/2024 to 31/01/2024	
	Positioning Strategy - Positioning the product -	3	01/02/2024	
	Product line Decisions - Brand Decisions -	2	02/02/2024 to 05/02/2024	
	Pricing Decisions - Promotion Decisions	2	06/02/2024 to 08/02/2024	
	Channel Decisions- - Case studies.	2	09/02/2024 to 12/02/2024	

References:

References:

1. Marketing Management - Philip Kotler, PHI, New Delhi.
2. Marketing Management - Rajan Saxena, , TMH, New Delhi.
3. Fundamental s of Marketing - Stanton, , TMH, New Delhi.
4. Gandhi, Marketing: A Managerial introduction, TMH, New Delhi,
5. Marketing: Paul Baines, Chris Fill and Kelly Page, Oxford University Press, 2nd Edition, 2011.

5. William Stanton, Fundamentals of Marketing, TMH, New Delhi.
6. Ramaswamy and Namakumari, Marketing Management, Macmillan, Delhi.

7. J S Panwar, Marketing in the New Era, Response Books, Delhi.

8. Majare, The Essence of Marketing, PHI, New Delhi.

9. Paul Peter and James H Donnelly, Marketing Management, TMH, New Delhi.
10.Mulins, Marketing Management, TMH, New Delhi.

Lesson Plan and Curriculum Deployment
First Semester M. Com 2023-2024
Subject: Human Resource Management (HC04)

Name of the Faculty: ROOPESH KUMAR N

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No hours required to complete	DATE	Method of Deployment
Module 1: Introduction: Human resource management – concepts - significance – objectives – scope – functions – changing role of Human Resource Manager - Need for studying HRM – Emerging trends in HRM - Human Resource Development (HRD) concept – scope – objectives - HRD techniques.	Introduction to Human resource management	2	13/11/2023 to 15/11/2023	• Lecture • Group Discussion • Case study
	Functions of HRM	2	16/11/2023 to 17/11/2023	
	Role of HR Manager	2	18/11/2023 to 20/11/2023	
	Human Resource Development	2	21/11/2023 to 22/11/2023	
	HRD Techniques	3	23/11/2023 to 27/11/2023	
Module2: Human Resources Planning and Procurement; Human resource planning - Importance – objectives - factors affecting HRP – requisites for successful HRP- Job analysis – methods - Purposes – Job description – Job specification - Job evaluation – Process and methods of Job evaluation - Job design approaches and process of Job design - factors affecting Job design, Recruitment – source of recruitment – factors governing recruitments, and	Human Resource Planning- importance, objectives, factors affecting HRP	3	28/11/2023 to 01/12/2023	• Lecture • Group Discussion • Case study
	Job Analysis – methods, purpose,	4	02/12/2023 to 06/12/2023	
	Job designing – importance and process	2	07/12/2023 to 08/12/2023	
	Recruitment – sources, e-recruitment	4	11/12/2023 to 14/12/2023	
	Selection – stages in selection - Interview	3	15/12/2023 to 19/12/2023	

recruitment process. Selection - process – interview				
Module3: Human Resource Development: Meaning-concepts of HRD - Objectives of training- organization of training programme – methods - advantages and limitation soft raining and development- Evaluation of training programme – HRD for total quality management - Transfer policy - Promotion policy and Transfer. Demotion and Discipline- consequences of indiscipline – disciplinary Procedure - Career Planning and Development. Case studies	Human Resource Development: concept, objectives, various techniques	3	20/12/2023 to 22/12/2023	• Lecture • Group Discussion • Case study
	Training – importance, methods, evaluation of training programme.	3	26/12/2023 to 28/12/2023	
	HRD for total quality management	2	29/12/2023 to 01/01/2024	
	Transfer policy	1	02/01/2024	
	Promotion policy	1	03/01/2024	
	Demotion policy	1	04/01/2024	
	Discipline : procedure, consequences of indiscipline	3	05/01/2024 to 09/01/2024	
	Career Planning and Development	2	10/01/2024 to 12/01/2024	
Module 4: Compensation/ Rewards System: Significance of reward system in a business organization. Employee motivation; Compensation system in practice - systems of promoting -factors determining employee compensation and rewards- dearness allowance - employee benefits-bonus - laws on wages, bonus, and social Security - managerial compensation. Performance Appraisal: concepts - objectives philosophy and process of performance appraisal system - 360 Degree performance appraisal system. E – HRM, Big data and HR Analytics, Artificial Intelligence Core and HRM Practices.HR Practices in Sunrise sector. Case studies	Introduction to reward system in a business organization, factors determining employee compensation	4	16/01/2024 to 19/01/2024	• Lecture • Group Discussion • Case study
	Types of employee compensation	3	22/01/2024 to 25/01/2024	
	Performance Appraisal : Methods	3	29/01/2024 to 31/01/2024	
	E- Human Resource management	1	01/02/2024	
	Role of Big Data analytics in HRM	2	02/02/2024 to 05/02/2024	
	Contribution of Artificial Intelligence in HRM	2	06/02/2024 to 08/02/2024	
	HR Practices in Sunrise sector	2	09/02/2024 to 12/02/2024	

References:

1. Human Resource Management -Dr. Ashwathappa

2. Human Resource Management: Strategies and Action-Armstrong

3. Human Resources Management—L. M. Prasad

4. Personnel and Human Resource Management -D.A. Deonz and F.P. Robins

5. Personnel Management – Edwin Phillip

Lesson Plan and Curriculum Deployment

First Semester M. Com 2023-2024

Subject: Statistics for Business Decisions (SC02)

Name of the Faculty: SHREENIDHI N V

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No of hours required to complete	Date	Method of deployment
Module 1: Time Series Analysis: Variations in time series – Cyclical - seasonal and regular variations; Trend analysis - Application of time series analysis forecasting Measure of Trend - Method of least squares and Measure of seasonal Indices case studies	Variations in time series – Cyclical - seasonal and regular variations	3	13/11/2023 to 16/11/2023	• Lecture • Tutorial • Case study • Group discussion
	Trend analysis - Application of time series analysis forecasting Measure of Trend	4	17/11/2023 to 22/11/2023	
	Method of least squares and Measure of seasonal Indices case studies	8	23/11/2023 to 2/12/2023	
Module 2: Probability Theory and Theoretical Distributions: Meaning terminology - types and rules - Random variables and use of expected value in decision making- Binomial, Poisson and Normal probability	Meaning terminology - types and rules - Random variables and use of expected value in decision making	5	04/12/2023 to 09/12/2023	• Lecture • Tutorial • Case study • Presentation

distributions and their characteristics and applications in business decisions case studies.	Binomial, Poisson and Normal probability distributions and their characteristics and applications in business decisions case studies.	10	11/12/2023 to 26/12/2023	
Module 3: Sampling: Meaning of sample and population – Probability and non-probability of sampling – Use of random digits to choose random samples- Sampling from normal and non- normal populations – The Central limit theorem - Use of sampling in business decisions. **a.** Testing of hypothesis Small and Large sample Tests - Statistical Inference: Estimation and test of hypothesis: Finite and infinite population, Random sample, parameter, statistic, sampling distribution of statistic, standard error and its utility. Estimation : Point and interval estimates, meaning of confidence interval. Statistical Hypothesis, null and alternative, simple and composite hypotheses, sample space, parameter space, critical region, two types of errors, level of significance and size of a test, power ofa test, one-tailed and two-tailed tests. **b**. Large sample tests: Tests for single mean, equality of two means, single proportion and equality of two proportions.	Meaning of sample and population – Probability and non-probability of sampling – Use of random digits to choose random samples- Sampling from normal and non- normal populations The Central limit theorem - Use of sampling in business decisions	4	27/12/2023 to 04/1/2024	• Lecture • Tutorial • Case study
	Testing of hypothesis Small and Large sample Tests - Statistical Inference: Estimation and test of hypothesis: Finite and infinite population, Random sample, parameter, statistic, sampling distribution of statistic, standard error and its utility. Estimation : Point and interval estimates, meaning of confidence interval. Statistical Hypothesis, null and alternative, simple and composite hypotheses, sample space, parameter space, critical region, two types of errors, level of significance and size of a test, power ofa test, one-tailed and two-tailed tests.	11	05/1/2024 to 20/1/2024	

c.Small sample tests: Sampling distribution- Chi-square, t-distributions (definitions through p.d.f.), features Chi-square test for single variance, testing goodness of fit and Independence of attributes in (2*2) contingency tables, Yates' correction for continuity. single mean, Equality of two means (Independent and Dependent Samples)	Large sample tests: Tests for single mean, equality of two means, single proportion and equality of two proportions Small sample tests: Sampling distribution- Chi-square, t-distributions (definitions through p.d.f.), features. Chi-square test for single variance, testing goodness of fit and Independence of attributes in (2*2) contingency tables, Yates' correction for continuity. single mean, Equality of two means (Independent and Dependent Samples)			
Module: 4 Preparing the Data for Analysis: Editing, Coding, Classification, Tabulation, Validation Analysis and Interpretation. Errors in Hypothesis Parametric and Non Parametric Test: T-Test, Z-Test, F-Test, U-Test, K-W Test - Statistical Analysis: Bivarate Analysis Multivariate Analysis - ANOVA: One-Way and Two Way Classification - Technology in research. Test of significance- Report writing and presentation of results: Importance of report writing, types of research report, report structure,	Editing, Coding, Classification, Tabulation, Validation Analysis and Interpretation	3	22/1/2024 to 24/1/2024	• Lecture • Tutorial • Presentation • Case study
	Errors in Hypothesis Parametric and Non Parametric Test: T-Test, Z-Test, F-Test, U-Test, K-W Test	4	25/1/2024 to 30/1/2024	
	Statistical Analysis: Bivarate Analysis - Multivariate Analysis - ANOVA: One- Way and Two Way Classification - Technology in research.	5	31/1/2024 to 05/2/2024	

guidelines for effective documentation. Case studies.	Test of significance-Report writing and presentation of results: Importance of report writing, types of research report, report structure, guidelines for effective documentation. Case studies	3	9/2/2024 to 12/2/2024	

Reference Books:

1. Statistical Methods: S.P.Gupta
2. Statistical Analysis for Decision Making: Morris Hamber
3. Statistics: Sanchetti and Kapoor

Lesson Plan and Curriculum Deployment

First Semester M. Com 2023-2024

Subject: Advanced Auditing (SC03)

Name of the Faculty: ROOPESH KUMAR N

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No of hours required to complete	DATE	Method of deployment
Module 1: Introduction - Objectives of Auditing, Different Types of Auditing - Auditor - Qualification, Qualities, Rights and Duties, Ethics in auditing, Audit of Auditors, Rotation of Auditors - Computerized Environment - Auditing and Digitalization, Audit Programme - Internal Check and Internal Control - Government Accounting - Professional Accounting - Auditing Boards - GAAS, CAG, PCAOB case studies	Objectives of Auditing, Different Types of Auditing.	2	13/11/2023 to 15/11/2023	• Lecture • Tutorial • Case study • Group discussion
	Qualification, Qualities, Rights and Duties.	2	16/11/2023 to 17/11/2023	
	Ethics in auditing, Audit of Auditors, Rotation of Auditors.	1	18/11/2023	
	Computerized Environment - Auditing and Digitalization, Audit Programme - Internal Check and Internal Control.	2	20/11/2023 to 21/11/2023	
	Government Accounting - Professional Accounting - Auditing Boards.	2	22/11/2023 to 23/11/2023	
	Auditing Boards - GAAS, CAG, PCAOB case studies.	3	24/11/2023 to 27/11/2023	
Module 2: Auditing Standards and Audit Procedures Auditing Standards - Generally Accepted Auditing Standards - Introductory Matters SA 100-199 - General Principles and	Introduction Auditing Standards - Generally Accepted Auditing Standards.	1	28/11/2023	• Lecture • Tutorial • Case study • Presentation
	Introductory Matters SA 100-199.	3	29/11/2023 to 02/12/2023	
	General Principles and Responsibilities SA 200-299.	5	04/12/2023 to 09/12/2023	

Responsibilities SA 200-299 - General Activities SA 1200 - Auditor Communications SA 260 - Quality Control for an Audit of Financial Statements - Statements SA 220 and Guidance Notes - Case studies **Audit Procedures** - Audit Planning and Risk Assessment SA 300-499 - Auditing Internal Control Over Financial Reporting - Audit Procedures in Response to Risks – Nature – Timing - and Extent - Auditor's Responsibilities Regarding Supplemental and Other Information - Concluding Audit Procedures, Post-Audit Matters - Case Studies.	General Activities SA 1200 and Auditor Communications SA 260.	3	11/12/2023 to 14/12/2023	
	Auditor Communications SA 260 - Quality Control for an Audit of Financial Statements.	2	15/12/2023 to 16/12/2023	
	Statements SA 220 and Guidance Notes - Case studies.	2	18/12/2023 to 20/12/2023	• Lecture • Tutorial • Case study • Presentation
	Audit Planning and Risk Assessment SA 300-499.	4	21/12/2023 to 27/12/2023	
	Auditing Internal Control Over Financial Reporting	1	28/12/2023	
	Audit Procedures in Response to Risks, Nature, Timing and Extent.	1	30/12/2023	
	Auditor's Responsibilities Regarding Supplemental and Other Information	1	02/01/2024	
	Concluding Audit Procedures and Post-Audit Matters	1	03/01/2024	
Module 3: Audit Reports - Auditor Reporting SA 700-799 - Reporting on Audits of Financial Statements - Other Reporting Topics - Matters Relating to Filings Under Federal Securities Laws - Other Matters Associated with Audits (SA 6101, SA 6105, SA 6110, SA 6115) - Standards on Quality Control (SQCs) - Standards on Auditing (SAs) - Audit Committee and Corporate Governance - Audit of	Auditor Reporting SA 700-799	5	04/01/2024 to 09/01/2024	• Lecture • Tutorial • Case study • Presentation
	Reporting on Audits of Financial Statements.	1	10/01/2024	
	Matters Relating to Filings Under Federal Securities Laws - Other Matters Associated with Audits (SA 6101, SA 6105, SA 6110, SA 6115).	5	11/01/2024 to 17/01/2024	
	Standards on Quality Control (SQCs) - Standards on Auditing (SAs).	1	18/01/2024	

Limited Companies Schedule III of Companies Act 2013 - Environmental Auditing, Audit Data Analytics - Case Studies - Leading & Top Auditing Firms – Case studies.	Audit Committee and Corporate Governance - Audit of Limited Companies Schedule III of Companies Act 2013.	2	19/01/2024 to 20/01/2024	
	Environmental Auditing, Audit Data Analytics and Leading & Top Auditing Firms.	2	22/01/2024 to 25/01/2024	
Module 4: Audit Regulation and Laws - CAG Recommendations, Hierarchy of Audit regulations in India, Investigation, Forensic Audit - Peer and Quality Review - Auditing Software – Winman – SAP - Audit related Penalties - Imprisonment and Prosecution - Rethinking of Audit - International Auditing Practices - Comparison with Indian Auditing practices - Indian Standards on Auditing (SA) - Major Scams in India and its Impact on Economy of the Country - Case Studies - Kingston Cotton Mill Company 1896 – Sahara and Subratha Rai Case Study.	CAG Recommendations, Audit regulations in India and Investigation.	2	27/01/2024 to 29/01/2024	• Lecture • Tutorial • Case study • Presentation
	Forensic Audit - Peer and Quality Review.	2	30/01/2024 to 31/01/2024	
	Audit related Penalties - Imprisonment and Prosecution - Rethinking of Audit - International Auditing Practices.	2	01/02/2024 to 03/02/2024	
	Major Scams in India and its Impact on Economy of the Country - Case Studies	2	05/02/2024 to 06/02/2024	

Reference Books:

1. Advanced Auditing and Professional Ethics, CA Surabhi Bansal, Bestword Publication Pvt. Ltd.
2. Audit Full Course - CA Shubham Keswani
3. Advanced Auditing and Professional Ethics – CA Pankaj Garg, Taxmann Books, New Delhi

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment 2023-24

Third Semester M. Com

Subject: Business Research Methods (HC08)

Name of the Faculty: Dr. UMA K

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No hours required to complete	DATE	Method of Deployment
Module: 1 Business Research: Meaning – types - process of research- management problem - defining the research problem - formulating the research Hypothesis - developing the research proposals - research design formulation - sampling design - planning and collecting the data for research - data analysis and interpretation - Research Application in business decisions - Features of good research study-Ethics in research, Plagiarism, Digital Technologies and falsifications.	Brief Introduction to the course.Meaning – types - process of research- management problem - defining the research problem	2	13/11/2023 to 14/11/2023	• Lecture • Case study • Field Survey
	Formulating the research Hypothesis - developing the research proposals - research design formulation	2	15/11/2023 to 16/11/2023	
	sampling design - planning and collecting the data for research - data analysis and interpretation -	2	17/11/2023 to 18/11/2023	
	Research Application in business decisions - Features of good research study	2	19/11/2023 to 21/11/2023	
	Ethics in research,Plagiarism, Digital Technologies and falsifications.	2	22/11/2023 to 23/11/2023	
Background to Research: Developing research questions-Research paradigms- Contributions of research to theory and	Background to Research: Developing research questions-Research paradigms-	2	24/11/2023 to 26/11/2023	
	Contributions of research to theory and practice- Importance of scientific	2	27/11/2023 to 28/11/2023	

practice- Importance of scientific research in business decision making - Types of research and research process	research in business decision making			
	Types of research and research process	2	29/11/2023 to 30/11//2023	
Module: 2 Types of Business Research Design: Exploratory and Conclusive Research Design Exploratory Research: Meaning, purpose – methods - secondary resource analysis, comprehensive case methods, expert opinion survey, focus group discussions - Conclusive research Design - Descriptive Research – Meaning - Types-cross sectional studies and longitudinal studies - Experimental research design-Meaning and classification of experimental designs - Pre experimental design, Quasi - experimental design – True experimental design, statistical experimental design - Observation Research – Meaning – Uses - Participation and Non-participation – Evaluation - Conducting an Observation study - Data collection.	Exploratory and Conclusive Research Design Exploratory Research: Meaning, purpose – methods- secondary resource analysis	2	01/12/2023 to 04/12/2023	• Lecture • Case study • Field survey
	comprehensive case methods, expert opinion survey, focus group discussions - Conclusive research Design - Descriptive Research – Meaning-Types.	2	05/12/2023 to 08/12/2023	
	cross sectional studies and longitudinal studies - Experimental research design-Meaning and classification of experimental designs - Pre experimental design, Quasi - experimental design – True experimental design, statistical experimental design	2	09/12/2023 to 11/12/2023	

Literature Review: Identifying - accessing and managing information and scholarly literature - Academic writing and referencing - Literature review development- Argumentation and synthesis	Observation Research – Meaning – Uses - Participation and Non-participation – Evaluation - Conducting an Observation study - Data collection.	3	12/12/2023 to 14/12/2023	
	Literature Review: Identifying - accessing and managing information and scholarly literature -	3	15/12/2023 to 19/12/2023	• Lecture • Case study Field survey
	Academic writing and referencing - Literature review development- Argumentation and synthesis	3	20/12/2023 to 22/12/2023	
Module: 3 Measurement and Data Collection: Primary and Secondary data Primary data collection methods – Observations – survey - Interview and Questionnaire - Qualitative Techniques of data collection. Questionnaire design – Meaning - process of designing questionnaire - Secondary data –Sources- advantages and disadvantages Measurement and Scaling Techniques: Basic measurement scales-	Primary and Secondary data Primary data collection methods – Observations – survey	2	26/12/2023 to 28/12/2023	• Lecture • Case study
	Interview and Questionnaire - Qualitative Techniques of data collection. Questionnaire design – Meaning - process of designing questionnaire	2	29/12/2023	
	Secondary data – Sources- advantages and disadvantages	1	01/01/2024	
	Measurement and Scaling Techniques: Basic measurement scales-Nominal scale - Ordinal scale - Interval scale - Ratio scale.	2	02/01/2024	
	Attitude measurement scale - Likert's Scale -	2	04/01/2024	• Lecture • Case study

Nominal scale - Ordinal scale - Interval scale - Ratio scale. Attitude measurement scale - Likert's Scale - Semantic Differential Scale - Thurston scale - Multi-Dimensional Scale – Data Processing Sampling: Concepts - Types of Sampling - Probability Sampling - simple random sampling, systematic sampling - stratified random sampling - cluster sampling - Non ProbabilitySampling- conveniencesampling- Judgementalsampling- snowballsampling - quota sampling - Errors in sampling	Semantic Differential Scale - Thurston scale - Multi-Dimensional Scale – Data Processing			
	Sampling: Concepts - Types of Sampling -	1	05/01/2024	• Lecture • Case study
	Probability Sampling - simple random sampling, systematic sampling - stratified random sampling - cluster sampling	2	08/01/2024 to 12/01/2024	
	Non-Probability Sampling- conveniencesampling	1	16/01/2024	
	Judgmental sampling- snowball sampling - quota sampling	1	17/01/2024	
	Errors in sampling	1	18/01/2024 to 22/01/2024	
Module: 4 Preparing the Data for Analysis: Editing, Coding, Classification, Tabulation, Validation Analysis and Interpretation. Errors in Hypothesis Application of statistical tools for the analysis of data. Technology in research. Report writing and presentation of results: Importance of report writing, types of research report, report structure, guidelines for effective documentation.	Editing, Coding, Classification	1	23/01/2024 to 25/01/2024	• Lecture • Case study
	Tabulation, Validation Analysis and Interpretation	2	29/01/2024 to 30/01/2024	
	Errors in Hypothesis Application of statistical tools for the analysis of data.	2	01/02/2024 to 05/02/2024	
	Technology in research. Report writing and presentation of results:	2	06/02/2024	• Lecture • Case study
	Importance of report writing,types of research report,	2	07/02/2024 to 12/02/2024	
	report structure,	1	13/02/2024 to 17/02/2024	
	guidelines for effective documentation.	2	19/02/2024 to 20/02/2024	

References:

1. Business Research Methods, William G. Zikmund, The DrydenPress
2. Research for Development: A Practical Guide, Sophie Laws, VISTAAR

Publications

3. Research Methodology in Spcial Sciences – Krishnamachari
4. Research Methodology –C K Kothari

Lesson Plan and Curriculum Deployment

Second Semester M. Com 2023-2024

Subject: Organizational Behaviour

Name of the Faculty: Dr. UMA K

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No of hours required to complete	Date	Method of deployment
Module1: Introduction: Meaning-Definitions and scope of organizational behavior – Fundamental Concepts of OB - Key elements of OB- people, Organizational structure, technology and environment; Historical development of Organizational Behavior- Model of Organizational Behavior. Contributing Disciplines to OB- Psychology-Sociology-social psychology- Anthropology- Political science; OB and Management-Comparative roles in organization; - Organizational structure Designs and Culture -Formal and Informal organization -	Introduction to the course, Introduction: Meaning-Definitions and scope of organizational behavior – Fundamental Concepts of OB	2	08/04/2024 to 09/04/2024	• Lecture • Tutorial • Group discussion
	Key elements of OB- people, Organizational structure, technology and environment;	2	10/04/2024 to 11/04/2024	
	Historical development of Organizational Behavior- Model of Organizational Behavior.	3	12/04/2024 to 15/04/2024	
	Contributing Disciplines to OB-Psychology-Sociology-social psychology- Anthropology- Political science;	2	16/04/2024 to 18/04/2024	
	OB and Management-Comparative roles in organization	2	19/04/2024 to 22/04/2024	
	Organizational structure Designs and Culture	3	23/04/2024 to 29/04/2024	

Case studies.	-Formal and Informal organization -	1	30/04/2024	
	Case studies.	1	02/05/2024	
Module 2: Foundations of Individual Behavior: Personal factors, Psychological factors - Organizational factors, Environmental factors - Personality - Personality determinants- personality traits-Theories of Personality – Authoritarianism - Locus of Control – Machiavellianism - Introversion and Extroversion - Achievement Orientation - Self- Esteem - Risk-taking, Self-Monitoring.- Learning – Theories of learning - Perception- meaning and definition, factors influencing perception – Attitudes - formation of attitudes, changing attitudes, attitudes and Job satisfaction – Values - Importance of Values - Sources of Values - Case studies.	Introduction to Foundations of Individual Behavior: Personal factors, psychological factors - Organizational factors, Environmental factors	2	03/05/2024 to 06/05/2024	• Lecture • Tutorial • Group discussion Case study
	Personality - Personality determinants- personality traits-	2	07/05/2024 to 08/05/2024	
	Theories of Personality	2	09/05/2024 to 13/05/2024	
	Authoritarianism - Locus of Control – Machiavellianism - Introversion and Extroversion	2	14/05/2024 to 15/05/2024	
	Achievement Orientation - Self- Esteem - Risk-taking, Self-Monitoring.	3	16/05/2024 to 21/05/2024	
	Learning – Theories of learning - Perception- meaning and definition, factors influencing perception	2	22/05/2024 to 24/05/2024	
	Attitudes - formation of attitudes, changing attitudes, attitudes and Job satisfaction	3	27/05/2024 to 30/05/2024	
	Values - Importance of Values - Sources of Values - Case studies.	2	31/05/2024	

Module 3: Motivation: The concept of Motivation - Early Theories of Motivation - Hierarchy of Needs theory - theory X and Theory Y; Hygiene theory; contemporary theories of motivation-ERG Theory-three needs theory - cognitive evaluation theory and others - Work stress - sources of stress - Stress Management – Case studies.	Introduction to Motivation: The concept of Motivation - Early Theories of Motivation	2	01/06/2024 to 03/06/2024	• Lecture • Tutorial • Group discussion • Case study
	Hierarchy of Needs theory - theory X and Theory Y; Hygiene theory;	3	04/06/2024 to 06/06/2024	
	contemporary theories of motivation-ERG Theory-three needs theory	3	07/06/2024 to 11/06/2024	
	cognitive evaluation theory and others	3	12/06/2024 to 15/06/2024	
	Work stress - sources of stress	2	18/06/2024to 19/06/2024	
	Stress Management – Case studies.	3	20/06/2024 to 24/06/2024	
Module 4: Foundations of Group Behavior: Defining and classifying groups-group process-group tasks-cohesive groups - group dynamics - Leadership-nature and importance- functions styles - Communication: Nature and Types - Effective communication - Roles of Formal and Informal communication - Conflict management - The process of conflict - Types of conflict - Functional and Dysfunctional	Introduction to Foundations of Group Behavior: Defining and classifying groups-group process-	2	25/06/2024 to 26/06/2024	• Lecture • Tutorial • Group discussion • Case study
	group tasks-cohesive groups - group dynamics	2	27/06/2024 to 29/06/2024	
	Leadership-nature and importance- functions styles	2	01/07/2024 to 02/07/2024	
	Communication: Nature and Types	1	04/07/2024	
	Effective communication - Roles of Formal and Informal communication	1	08/07/2024	
	Conflict management - The process of conflict	1	11/07/2024	

conflict -Resolution of conflict - Case studies.	Types of conflict - Functional and Dysfunctional conflict	1	14/07/2024	
	Resolution of conflict - Case studies.	1	15/07/2024	

Reference Books:

1. Organisational Behaviour – Fred Luthans
2. Organisation Theory and Behaviour - V S P Rao and P S Narayana
3. Organisational Behaviour – K. Aswathappa
4. Human Behaviour at Work – Keith Devis
5. Organisational Theory and Behaviour- R. A. Sharma
6. Organisational Psychology – Schein, E.H.

Lesson Plan and Curriculum Deployment

Second Semester M. Com 2023-2024

Subject: Corporate Governance

Name of the Faculty: DR. ROOPESH KUMAR N

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No of hours required to complete	Date	Method of deployment
Module 1: Concept of Corporate Governance: Its importance -Principles of corporate governance - OECD Principles of corporate governance, Theories of corporate governance-Agency theory and stewardship theory - Models of corporate governance around the world - Need for good corporate governance - Evolution of Corporate Governance in India	Introduction to the course, Introduction-meaning-definitions of Corporate Governance	2	08/04/2024 to 09/04/2024	• Lecture • Tutorial • Group discussion
	importance of corporate governance	1	10/04/2024	
	Principles of corporate governance	2	12/04/2024 to 15/04/2024	
	OECD principles of corporate governance	2	16/04/2024 to 18/04/2024	
	Theories of corporate governance & case study	2	19/04/2024 to 22/04/2024	
	Models of corporate governance around the world	3	23/04/2024 to 26/04/2024	

	Need for good corporate governance	1	29/07/2024	
	Evolution of corporate governance in India	2	30/04/2024 to 02/05/2024	
Module 2: Corporate Management and Functions of Board Committees: Management vs. Governance - internal constituents of the corporate governance - key managerial personnel (KMP); chairman - qualities of a chairman – powers - responsibilities and duties of a chairman - chief executive officer (CEO) - role and responsibilities of the CEO - separation of roles of chairman and CEO - CFO – manager - company secretary – auditor - Statutory committees of board- audit committee, remuneration committee - nomination committee - compliance committee - shareholders grievance committee -investor's relation committee - investment committee - risk management committee - other committees.	Introduction to corporate Management and Functions of Board Committees	2	03/05/2024 to 06/05/2024	• Lecture • Tutorial • Group discussion • Case study
	Management vs. Governance	1	07/05/2024	
	Internal constituents of the corporate governance	1	08/05/2024	
	Key managerial personnel (KMP); chairman - qualities of a chairman – powers - responsibilities and duties of a chairman	2	09/05/2024 to 13/05/2024	
	Chief executive officer (CEO) - role and responsibilities of the CEO	1	14/05/2024	
	Separation of roles of chairman and CEO- CFO – manager - company secretary – auditor	1	15/05/2024	
	Statutory committees of board- audit committee, remuneration committee	4	16/05/2024 to 21/05/2024	
	Nomination committee-compliance committee	2	22/05/2024 to 24/05/2024	
	Shareholder's grievance committee -investor's relation committee - investment committee - risk management committee - other committees.	3	27/05/2024 to 31/05/2024	
Module 3: Regulatory framework of corporate governance: Corporate Governance committees-Cadbury Committee on corporate governance, 1992 - Sarbanes-Oxley Act, 2002 - Kumar Mangalam Birla Committee, 1999 - Naresh Chandra Committee Report, 2002 - Narayana Murthy committee Report, 2003, Dr. J.	Introduction to Regulatory framework of corporate governance	1	01/06/2024	• Lecture • Tutorial • Group discussion • Case study
	Corporate Governance committees-Cadbury Committee on corporate governance, 1992	3	03/06/2024 to 06/06/2024	
	Sarbanes-Oxley Act, 2002 - Kumar mangalam Birla Committee, 1999 - Naresh Chandra Committee Report, 2002	3	07/06/2024 to 11/06/2024	

J. Irani Committee Report on Company Law, 2005 (Only highlights of committee reports)- SEBI guidelines and clause 49 - reforms in the Companies Act; whistle blowing - whistleblower policy - Case studies.	Narayana Murthy committee Report, 2003, Dr. J. J. Irani Committee Report on Company Law, 2005 (Only highlights of committee reports)	3	12/06/2024 to 15/06/2024	
	SEBI guidelines and clause 49 - reforms in the Companies Act;	2	18/06/2024 to 19/06/2024	
	Whistle blowing - whistleblower policy - Case studies.	3	20/06/2024 to 24/06/2024	
Module 4: Business Ethics and Corporate Social Responsibilities: Concept – Importance - Principles of Business ethics - Arguments for and against business ethics - benefits of corporate ethics - techniques to improve ethical conduct of business - Ethics in functional areas of business-marketing - HRM - Accounting and auditing - Finance etc., Corporate Social Responsibility: Meaning- CSR models- corporate social challenges-corporate accountability-business and ecology - Sustainability Reporting - Case analysis.	Introduction to Business Ethics and Corporate Social Responsibilities	2	25/06/2024 to 26/06/2024	• Lecture • Tutorial • Group discussion • Case study
	Concept – Importance - Principles of Business ethic	2	27/06/2024 to 29/06/2024	
	Arguments for and against business ethics - benefits of corporate ethics	2	01/07/2024 to 02/07/2024	
	Techniques to improve ethical conduct of business	2	04/07/2024 to 06/07/2024	
	Ethics in functional areas of business-marketing - HRM - Accounting and auditing - Finance etc.,	2	08/07/2024 to 10/07/2024	
	Corporate Social Responsibility: Meaning- CSR models	2	11/07/2024 to 13/07/2024	
	Corporate social challenges- Corporate accountability- Business and ecology - Sustainability Reporting	1	14/07/2024	
	Case study	1	15/07/2024	

Reference Books:

1. Corporate Governance principles, policies and practices - A.C. Fernando
2. Corporate Governance - H.R Machiraju
3. Corporate Governance - Kesho Prasad
4. Corporate Governance Global concepts & practices - Dr. S.Singh
5. Corporate Governance - Satheesh Kumar
6. Business Ethics text and cases - C.S.V Murthy
7. Corporate Social Responsibility in India - Sanjay Kumar Panda
8. Case Studies in business Ethics and Corporate Governance - Mohapatra, Sanjay
9. Corporate Governance, business Ethics and CSR (with case studies and major corporate scandals) - J.P Sharma

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment

Second Semester M. Com 2023-2024

Subject: International Business (HC07)

Name of the Faculty: Ms. BOJAMMA M N

Total No. of working hours available – 60 hours **Hours/week : 05**

Prescribed Curriculum	Topics	No of hours required to complete	Date	Method of deployment
Module 1: Introduction: Nature of International Business-players in International Business-Approaches and need for International Business, International Trade Theories. International Marketing-Trends in International Trade Reasons for Going International - Global Sourcing and Production Sharing-International Orientations Internationalization Stages and Orientations-Growing Economic Power of Developing Countries-International Business Decision - Case Studies.	•Nature of International Business-players in International Business	1	18-04-2024	• Lecture • Tutorial • Case study • Group discussion
	•Approaches and need for international Business,	3	22-04-2024 to 24-04-2024	
	•International Trade Theories.	2	25-04-2024 to 26-04-2024	
	•International Marketing	1	29-04-2024	
	•Trends in International Trade	1	30-04-2024	
	•Reasons for Going International	1	02-05-2024	
	•Global Sourcing and Production Sharing	1	03-05-2024	
	•International Orientations Internationalization Stages and Orientations-	2	06-05-2024 to 07-05-2024	
	•Growing Economic Power of Developing Countries	1	08-05-2024	
	•International Business Decision	1	09-05-2024	
	•Case Studies.	2	13-05-2024 to 14-05-2024	
Module 2: Regional Trade Blocks: Trading Environment-Commodity Agreements – Unilateral, Bilateral and multilateral Stages of Economic	•Introduction to Regional Trade Blocks	2	15-05-2024 to 16-05-2024	• Lecture • Tutorial • Case study • Group discussion
	•Trading Environment-Commodity	2	20-05-2024 to 21-05-2024	

tegration, Castes - State rading and Growing Intra-egional Trade - Other egional Groupings - GATT WTO - The Uruguay Round valuation – UNCTAI – FTA – LAFTA – EU – AARC - World Bank - IMF nd other trading blocks and ommon marketing for ternational business – case udies.	Agreements – Unilateral, Bilateral and multilateral stages of Economic integration, Castes			
	•State Trading and Growing Intra-Regional Trade	2	22-05-2024 to 23-05-2024	
	•Other Regional Groupings - GATT / WTO	2	27-05-2024 to 28-05-2024	
	•The Uruguay Round Evaluation	1	29-05-2024	
	•UNCTAI – EFTA – LAFTA – EU – SAARC	4	30-05-2024 to 04-06-2024	
	•World Bank - IMF and other trading blocks and common marketing for international business	2	05-06-2024 to 06-06-2024	
	•Case studies.	1	07-06-2024	
Iodule 3: Multinational orporations: Definition - rganizational Structures - he Role of MNC's and ominance of MNC's - India s a player in the ternational market place – s position and prospects - DI & FII's in India - Code f Conduct - Multinationals India - Case Studies.	•Introduction to Multinational Corporations: Definition	2	19-06-2024 to 20-06-2024	• Lecture • Tutorial • Case study • Group discussion
	• Organizational Structures	2	24-06-2024 to 25-06-2024	
	• The Role of MNC's and Dominance of MNC's	2	26-06-2024 to 27-06-2024	
	• India as a player in the international market place -its position and prospects	2	28-06-2024 to 29-06-2024	
	• FDI & FII's in India, Code of Conduct	3	01-07-2024 to 03-07-2024	
	• Multinationals in India - Case Studies.	2	04-07-2024 to 07-06-2024	
Iodule 4: India in the lobal setting and lobalization of Indian usiness: India an Emerging Iarket-India in the Global rade- Liberalization and ntegration with Global conomy - Foreign Trade	• India in the global setting and globalization of Indian business: India an Emerging Market	3	08-07-2024 to 10-07-2024	• Lecture • Tutorial • Case study • Group discussion
	• India in the Global Trade- Liberalization	2	11-07-2024 to 12-07-2024	

olicy 2015-20 - Regulation nd Promotion of Foreign rade in India - Export romotion- Organizational et-up - incentives – EOUs - PZs and SEZs - export ouses and trading houses - n evaluation-One Border ne Road, - Case studies.	and Integration with Global Economy			
	• Foreign Trade Policy 2015-20	1	15-07-2024	
	• Regulation and Promotion of Foreign Trade in India	2	18-07-2024 to 19-07-2024	
	• Export promotion	1	22-07-2024	
	• Organizational set-up - incentives	1	23-07-2024	
	• EOUs - EPZs and SEZs	1	24-07-2024	
	• Export houses and trading house an evaluation	1	25-07-2024	
	• One Border one Road	1	26-07-2024	
	• Case studies.	2	27-07-2024 to 29-07-2024	

Reference Books:

1. International Business Subba Rao
2. International Business Francis Cherunilam
3. International Business Shyam Shukla
4. WTO and Indian Economy: Chadha.G.K
5. International Business: New Trends: G. S. Batra& R.C.Dangwal
6. Global Marketing Strategies: Jean Pierre & H. David Hennessay
7. International Marketing – SakOnkvisit and John J.Shaw
8. International Marketing – Philip Cateora and John Graham
9. International Business – By Roger Bonnet
10. International Business – Michael Zinkata
11. International Business – John D. Daniels
12. International Business – Richard M. Shaffer
13. Restless Continent – Michael Wesley

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment

Second Semester M. Com 2023-2024

Subject: Portfolio Management (SC06)

Name of the Faculty: Ms. BOJAMMA M N& Mr. SHREENIDHI N V
Total No. of working hours available – 60 Hours/week : 05

Prescribed Curriculum	Topics	No of hours required to complete	Date	Method of deployment
Module 1: Theories of Portfolio Management: Efficient Market Hypothesis Random Walk- Levels of Efficiency – Weak – Semi Strong and Strong - Techniques for Measuring Efficiency - Empirical Tests Behavioral Finance Dow Theory – Elliot Wave Theory Investment Avenues - Case Studies.	Theories of Portfolio Management: Introduction	2	18-04-2024 to 19-04-2024	• Lecture • Tutorial • Problem solving • Case study • Group discussion
	Efficient Market Hypothesis - Random Walk-	3	22-04-2024 to 24-04-2024	
	Levels of Efficiency – Weak – Semi Strong and Strong	2	25-04-2024 to 26-04-2024	
	Techniques for Measuring Efficiency	1	29-04-2024	
	Empirical Tests	1	30-04-2024	
	Behavioral Finance Dow Theory	1	02-05-2024	
	•Elliot Wave Theory	1	03-05-2024	
	Investment Avenues	2	06-05-2024 to 07-05-2024	
	Case Studies.	1	08-05-2024	
Module 2: Fundamental and Technical Analysis- Economic Analysis- Industry Analysis - Company Analysis - Forecasting Company Earnings - Valuation of Companies - Intrinsic and Market Value - Market Indicators - Forecasting Individual Stock Performance – Technical Analysis: Basic Tenets of Technical Analysis — Behavior of Stock Prices –	Fundamental and Technical Analysis- Introduction	2	13-05-2024 to 14-05-2024	• Lecture • Tutorial • Problem solving • Case study • Group discussion
	•Economic Analysis- Industry Analysis - Company Analysis	3	15-05-2024 to 17-05-2024	
	•Forecasting Company Earnings	2	20-05-2024 to 21-05-2024	
	•Valuation of Companies -Intrinsic and Market Value - Market Indicators	2	22-05-2024 to 23-05-2024	
	•Forecasting Individual Stock Performance	1	24-05-2024	
	•Technical Analysis: Basic Tenets of Technical Analysis — Behavior of Stock Prices – Major Trends – Charts and Trend Lines	3	2705-2024 to 29-05-2024	
	•Charts and Trend Lines – Resistance and	2	03-06-2024 to 04-06-2024	

Major Trends – Charts and Trend Lines – Resistance and Support Lines – Different Patterns-Case Studies.	Support Lines – Different Patterns-			
	•Case studies.	1	05-06-2024	
Module 3: Portfolio Analysis and Risk Management -Various Steps Involved in Portfolio Development- Theories Relating to Portfolio Analysis- Risk & Return – Mean Return – Variance Analysis -Standard Deviation- Beta and Alpha Measures- Portfolio Diversification- Markowitz Risks Return Optimization- Sharpe Index Model - Capital Asset Pricing Model- Arbitrage Pricing Theory- Case Studies.	•Portfolio Analysis and Risk Management- Introduction	2	06-06-2024 to 07-06-2024	• Lecture • Tutorial • Problem solving • Case study • Group discussion
	• Various Steps Involved in Portfolio Development	2	19-06-2024 to 20-06-2024	
	• Theories Relating to Portfolio Analysis	2	24-06-2024 to 25-06-2024	
	• Risk & Return – Mean Return – Variance Analysis	2	26-06-2024 to 27-06-2024	
	• Standard Deviation- Beta and Alpha Measures	3	28-06-2024 to 01-07-2024	
	• Portfolio Diversification- Markowitz Risks Return Optimization	2	02-07-2024 to 03-07-2024	
	Sharpe Index Model - Capital Asset Pricing Model-	3	04-07-2024 to 06-07-2024	
	Arbitrage Pricing Theory- Case Studies.	1	07-07-2024	
Module- 4: Portfolio Performance Evaluation - Mutual Funds - Exchange Traded Funds (ETFs) - Performance Evaluation Measures– Sharpe - Treynor and Jensen's Ratios - Optimal Portfolio Selection- Case Study.	• Portfolio Performance Evaluation - Introduction	3	08-07-2024 to 10-07-2024	• Lecture • Tutorial • Problem solving • Case study • Group discussion
	• Mutual Funds	2	11-07-2024 to 12-07-2024	
	• Exchange Traded Funds (ETFs)	1	15-07-2024	
	• Performance Evaluation Measures	2	18-07-2024 to 19-07-2024	
	• Sharpe ratio	1	22-07-2024	
	• Treynor ratio	1	23-07-2024	
	• Jensen's Ratios	1	24-07-2024	
	• Optimal Portfolio Selection	1	25-07-2024	
	• Case studies.	1	27-07-2024	

References:

1. Portfolio Analysis and Management – Balla D- S Chand & Co
2. Investment Analysis and Portfolio Management- Prasanna Chandra-McGraw-Hill Publication.
3. Security Analysis and Portfolio Management – V. A. Avdhani, Himalaya Publication
4. Security Analysis and Portfolio Management – S. Kevin-PHI Publication
   Security Analysis & Portfolio Management - Punithaathi Pandian-, Vikas Publishing House.

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment

Second Semester M. Com 2023-2024

Subject: Computer Application in Commerce

Name of the Faculty: Dr. UMA K

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No of hours required to complete	Date	Method of deployment
Module1: Computer Applications in Financial Accounting: Features of Tally ERP.9. Setting up a new company and creating Masters in Tally ERP9 – Data Management security levels and controls - Technological advantages of Tally.ERP9 - Role of XBRL in Business Reporting - Fundamentals of XBRL. Features of XBRL software - Evolution of extensible Business Reporting Language (XBRL) - Commercial & Industrial Taxonomy of MCA - Instance	Introduction to the course, Introduction: Applications in Financial Accounting: Features of Tally ERP.9. Setting up a new company and creating Masters in Tally ERP9.	2	08/04/2024 to 09/04/2024	• Lecture • Computer Lab • Group discussion
	Data Management security levels and controls - Technological advantages of Tally.ERP9 - Role of XBRL in Business Reporting	2	10/04/2024 to 11/04/2024	
	Fundamentals of XBRL. Features of XBRL software	2	12/04/2024 to 15/04/2024	
	Evolution of extensible Business Reporting Language	2	16/04/2024 to 18/04/2024	

Document - Filling of Financial statements using XBRL Software - Analysis of XBRL financial statements.	(XBRL) - Commercial & Industrial Taxonomy of MCA	2	19/04/2024 to 22/04/2024	
	Instance Document - Filling of Financial statements using XBRL Software	3	23/04/2024 to 29/04/2024	
	Analysis of XBRL financial statements.	2	30/04/2024 to 02/05/2024	
Module 2: Computer Applications in Financial Management and Taxation: Using MS Excel to solve financial management problems- Present Value - Future Value - NPV etc - Online Trading of Securities - Online Banking - Filing of Online Application for PAN and TAN - Online submission of Income Tax Returns – Form 49 A From 49 AA Form 49 B, and TDS Return - E-filing of indirect taxes return –GST.	Introduction to FoundationsComputer Applications in Financial Management and Taxation:	2	03/05/2024 to 06/05/2024	• Lecture • Computer Lab • Case study
	Using MS Excel to solve financial management problems- Present Value - Future Value - NPV etc	4	07/05/2024 to 15/05/2024	
	Online Trading of Securities - Online Banking	3	16/05/2024 to 21/05/2024	
	Filing of Online Application for PAN and TAN	2	22/05/2024 to 24/05/2024	
	Online submission of Income Tax Returns	3	27/05/2024 to 28/05/2024	
	Form 49 A From 49 AA Form 49 B, and TDS Return - E-filing of indirect taxes return –GST.	2	28/05/2024 to 30/05/2024	
Module 3: Computer Applications in Statistical Analysis: Features of SPSS - Creating files and data entry in SPSS - Preparation of frequency tables and graphs - Computation and interpretation of Mean -	Introduction to Computer Applications in Statistical Analysis	2	01/06/2024 to 03/06/2024	• Lecture • Computer Lab • Case study
	Features of SPSS - Creating filesand data entry in SPSS	3	04/06/2024 to 06/06/2024	
	Preparation of frequency tables and graphs	3	07/06/2024 to 11/06/2024	

Standard Deviation - Standard Error -Simple and multiple correlation – regression - Analysis of variance - t-Test - Chi-Square Test.	Computation and interpretation of Mean - Standard Deviation - Standard Error	3	12/06/2024 to 15/06/2024	
	Simple and multiple correlation – regression	2	18/06/2024 to 19/06/2024	
	Analysis of variance - t-Test - Chi-Square Test.	3	20/06/2024 to 24/06/2024	
Module 4: Computer Applications in Operations Research: Mathematical formulation of Linear Programming and Integer Programming problems and solve them using computer software	Introduction to Computer Applications in Operations Research:	2	25/06/2024 to 26/06/2024	• Lecture • Computer Lab • Group discussion
	Mathematical formulation of Linear Programming	2	27/06/2024 to 29/06/2024	
	Mathematical formulation of Integer Programming	2	01/07/2024 to 02/07/2024	
	Linear Programming problems and solve them using computer software	2	04/07/2024 to 13/07/2024	
	Integer Programming problems and solve them using computer software	2	14/07/2024 to 16/07/2024	

Reference Books:

1. Tally.ERP 9 Essentials, 2009, Tally Solutions Pvt.Ltd.
2. Mastering Financial Modeling-AlastairDay.
3. www.xbrl.org.
4. www.iasb.org.
5. www.spss.org
6. www.rbi.org.
7. www.incometax.india.gov.in.
8. www.xbrl.icai.org.
9. www.mca.gov.in
10. www. bse.org.nse.org.sebi.org.

Goods and Services Tax –by Dr. H.C. Mehrotra, Prof. V.P. Agarwal, Dr. S.K.Batra, Sahitya Publications Agra.

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment

Second Semester M. Com 2023-2024

Subject: Stock Markets and Investment Decisions (OE01)

Name of the Faculty: Shreenidhi N V

Hours/Week: 4 **Total Hours: 60**

Prescribed Curriculum	Topics	No of hours required to complete	Date	Method of deployment
Module 1: Stock Markets: Meaning - History- Functions of Stock Exchange- Leading Stock Exchanges in India - NSE and BSE - Role of SEBI - Investor'sProtection – Grievance Redressal	Meaning - History- Functions of Stock Exchange- Leading Stock Exchanges in India	3	08/04/2024 to 10/04/2024	• Lecture • Tutorial • Case study • Group discussion
	NSE and BSE - Role of SEBI - Investor'sProtection – Grievance Redressal	12	11/04/2024 to 26/04/2024	
Module 2: Stock Market Instruments Short Term and Long Term Instruments – Shares - Types of Shares – Debentures - Types of debentures -Bonds -	Short Term and Long Term Instruments – Shares - Types of Shares	4	27/04/2024 to 3/05/2024	• Lecture • Tutorial • Case study • Presentation
	Debentures - Types of debentures -Bonds - Types of Bonds	4	4/05/2024 to 10/05/2024	

Types of Bonds - Benefits of Investments in Stocks - Stock v/s Debenture - Case studies	Benefits of Investments in Stocks	4	11/05/2024 to 17/05/2024	
	Stock v/s Debenture - Case studies	3	20/05/2024 to 24/05/2024	
Module 3: Trading in Stock Market: Trading Mechanism - PAN Card, Speculation- Types of Speculation - Advantages and Drawbacks of Speculation- DEMAT Account - Depository Services - NSDL - CSDL – Stock Market Trading types – Intraday Trading - Delivery Trading - Swing Trading - Positional Trading - Fundamental Trading - Technical Trading	Trading Mechanism - PAN Card, Speculation- Types of Speculation - Advantages and Drawbacks of Speculation	5	27/05/2024 to 04/06/2024	• Lecture • Tutorial • Case study
	DEMAT Account - Depository Services - NSDL - CSDL – Stock Market Trading types	5	05/06/2024 to 11/06/2024	
	Intraday Trading - Delivery Trading - Swing Trading - Positional Trading - Fundamental Trading - Technical Trading	5	12/06/2024 to 17/06/2024	
Module 4: Stock Market Indices and Risk Management: SENSEX – NIFTY- SENSEX S&P - CNX - MID CAP - SMALL CAP - LARGE CAP – Factors impacting on	SENSEX – NIFTY- SENSEX S&P - CNX - MID CAP - SMALL CAP - LARGE CAP	5	18/06/2024 to 26/06/2024	• Lecture • Tutorial • Presentation • Case study
	Factors impacting on indices - Recent changes in the Stock Market Volatilities	4	27/06/2024 to 03/07/2024	
	Risk Management	3	05/05/2024 to 10/7/2024	

indices - Recent changes in the Stock Market Volatilities- Risk Management – Systematic and Unsystematic risk, Case studies	Systematic and Unsystematic risk, Case studies	3	11/07/2024 to 16/07/2024	

Reference Books:

1. Capital Markets- Dr. S. Guruswamy, McGraw Hill Publications.
2. Capital Market and Investment Management- Dr. M.S. Khan, S.M.Farisal, Laxmi Publications, first edition.
3. Capital Market Instruments- Dr. G. Kotreshwar, Chandana Publications, Mysore.
4. Equity Shares, Preferred Shares and Stock Market Indices- By Sunil, Parameswaran, Mcgraw Hill Publications

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment 2023-24

Third Semester M. Com

Subject: Operations Research (HC09)

Name of the Faculty: Mr. Shreenidhi N.V

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No of hours required to complete	Date	Method of deployment
Module-1: Introduction to Operations Research: Basics definition, scope, objectives, phases, models and limitations of Operations Research. Linear Programming Problem – Formulation of LPP - Graphical solution of LPP - Simplex Method.	Introduction to Operations Research**.**	2	13/11/2023 to 15/11/2023	• Lecture • Tutorial • Problem Solving • Case study Analysis
	Basics definition, scope, objectives, phases, models and limitations of Operations Research.	3	16/11/2023 to 18/11/2023	
	Linear Programming Problem – Formulation of LPP - Graphical solution of LPP - Simplex Method.	8	20/11/2023 to 29/11/2023	
Module-2: Transportation Problem. Formulation – solution - unbalanced Transportation problem -	Introduction to Transportation Problem**.**	2	30/11/2023 to 01/12/2023	• Lecture • Tutorial
	Formulation – solution - unbalanced Transportation problem.	2	4/12/2023 to 5/12/2023	

Finding basic feasible solutions – Northwest corner rule - least cost method and Vogel's approximation method - Optimality test: the stepping stone method and MODI method, Assignment Model– Formulation-Hungarian method for optimal solution-Solving unbalanced problem.	Finding basic feasible solutions – Northwest corner rule - least cost method and Vogel's approximation method - Optimality test: the stepping stone method and MODI method.	15	6/12/2023 to 27/12/2023	• Problem Solving • Case study Analysis
	Formulation-Hungarian method for optimal solution-Solving unbalanced problem.	2	28/12/2023 to 01/1/2024	
Module-3: Sequencing Models. Solution of Sequencing Problem – Processing n Jobs through 2 Machines – Processing n Jobs through 3 Machines – Processing 2 Jobs through m machines – Processing n Jobs through mMachines.	Introduction to Sequencing Models.	2	02/1/2024 to 03/1/2024	• Lecture • Tutorial • Problem Solving • Case study Analysis
	Solution of Sequencing Problem – Processing n Jobs through 2 Machines, 3 Machines and m - Machines	8	04/1/2024 to 16/1/2024	
Module-4: Game Theory. Competitive games, rectangular game, saddle point - minimax (maximin) method of optimal strategies - value	Introduction to Game Theory.	2	17/1/2024 to 19/1/2024	• Lecture • Tutorial • Problem
	Solution of Game theory Problems	6	20/1/2024 to 27/1/2024	
	Solution of Replacement Problems	8	29/1/2024 to 10/2/2024	

of the game - Solution of games with saddle points - dominance principle. Rectangular games without saddle point – mixed strategy for 2 X 2games. **Replacement Models**- Replacement of Items that deteriorates, whose maintenance costs increase with time without change in the money value - Replacement of items that fail suddenly: individual replacement policy				Solving • Case study Analysis

Reference Books:

1. Operations Research-K.K Chawla, and Vijay Gupta, Kalyani Publication
2. Operations Research- Theory and Applications: J.K. Sharma, Macmillan India Ltd.
3. Operations Research- S. Kalavathi, Vikas Publication.

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment 2023-24

Third Semester M. Com

Subject: Entrepreneurship Development (SC08)

Name of the Faculty: Mr. ROOPESH KUMAR N

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No hours required to complete	DATE	Method of Deployment

Module - 1 Concept of Entrepreneurship Evolution of Entrepreneurship - Types of Entrepreneur - Theories of Entrepreneurship - Stages in Entrepreneurial Process- Entrepreneurial Competencies - Role of Entrepreneurship in Economic Development - Factors affecting Entrepreneurship - entrepreneurial policy – culture and entrepreneurship- Case Study.	Evolution of Entrepreneurship in India	2	13/11/2023 to 15/11/2023	• Lecture • Case study • Field Survey
	Types of entrepreneurs	2	16/11/2023 to 17/11/2023	
	Theories of entrepreneurship	2	18/11/2023 to 20/11/2023	
	Stages in the entrepreneurial process	2	21/11/2023 to 22/11/2023	
	Entrepreneurial competencies	2	23/11/2023 to 24/11/2023	
	Role of entrepreneurship in the economic development of the country	2	26/11/2023 to 28/11/2023	
	Problems of entrepreneurship in India	2	29/11/2023 to 01/12/2023	
	Culture and Entrepreneurship	1	02/12/2023	
Module - 2 Establishing Enterprises: Generating new ideas – Entrepreneurial Motivation - Identifying the Business Opportunities - Business Plan -Meaning of business plan - Business plan process - Advantages of business planning -Innovation, Creativity, Invention Vs, Innovation - Marketing plan - Production/operations plan - Organization plan - Financial plan- Final Project Report with Feasibility Study - preparing a model project report for starting a new venture – case studies.	Process of establishing Enterprise	6	04/12/2023 to 11/12/2023	• Lecture • Case study • Field survey
	Business plan – case discussion	6	12/12/2023 to 19/12/2023	
	Case study discussion	3	20/12/2023 to 22/12/2023	
Module - 3 Institutions Supporting System: Role of Government in promoting Entrepreneurship -	Role of Government in entrepreneurship development in India	2	26/12/2023 to 28/12/2023	• Lecture • Case study
	SIDBI	1	29/12/2023	

A brief overview of financial institutions in India – Central level and state level institutions - SIDBI - NABARD - IDBI - SIDCO – Indian Institute of Entrepreneurship - DIC - Single Window - Latest Industrial Policy of Government of India- Start-up India- startups and climate for startups MUDRA Scheme. Start-up Karnataka – State's financing for start-ups at the state level.	NABARD	1	01/01/2024	
	IDBI	1	02/01/2024	
	SIDCO	1	04/01/2024	
	DIC	1	05/01/2024	
	Industry policy	3	08/01/2024 to 12/01/2024	
	Startup India	1	16/01/2024	
	MUDRA SCHEME	1	17/01/2024	
	State's financing for start-ups	3	18/01/2024 to 22/01/2024	
Module - 4 Managing the Enterprise: Financial Management: Working Capital Management - Financial Planning & Control - Marketing Management - Marketing Plan & Control - CRM – Product Development & Marketing –Production Management: Inventory Control, Productivity, and Break Even Analysis – Human Resource Management: Manpower Planning – Labor Productivity – Industrial Relations.	Financial Management: Working Capital Management	2	23/01/2024 to 25/01/2024	
	Financial Planning & Control	2	29/01/2024 to 30/01/2024	
	Marketing Management - Marketing Plan & Control - CRM	3	01/02/2024 to 05/02/2024	
	Product Development & Marketing	1	06/02/2024	
	Production Management: Inventory Control, Productivity, and Break Even Analysis	3	07/02/2024 to 12/02/2024	
	Human Resource Management: Manpower Planning – Labor Productivity	3	13/02/2024 to 17/02/2024	
	Industrial Relations	2	19/02/2024 to 20/02/2024	

References:

1. Vasant Desai, The Dynamicsof Entrepreneurial Development and Management, Himalaya Publishing House,2009.
2. Poornima M. Charantimath, 'Entrepreneurial Development And Small Business Enterprises", Pearson Education Licensee, New Delhi2006.
3. Matthias Fink, Sascha Kraus, The Management of Small and Medium Enterprises, Routledge Studies in Small Business,2009
4. S. Nagendra, V.S. Manjunath, "Entrepreneurship and Management", Pearson Education Licensee, New Delhi2011.

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment 2023-24

Third Semester M. Com

Subject: International Human Resource Management (SC09)

Name of the Faculty: Ms. BOJAMMA M N

Total Number of Working Hours Available: 60 Hours/week : 05

Prescribed Curriculum	topics	No. of Hours Required to Complete	Date	Method of Deployment
Module 1: Nature of international Human Resource Management (IHRM), Nature of international Human Resource Management (IHRM), Approaches to IHRM differences between domestic HRM and IHRM. Challenges of globalization and managing resources, Role of information technology in IHRM. Models of IHRM: Matching model, Harvard Model, Contextual Model, European Model and 5P Model, Role of culture in International HRM, HR practices in Japan, US, Europe and India- Country and Regional Cultures,	Nature of international Human Resource Management (IHRM),	3	15-11-2023 to 17-11-2023	• Lecture • Tutorial • Case study
	Approaches to IHRM, differences between domestic HRM and IHRM.	3	20-11-2023 to 22-11-2023	
	Challenges of globalization and managing human resources.	1	23-11-2023	
	Role of information technology in IHRM.	1	24-11-2023	
	Models of IHRM- Matching model, Harvard Model, Contextual Model, European Model and 5P Model,	4	27-11-2023 to 30-11-2023	
	Role of culture in International HRM	2	04-12-2023 to 05-12-2023	

Country Culture versus MNE Culture, Culture and employee management issues/ impact of Country culture on IHRM.	HR practices in Japan, US, Europe and India	2	06-12-2023 to 07-12-2023	
	Country and Regional Cultures, Country Culture versus MNE Culture	2	11-12-2023 to 12-12-2023	
	Culture and employee management issues/ impact of Country culture on IHRM.	2	13-12-2023 to 14-12-2023	
Module: 2 Human Resource Planning in IHRM: recruitment and selection issues in staff selection of expatriates, Training and development, expatriate training, developing international staff and multinational teams, Case study.	IHRM Planning - Introduction	1	15-12-2023	• Lecture • Tutorial • Case study
	Recruitment and selection	4	18-12-2023 to 21-12-2023	
	Issues in staff selection of expatriates,	2	25-12-2023 to 26-12-2023	
	Training and development, expatriate training,	3	27-12-2023 to 29-12-2023	
	Developing international staff and multinational teams,	2	02-01-2024 to 03-01-2024	
	Case study.	2	04-01-2024 to 05-01-2024	
Module:3 Performance Management: Factors associated with individual performance and appraisal criteria used for performance appraisal of international employees,	Factors associated with individual performance	2	08-01-2024 to 09-01-2024	• Lecture • Tutorial • Case study
	Appraisal criteria used for performance appraisal of international employees	2	10-01-2024 to 11-01-2024	
	Appraisal of host country nationals.	2	17-01-2024 to 18-01-2024	

appraisal of host country nationals. Compensation, objectives of international compensation approaches of international, compensation. Issues and challenges in international performance management, country specific performance management practices.	Compensation; objectives of international compensation approaches of international compensation.	3	22-01-2024 to 24-01-2024	
	Difference between performance appraisal and performance management	2	29-01-2024 to 30-01-2024	
	Issues and challenges in international performance management,	2	05-02-2024 to 06-02-2024	
	Country specific performance management practices.	2	07-02-2024 to 08-02-2024	
Module: 4 Expatriate Failure: Meaning, Causes of failure, Repatriation, Repatriation process. Labor relations, Key issues in international relations, strategic choices before firms, strategic choices before unions, union tactics.Case Studies.	Meaning of Expatriate failure, Causes of failure,	2	12-02-2024 to 13-02-2024	• Lecture • Tutorial • Case study
	Repatriation, Repatriation process.	2	14-02-2024 to 15-02-2024	
	Labour relations, Key issues in international relations,	2	19-02-2024 to 20-02-2024	
	Strategic choices before firms, strategic choices before unions, union tactics.	3	27-02-2024 to 29-02-2024	
	Case Studies	2	04-03-2024 to 05-03-2024	

Reference Books:

1. International Human Resource management –Pipparely, paperback 2011.

2. Principles of HRM—George W. Bohalandar, Scott. A Snell. November, 2016.

3. Fundamentals of HRM , Person , Garry Dressler, October,2016.

4. Human Resource management, John M. Ivancevich, Indian Edition.

5. Human Resource Development, D.K. Bhattacharya, Himalaya publishing house, 2015.

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment 2023-24

Third Semester M. Com

Subject: Goods and Services Tax and Customs Duty (SC12)

Name of the Faculty: Dr. UMA K

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No hours required to complete	DATE	Method of Deployment
Module 1: Introduction To GST– Background-- Constitutional Provision - Structure of Indian Tax System- Different Types of Taxes- Taxes Under Indirect Tax- Structure of GST -Types of GST – CGST- SGST- IGST- UTGST - Taxes Subsumed in GST - Taxes not Subsumed in GST- GST Council.	Introduction To GST– Background- Constitutional Provision	2	13/11/2023 to 14/11/2023	• Lecture • Case study • Practical Problems solved
	Structure of Indian Tax System-	2	15/11/2023 to 16/11/2023	
	Different Types of Taxes-	2	17/11/2023 to 18/11/2023	
	Taxes Under Indirect Tax-	2	19/11/2023 to 21/11/2023	
	Structure of GST -Types of GST-– CGST- SGST- IGST- UTGST	2	22/11/2023 to 23/11/2023	
	Taxes Subsumed in GST	2	24/11/2023 to 26/11/2023	
	Taxes not Subsumed in GST	2	27/11/2023 to 28/11/2023	
	GST Council.	2	29/11/2023 to 30/11//2023	

Module 2: Taxes Under GST- Supply of Goods & Services - Levy and Incidence of GST- Composition Levy Scheme in GST - Rates and Schedules- GST on Exports-Imports and SEZ Supplies- E-Commerce- Value of Supply- Input Tax Credit- Payment of Tax- Interest- Penalty-Accounts- Utilization of Input Tax Credit.	Supply of Goods & Services -	2	01/12/2023 to 04/12/2023	• Lecture • Case study • Practical Problems solved
	Levy and Incidence of GST	2	05/12/2023 to 08/12/2023	
	Composition Levy Scheme in GST -	2	09/12/2023 to 11/12/2023	
	Rates and Schedules-- GST on Exports-Imports and SEZ Supplies-	3	12/12/2023 to 14/12/2023	
	E-Commerce- Value of Supply- Input Tax Credit	3	15/12/2023 to 19/12/2023	• Lecture • Case study • Practical Problems solved
	Payment of Tax- Interest- Penalty-Accounts- Utilization of Input Tax Credit.	3	20/12/2023 to 22/12/2023	
Module 3: Other Aspects Under GST – Registration Under GST-Tax Invoice, Credit and Debit Notes- Returns- Payment of Tax- Assessment and Audit- Appeals and Revisions.	Registration Under GST-Tax	2	26/12/2023 to 29/12/2023	• Lecture • Case study • Practical Problems solved
	Tax Invoice	2	01/01/2024to 02/01/2024	
	Credit and Debit Notes	2	03/01/2024to 04/01/2024	
	Returns- Payment of Tax	2	05/01/2024to 08/01/2024	
	Assessment and Audit	2	09/01/2024 to 12/01/2024	
	Appeals and Revisions.	2	16/01/2024 to 22/01/2024	
Module 4: Customs Duty: Customs Act-1962 - Customs Tariff Act-and Applicable Rules – Authority	Customs Act-1962- Customs Tariff Act-and Applicable Rules	2	23/01/2024 to 25/01/2024	• Lecture • Case study • Practical Problems solved
	Authority for Advanced Ruling	2	29/01/2024 to 30/01/2024	

for Advanced Ruling - Provisions for Levy of Customs Duty- Types of Customs Duties- Classification of Goods - Valuation of Goods- Calculation of Assessable Value -Custom Duty Payable- Duty on Baggage- Goods Imported or Exported by Post and Stores- Duty Draw-Back Schemes- Impact of GST on Customs Duty- Case Studies.	Provisions for Levy of Customs Duty.	2	01/02/2024 to 02/02/2024	
	Types of Customs Duties- Classification of Goods -Valuation of Goods	2	03/02/2024 to 06/02/2024	• Lecture • Case study • Practical Problems solved
	Calculation of Assessable Value - Custom Duty Payable-	3	07/02/2024 to 12/02/2024	
	Duty on Baggage- Goods Imported or Exported by Post and Stores	3	13/02/2024 to 17/02/2024	
	Duty Draw-Back Schemes- Impact of GST on Customs Duty- Case Studies.	3	19/02/2024 to 20/02/2024	

References:

1. Goods and Services Tax -HC Mehotra-Sahitya Bhavan Publication
2. Goods and Services Tax with Customs Law-Dr Srinivas K.R, Dr. Jayaprasad and Dr Bhavani. M- Kalyani Publication
3. Goods and Services Law and Practice-CA Nitesh Parashar- Bharath's Publication
4. GST Manual: CA G Shekar-Padhuka's Publication
5. GST and Customs Law-Dr. K Vinod Singhania - Taxmann Publication

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment 2023-24

Third Semester M. Com

Subject: Corporate Restructuring (SC14)

Name of the Faculty: Shreenidhi N V

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No of hours required to complete	Date	Method of deployment
Module 1: Corporate Restructuring: Meaning-Significance and Forms of Restructuring–Sell-Off- Spin-Off-Divestitures- Demerger-Equity Carve Out (ECO)-Leveraged Buy Outs (LBO)- Management Buy Out (MBO)- Master Limited Partnership (MLP)- Limited Liability Partnership (LLP) and Joint Ventures.	Meaning-Significance and Forms of Restructuring–Sell-Off- Spin-Off-Divestitures- Demerger-Equity Carve Out (ECO)	3	13/11/2023 to 15/11/2023	• Lecture • Tutorial • Case study • Group discussion
	Leveraged Buy Outs (LBO)- Management Buy Out (MBO)- Master Limited Partnership (MLP)- Limited Liability Partnership (LLP) and Joint Ventures.	12	16/11/2023 to 30/11/2023	
Module 2: Introduction of Merger and Acquisition: Meaning-Types of Mergers–Merger Motives-Theories of Mergers-Mergers and Industry Life Cycle-Reasons for Failures of M &A-Synergy-Types of Synergy–Value Creation in M&A-**Merger Process-**Procedure for Effecting M & A-Five-	Meaning-Types of Mergers–Merger Motives-Theories of Mergers-Mergers and Industry Life Cycle-Reasons for Failures of M &A-Synergy	4	1/12/2023 to 5/12/2023	• Lecture • Tutorial • Case study • Presentation
	-Types of Synergy–Value Creation in M&A	4	6/12/2023 to 11/12/2023	
	Merger Process-Procedure for Effecting M & A-Five-Stage Model–Due Diligence–Types-Process	4	12/12/2023 to 18/12/2023	
	Challenges of Due Diligence-HR Aspects of M & A–Tips for Successful Mergers-Process of Merger Integration	3	19/12/2023 to 22/12/2023	

Stage Model–Due Diligence–Types-Process and Challenges of Due Diligence-HR Aspects of M & A–Tips for Successful Mergers-Process of Merger Integration				
Module 3: Acquisitions and Takeovers: Meaning and Types of Acquisition/Takeovers-Friendly and Hostile - Takeovers-Anti-Takeover Strategies-Anti-Takeover-Amendments-Legal-Aspects ofM&A-Combination and Competition.	Meaning and Types of Acquisition/Takeovers	5	23/12/2023 to 29/12/2023	• Lecture • Tutorial • Case study
	Friendly and Hostile - Takeovers-Anti-Takeover Strategies	5	30/12/2023 to 5/1/2024	
	Anti-Takeover-Amendments-Legal-Aspects of M&A-Combination and Competition.	5	06/1/2024 to 12/1/2024	
Module 4: Legal Aspects of Mergers, Amalgamations Acquisitions and Takeovers: Combination and Competition Act-Competition Commission of India (CCI)- CCI Procedure in	Combination and Competition Act-Competition Commission of India (CCI**)**	5	13/1/2024 to 19/1/2024	• Lecture • Tutorial • Presentation • Case study
	CCI Procedure in Regard to the Transactions of Business Relating to Combination	4	24/1/2024 to 30/1/2024	
	Scheme of Merger/Amalgamation-EssentialFeatures of the Scheme of Amalgamation-Approvals for the	3	1/2/2024 to 5/2/2024	

Regard to the Transactions of Business Relating to Combination - Scheme of Merger/Amalgamation-EssentialFeatures of the Scheme of Amalgamation-Approvals for the Scheme-Step Wise Procedure-Acquisitions/Takeovers-Listing Agreement-The SEBI Substantial Acquisition of Shares and Takeover Code.	Scheme-Step Wise Procedure			
	Acquisitions/Takeovers-Listing Agreement-The SEBI Substantial Acquisition of Shares and Takeover Code.	3	6/2/2024 to 9/2/2024	

Reference Books:

References:

1. Mergers, Acquisitions & Corporation Restructuring- Rabi Narayan Kar-International Book House Private Limited.

2. Mergers, Restructuring and Corporate Control-Fred Weston, Kwang S Sung, Susan E Hoag-Pearson, 1 st Edition, 2016.

3. Creating Value from Mergers and Acquisitions, Pearson Education, 2nd Edition, 2016.

4. Donald M. Depamphilis, Mergers, Acquisitions & Corporation Restructuring-Sudi Sudarasanam-International Book House Private Limited.

5. Mergers, Acquisitions & Corporate Restructuring- Prasad Godbole-Vikas Publication.

6. Mergers and Acquisitions & Takeovers-Machi Raju- International Book House.

8. Investment Valuation-Ashwath Damodaran- John Wiley & Sons Inc.

Mahajana Education Society
SBRR Mahajana First Grade College (Autonomous)
PG Wing Pooja Bhagavat Memorial Mahajana Education Centre
KRS Road, Mysore – 570 016

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment

Fourth Semester M. Com 2023 -2024

Subject: International Accounting (HC10)

Name of the Faculty: Dr. UMA K
Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	topics	No. of Hours Required to Complete	Date	Method of Deployment
Module 1: An Introduction to International Accounting: Definition - need and scope of international accounting - Factors that contribute to accounting diversity at the international level - Harmonization of accounting - International financial Reporting standards - Ethical issues in International Accounting - Analysis of annual reports and case studies	Definition - need and scope of international accounting	2	08/04/2024 to 09/04/2024	• Lecture • Tutorial • Case study
	Factors that contribute to accounting diversity at the international level	2	10/04/2024 to 12/04/2024	
	Harmonization of accounting -	2	15/04/2024 to 16/04/2024	
	International Financial Reporting Standards	1	18/04/2024	
	Ethical issues in International Accounting	2	19/04/2024 to 22/04/2024	
	Analysis of annual reports and case studies	3	23/04/2024 to 26/04/2024	
Module 2: Accounting for Foreign Exchange Rate Fluctuations: An overview of foreign currency markets and exchange rates - Foreign exchange exposure-transaction,	An overview of foreign currency markets and exchange rates	2	29/07/2024 to 30/04/2024	• Lecture • Tutorial • Case study • Problem solving
	Foreign exchange exposure-transaction, translation and operating -	2	02/05/2024 to 03/05/2024	
	Accounting for foreign currency transaction	2	06/05/2024 to 07/05/2024	

anslation and operating - ccounting for foreign urrency transaction-Spot nd Forward foreign urrency transactions - ingle-transaction pproach and Two- ransaction Approach - unctional versus eporting currency - oreign currency anslation methods- urrent rate method - urrent/Non-Current ethod - Monetary/Non- Ionetary method and emporal method - roblems and Case study nalysis	Spot and forward foreign currency transactions - Single-transaction approach and Two-Transaction Approach	2	08/05/2024 to 09/05/2024	
	Functional versus Reporting currency	1	13/05/2024	
	Foreign currency translation methods-	3	14/05/2024 to 15/05/2024	
	Current rate method - Current/Non-Current method	3	16/05/2024 to 21/05/2024	
	Monetary/non-monetary method and Temporal method - Problems	3	22/05/2024 to 24/05/2024	
	Case Study problems	2	27/05/2024 to 28/05/2024	
Iodule 3: International ransfer Pricing: volution - Meaning and bjectives of transfer ricing - Determinants of nternational Transfer ricing -Major stakeholders ffected by transfer pricing olicies - Arm's Length rice (ALP) - Steps in the rocess of computing ALP- LP methods - Comparable ncontrolled price method CUP)-Resale price method RPM) - Cost Plus method CPM) - Profit Split method	Evolution - Meaning and Objectives of transfer pricing	2	29/05/2024 to 31/05/2024	• Lecture • Tutorial • Case study • Problem solving
	Determinants of International Transfer Pricing	1	01/06/2024 to 03/06/2024	
	Transfer Pricing -Major stakeholders affected by transfer pricing policies	2	04/06/2024 to 06/06/2024	
	Arm's Length price (ALP) - Steps in the process of computing ALP	2	07/06/2024 to 10/06/2024	
	ALP methods - Comparable Uncontrolled price method (CUP)-Resale price method	2	11/06/2024 to 12/06/2024	
	Cost Plus method (CPM) - Profit Split method (PSM) - Transaction Net margin method (TNMM). Problems and Analysis of Case Studies.	4	13/06/2024 to 14/06/2024	

PSM) - Transaction Net argin method (TNMM). roblems and Analysis of ase Studies.				
Iodule 4: XBRL for nternational Financial eporting: Framework of xtensible Business eporting Language. nternational XBRL axonomy Architecture - he IFRS XBRL axonomy - The US GAAP BRL taxonomy etc. - BRL implementation in ountries around the world - nalysis of Case Studies.	Framework of extensible Business Reporting Language	1	18/06/2024	• Lecture • Tutorial • Case study
	International XBRL	1	19/06/2024 to 20/06/2024	
	Taxonomy Architecture	1	21/06/2024 to 24/06/2024	
	The IFRS XBRL Taxonomy	1	25/06/2024	
	The IFRS XBRL Taxonomy - The US GAAP XBRL taxonomy etc.	2	26/06/2024 to 28/07/2024	
	XBRL implementation in countries around the world	4	01/07/2024 to 02/07/2024	
	Analysis of Case Studies	4	03/07/2024 to 10/07/2024	

Reference Books:

1. International Accounting by Shirin Rathore, Prentice-Hall of India,
2. New Delhi
3. Comparative International Accounting by Christopher Nubs and Robert Parker, Pearson Education Asia, New Delhi.
4. Timothy Doupnik and Hector Perera. International Accounting, 4th Edition, McGraw-Hill Education.2015
5. International Accounting: A User Perspective by Shahrokh M. Saudagaran, South- Western Thomson Learning,Australia.
6. International Accounting by A.K.DasMohapatra, Prentice-Hall of India, New Delhi
7. The Analysis and use of Financial Statements by GerladI.White, AshwinipaulC.Sondhi and Dov Fried, John Wiley, New York.
8. The Economic Times, The Business Line and Financial Express dailypapers.
9. Journals on International Accounting.

Websites:

www.iasb.org.
www.worldbank.org.
www.unctad.org. etc.
www.xbrl.org.

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment

Fourth Semester M. Com 2023 -2024

Subject: Strategic Management (HC11)

Name of the Faculty: Ms. BOJAMMA M N

Total Number of Working Hours Available: 60 **Hours/week: 05**

Prescribed Curriculum	topics	No. of Hours Required to Complete	Date	Method of Deployment
Module 1: Strategic Management: Introduction to Management and Strategy, Need for Strategic Management- Strategic Management process – Strategic management in Business units – Corporate, divisional and functional level strategies, Strategic Management in Non -profit Organizations, - Participants in Strategic Management – Strategic Decision Making- Process of Strategic Decision Making, Strategic Planning- process of strategic planning, Strategic Formulation and Analysis- Vision, Mission, Goal and Objectives ,- Case Studies.	Introduction to Management and Strategy,	2	18-04-2024 to19-04-2024	• Lecture • Tutorial • Case study
	Need for Strategic Management- Strategic Management process	2	22-04-2024 to 23-04-2024	
	Strategic management in Business units – Corporate, divisional and functional level strategies,	3	24-04-2024 to 26-04-2024	
	Strategic Management in Non -profit Organizations,	1	29-04-2024	
	Participants in Strategic Management	1	30-04-2024	
	Strategic Decision Making- Process of Strategic Decision Making,	2	02-05-2024 to 03-05-2024	
	Strategic Planning- process of strategic planning,	2	06-05-2024 to 07-05-2024	
	Strategic Formulation and Analysis	2	08-05-2024 to 09-05-2024	
	Vision, Mission, Goal and Objectives ,- Case Studies.	3	13-05-2024 to 15-05-2024	
Module 2: Strategic Analysis and Choice: Environmental Analysis – Concepts of Strategic Choice, - Steps in the Process of Strategic Choice- Techniques used for Strategic Analysis-- Corporate Portfolio Analysis	Environmental Analysis – Concepts of Strategic Choice,	2	16-05-2024 to 17-05-2024	• Lecture • Tutorial • Case study
	Steps in the Process of Strategic Choice- Techniques used for Strategic Analysis	3	20-05-2024 to 22-05-2024	
	Corporate Portfolio Analysis	2	23-05-2024 to 24-05-2024	
	Environmental Threat and Opportunity Profile (ETOP)	2	27-05-2024 to 28-05-2024	
	Boston Consultancy group (BCG) Matrix	2	29-05-2024 to 30-05-2024	

- Environmental Threat and Opportunity Profile (ETOP) – Boston Consultancy group (BCG) Matrix – General Electronics 9 Cell Matrix - Porter's Five Forces Model of competition –McKinsey's 7s Framework Model - Case Study.	General Electronics 9 Cell Matrix	2	01-06-2024 to 03-06-2024	
	Porter's Five Forces Model of competition	2	04-06-2024 to 05-06-2024	
	McKinsey's 7s Framework Model - Case Study.	3	06-06-2024 to 08-06-2024	
Module 3: Strategy Implementation: Formulation of Strategy at Corporate, Business and Functional Levels, - Interrelationship between Formulation and Implementation. Issues in Implementation of Strategies - Project implementation – Procedural implementation - Resource Allocation - Budgets - Organization Structure –Matching structure and strategy - Behavioral issues - Leadership style – Corporate culture - Values - Power - Social responsibilities – Ethics, Case Study- Case Study.	Formulation of Strategy at Corporate, Business and Functional Levels,	2	10-06-2024 to 11-06-2024	• Lecture • Tutorial • Case study
	Interrelationship between Formulation and Implementation.	2	12-06-2024 to 13-06-2024	
	Issues in Implementation of Strategies - Project implementation – Procedural implementation	2	24-06-2024 to 25-06-2024	
	Resource Allocation - Budgets - Organization Structure	2	26-06-2024 to 27-06-2024	
	Matching structure and strategy	2	28-06-2024 to 29-06-2024	
	Behavioral issues - Leadership style – Corporate culture	2	01-07-2024 to 02-07-2024	
	Values - Power - Social responsibilities – Ethics, Case Study- Case Study.	3	03-07-2024 to 05-07-2024	

Module 4: Strategy Evaluation: Concept and purposes of strategic evaluation and analysis, GAP analysis; Role of organizational systems in evaluation, Strategic Control and Operational Control: Types of Strategic Controls, Process of Operational Control - Evaluation Techniques for Strategic and Operational Control-- Case Study.	Concept and purposes of strategic evaluation and analysis,	2	08-07-2024 to 09-07-2024	• Lecture • Tutorial • Case study
	GAP analysis; Role of organizational systems in evaluation,	2	10-07-2024 to 11-07-2024	
	Strategic Control and Operational Control: Types of Strategic Controls,	2	12-07-2024 to 15-07-2024	
	Process of Operational Control - Evaluation Techniques for Strategic and Operational Control	2	22-07-2024 to 24-07-2024	
	Case Studies	1	25-07-2024	

References:

1. A concept of corporate planning-, Russel Ackoff, Newyork wiley
2. Business policy and strategic management- Tokyo, McGraw hill
3. Strategic Management-Text and Cases- V.S.P. Rao and V.Harikrishna
4. Strategic Management-Azar Kazmi
5. Strategic Management-Francis Cherunillam
6. Strategic Management-Subba Rao
7. Strategic Planning Formulation of Corporate Strategy -Ramaswamy
8. Strategic Management, 12th Ed. - Concepts and Cases - Arthur A. Thompson Jr. And A.J. Strickland
9. Management Policy and Strategic Management (Concepts, Skills and Practices R.M. Shrivastava
10. Strategic Management –Pearce
11. Strategy & Business Landscape –Pankaj Ghemawat

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment

Fourth Semester M. Com 2023 -2024

Subject: Corporate Tax Laws and Planning (SC19)

Name of the Faculty: Dr. ROOPESH KUMAR N

Total Number of Working Hours Available: 60

Prescribed Curriculum	topics	No. of Hours Required to Complete	Date	Method of Deployment
Module 1: Introduction: Basic Framework of Corporate Tax Laws- Types of Company- Residential status of a Company and Incidence of Tax - Corporate Tax Planning-, Tax Evasion and Tax Avoidance. Tax Planning & Tax Management	Basic Framework of Corporate Tax Laws	2	08/04/2024 to 09/04/2024	• Lecture • Tutorial • Case study
	Types of Company	2	10/04/2024 to 12/04/2024	
	Residential status of a Company and Incidence of Tax	2	15/04/2024 to 16/04/2024	
	Corporate Tax Planning	1	18/04/2024	
	Tax Evasion and Tax Avoidance	2	19/04/2024 to 22/04/2024	
	Tax Planning & Tax Management.	3	23/04/2024 to 26/04/2024	
Module 2: Computation of Taxable Income- Computation of taxable	Computation of taxable income under different heads of income	1	29/07/2024	• Lecture • Tutorial • Case study
	House property	1	30/04/2024	

ncome under different eads of income - House roperty - Profit and Gain om Business or rofession - Capital Gain nd Income from Other ources - Treatment of orporate Loss - Carry orward and Set-off of osses - Deductions, xemptions and Concisions om Gross Total Income - Minimum Alternative Tax ec 115 JB - Importance nd Objectives - alculation on Book Profit Case Studies.	Profit and Gain from Business or Profession	2	02/05/2024 to 03/05/2024	• Problem solving
	Capital Gain	2	06/05/2024 to 07/05/2024	
	Income from Other Sources	2	08/05/2024 to 09/05/2024	
	Treatment of Corporate Loss - Carry Forward and Set-off of Losses	1	13/05/2024	
	Deductions, Exemptions and Concisions from Gross Total Income	2	14/05/2024 to 15/05/2024	
	Minimum Alternative Tax Sec 115 JB	3	16/05/2024 to 21/05/2024	
	Calculation on Book Profit	3	22/05/2024 to 24/05/2024	
	Case Study problems	2	27/05/2024 to 28/05/2024	
Iodule 3: Tax Planning nd Managerial Decision: ax Planning Relating to apital Structure - Make or uy - Buy or Lease- Own or ease - Purchase by nstallment or by Hire – hut Down or Continue perations.	Tax Planning Relating to Capital Structure	2	29/05/2024 to 31/05/2024	• Lecture • Tutorial • Case study • Problem solving
	Make or Buy	2	01/06/2024 to 03/06/2024	
	Buy or Lease	2	04/06/2024 to 06/06/2024	
	Own or Lease	2	07/06/2024 to 10/06/2024	
	Purchase by Installment or by Hire	2	11/06/2024 to 12/06/2024	
	Shut Down or Continue Operations.	2	13/06/2024 to 14/06/2024	
Iodule 4: Procedure for ssessment- Assessment ypes- Hierarchy of Tax uthority Deduction of Tax t Source (TDS) - Duties nd Responsibilities of DS Officer -Collection of ax at Source (TCS) -	Assessment Types	1	1806/2024	• Lecture • Tutorial • Case study
	Hierarchy of Tax Authority	2	19/06/2024 to 20/06/2024	
	Deduction of Tax at Source (TDS)	2	21/06/2024 to 24/06/2024	
	Duties and Responsibilities of TDS Officer	1	25/06/2024	

emittance of Tax - dvance Payment of Tax- ax Returns – Refunds - ppeals and Revisions - reparation and Issue of ifferent Forms for Tax ollection - FORM-16 and ORM 3CA- 3CB and 3CD Case Studies.	Collection of Tax at Source (TCS) - Remittance of Tax	2	26/06/2024 to 28/07/2024	
	Advance Payment of Tax	2	01/07/2024 to 02/07/2024	
	Tax Returns – Refunds - Appeals and Revisions	2	03/07/2024 to 04/07/2024	
	Preparation and Issue of Different Forms for Tax Collection - FORM-16 and FORM 3CA- 3CB and 3CD	2	05/07/2024 to 08/07/2024	
	Case Studies	2	09/07/2024 to 10/07/2024	

Reference Books:

1. Direct Taxes-H.C. Mehrotra and Dr.S.P. Goyal -Sahitya Bhavn Publication.
2. Corporate Tax Planning & Business Tax Procedures- Vinod K Singhania & Monica Singhania - Taxmann Publication
3. Simplified Approach to Corporate Tax Planning & Management-Dr Girish Ahuja- Bharat's Publication. Master Guide to Corporate Taxation-O. P Yadav- Lexis Nexis
4. Corporate Tax Planning and Management- Lakhotia-Vision Publishers

Department of Studies in Commerce

Lesson Plan and Curriculum Deployment

Fourth Semester M. Com 2023 -2024

Subject: Financial Derivatives (SC21)

Name of the Faculty: Shreenidhi N V

Hours/Week: 5 **Total Hours: 60**

Prescribed Curriculum	Topics	No of hours required to complete	Date	Method of deployment
Module 1: Introduction to Derivatives: forwards - Futures - options – swaps - trading mechanisms - Exchanges - Clearing house - structure and operations - regulatory framework - Floor brokers - Initiating trade - and Liquidating or Future position.	Forwards - Futures - options – swaps - trading mechanisms Exchanges - Clearing house - structure and operations	6	08/04/2024 to 15/04/2024	• Lecture • Tutorial • Case study • Group discussion
	Regulatory framework - Floor brokers - Initiating trade - and Liquidating or Future position	9	16/04/2024 to 30/04/2024	
Module2: Future and Forward Contracts: Structure of future and forward contracts financial futures - Valuation of forward and future prices - Margins - Initial margins - Variation margins Stock index futures - Valuation of stock index futures - Index futures - heading using stock index future contracts - Adjusting Beta of a portfolio using stock - Interest rate futures and currency futures.	Structure of future and forward contracts financial futures	5	01/05/2024 to 09/05/2024	• Lecture • Tutorial • Case study • Presentation
	Valuation of forward and future prices - Margins - Initial margins - Variation margins Stock index futures	4	10/05/2024 to 15/05/2024	
	Valuation of stock index futures - Index futures - heading using stock index future contracts	3	16/05/2024 to 20/05/2024	

	Adjusting Beta of a portfolio using stock - Interest rate futures and currency futures.	3	21/05/2024 to 25/05/2024	
Module 3: Options: Trading in Options –Factors impacting Option Prices - Pricing of Options - Models of valuation - Binomial and Black-Scholes model Option pricing – The Greeks.	Factors impacting Option Prices - Pricing of Options	4	27/05/2024 to 31/05/2024	• Lecture • Tutorial • Case study
	Models of valuation - Binomial and Black-Scholes model Option pricing – The Greeks	11	01/06/2024 to 12/06/2024	
Module4: Swaps: Evolution - Types of Swaps-Currency Swaps-Interest Rate Swaps - Designing Currency and Interest Rate Swaps - Valuation of Swaps.	Types of Swaps-Currency Swaps-Interest Rate Swaps	10	13/06/2024 to 29/06/2024	• Lecture • Tutorial • Presentation • Case study
	Designing Currency and Interest Rate Swaps - Valuation of Swaps	5	05/07/2024 to 10/07/2024	

Reference Books:

1. Introduction to Futures and Options Markets – By John Hull
2. Financial Derivatives – G. Kotreshwar

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Lesson Plan – 1 Semester 2023-24

Sl. No.	**Title of the Paper**	**Course Type**	**Credit Pattern**			**Total Credits**
			L	T	P	
1	Fundamentals of Biochemistry	FCHC	3	1	0	4
2	Techniques in Biology	FCHC	3	1	0	4
3	Molecular Cell Biology	FCHC	3	1	0	4
4	Bioorganic and Bioinorganic Chemistry	HC	3	0	0	3
5	**Practical 1A** Experiments in Biological techniques and Bioorganic chemistry & Tour Report (Laboratory Visit and Tour Report)	HC	0	0	2	2
6	**Practical 1B** Experiments in Cell Biology, Genetics and Bioinorganic chemistry & Seminar	HC	0	0	2	2
	Soft Core (Any One)					
7	Genetics	FCSC	3	0	0	3
	Membrane Biology	SC	3	0	0	3
TOTAL CREDITS: 22 6 Hard Core (HC): 19 Credits; 1 Soft Core (SC): 03 credits						

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Lesson Plan – 1 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Fundamentals of Biochemistry [Course code:**23F101**]
Term Period: November to March
Hrs./week:03
Total Hrs.: 48

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Module 1 Basics of Chemical Bonding and Carbohydrates	**Bonding:** Covalent bond; coordinate bond; coordinate bond formation in transition metals.	03	22-11-2023 To 28-11-2023	Lecture
	Bonding of iron in hemoglobin and cytochromes, cobalt in Vit B12, magnesium in chlorophyll. Special properties of water;	03	29-11-2023 To 04-12-2023	Lecture
	Structure and bonding, non-covalent interactions, reactions of carbohydrates.	03	05-12-2023 To 11-12-2023	Lecture
	Carbohydrates: Structure and classification of carbohydrates, monosaccharides (pentoses, hexoses), and polysaccharides) explanations.	03	12-12-2023 To 18-12-2023	Lecture
	Disaccharides (lactose, sucrose, maltose)	03	19-12-2023 To 26-12-2023	Lecture
	Polysaccharides (starch, cellulose, glycogen and bacterial cell wall	03	27-12-2023 To 31-12-2023	Lecture
Module 2 Basics of	Amino acids: Nomenclature, classification and buffering properties,	02	02-01-2024 To 03-01-2024	Lecture

Amino Acids and Proteins	Zwitterionic structure, reactions of Amino acids.	02	03-01-2024 To 08-01-2024	Lecture
	Proteins: Primary, secondary, tertiary and quaternary structures, protein sequencing.	02	10-01-2024 To 17-01-2024	Lecture
	Factors responsible for protein folding: Anfinsen's experiment. Non-covalent interactions and S-S bridges in stabilizing the proteins,	02	18-01-2024 To 22-01-2024	Lecture
	Denaturation and renaturation of proteins, molten globule, chaperones.	02	22-01-2024 To 23-01-2024	Lecture
Module 3 Basics of Lipids& Enzymology	**Lipids:** Classification & reaction of lipids; oils, fats, and waxes. Occurrence and properties of fatty acids, esters of fatty acids,	02	24-01-2024 To 29-01-2024	Lecture
	Cholesterol, phospholipids, glycolipids, sphingolipids, cerebrosides and gangliosides. Role in celL membrane.	02	05-02-2024 To 06-02-2024	Lecture
	Enzymology: Classification, enzyme activity, Michaelis-Menten kinetics, LB plot, inhibition - competitive, uncompetitive, non-competitive, determination of Ki,	02	07-02-2024 To 12-02-2024	Lecture
	Active site, allosterism - ATCase, isoenzymes- LDH, catalytic strategies, co-enzymes and cofactors, multienzyme complexes-PDC.	02	13-02-2024 To 14-02-2024	Lecture
Module 4 Basics of Nucleic Acids	**Nucleic Acids**: DNA as genetic material ,Griffith ,Avery & Macleod experiments ,	03	19-02-2024 To 20-02-2024	Lecture
	Isolation of DNA & RNA from biological sources, secondary structure of DNA,	03	21-02-2024 To 26-02-2024	Lecture
	Watson and Crick model, Chargaff's rule; B and Z DNA. Features of mitochondrial, chloroplast DNA and plasmids.	03	27-02-2024 To 29-02-2024	Lecture
	Secondary structure of tRNA and clover leaf model. Physiochemical properties of nucleic acids, melting of DNA, T_m; factors affecting T_m, Cot curve, classification of DNA basedon Cot curve.	03	04-03-2024 To 06-02-2024	Lecture

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Lesson Plan – 1 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Techniques in Biology [Course code:**23F102**]
Term Period: November to March
Hrs/week:03
Total Hrs: 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module-I Biological samples	Tissue homogenization, Cell lysis techniques, extraction of cell cellularcontents.	2	23-11-2023	Lecture
	Protein purification techniques: salting in, salting out,	2	24-11-2023	Lecture
	Dialysis and ultrafiltration.	2	25-11-2023	Lecture
	Centrifugation: Svedberg's constant, sedimentation velocity and sedimentation equilibrium	2	30-11-2023	Lecture
	Differential and density gradient centrifugation	2	1-12-2023	Lecture
	centrifugal elutriation, isolation of cell organelles (e.g. Mitochondria) from biological tissue samples	2	02-12-2023	Lecture
Module-II Spectroscopic analysis	Principles and applications of colorimeter, IR, ESR,NMR& Raman's spectroscopy	3	04-12-2023 To 06-12-2023	Lecture

	spectrophotometer, fluorimeter	2	08-12-2023 To 09-12-2023	Lecture
	multiwell plate reader. Beer-Lambert's Law and its limitations	2	12-12-2023	Lecture
	Extinction coefficient, chromogenic and fluorescent probes their applications	3	14-12-2023	Lecture
	Principle of flame photometry, and X-ray crystallography	2	15-12-2023	Lecture
Module-III Chromatographic and electrophoretic techniques	Principles,working and applications of paper chromatography (radial, ascending, descending and 2-D),	2	16-12-2023	Lecture
	Brief introduction, application of Adsorption, Ion exchange,Gel Filtration	1	21-12-2023 To 23-12-2023	Lecture
	Affinity, Gas chromatography. Chromatofocusing	2	28-12-2023 To 30-12-2023	Lecture
	HPLC, UPLC and FPLC.	1	04-01-2024	Lecture
	Polyacrylamide gel electrophoresis, SDS-PAGE, IEF & 2DEF. Visualizing proteins using CBB, silver stain; glycoproteins and lipoproteins staining	2	05-01-2024 To 06-01-2024	Lecture
	Brief introduction to Zymogram and reverse zymogram	1	10-01-2024	Lecture

	Agarose gel electrophoresis, Visualizing nucleic acids in using Ethidium bromide	2	11-01-2024 To 13-01-2024	Lecture
	Fluorescence probes: SYBR green and Eeva green, Taq	1	18-01-2024 To 27-01-2024	Lecture
Module-IV Radiochemistry and Mass spectroscopy Isotopes	Heavy isotopes and radio isotopes, half-life, decay constant, detection and quantitation	3	02-02-2-24 To 10-02-2024	Lecture
	Principle and working of GM counter and scintillation counter (solid/liquid).	3	15-02-2024 To 17-02-2024	Lecture
	SpectroscopyPrinciple and construction of mass spectrometer. m/e, tof, MALDI and ESI. LC-MS, LC-MS-MS	3	22-02-2024 To 24-02-2024	Lecture
	Radio isotopes in biology 3H, 14C, 32P, 131I,35S; Labeling of proteins and nucleic acids, autoradiography, pulse chase method, carbon dating	3	29-02-2024 To 07-03-2024	Lecture

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Lesson Plan – 1 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Molecular Cell Biology [Course code:**23F103**]
Term Period: November to March
Hrs/week:03
Total Hrs: 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
ModuleI **Organization of the cell**	Universal features of cells,	2	22-11-2023	Lecture
	Ultra structure of prokaryotic and eukaryotic cells (Plants and animals),	2	23-11-2023 To 28-11-2023	Lecture
	Structure of plant cell wall, Structure of cell membrane and models,	2	29-11-2023	Lecture
	functions of cell membrane, Intracellular organelles:	2	30-11-2023	Lecture
	Structure and functions of Ribosomes, Golgi apparatus; Mitochondria,	1	04-12-2023	Lecture
	Chloroplast, Lysosomes, Centrosome, Endoplasmicreticulum, Nucleus-Internal organization,	1	05-12-2023	Lecture
	Chromatin- structure and function, cellularcytoskeleton.	2	06-12-2023	Lecture

Module II **Cellular processes**	Cell cycle and its regulation	1	11-12-2023	Lecture
	Cell cycle check points, Molecular dynamics of cell division, interphase,	1	12-12-2023	Lecture
	Mitosis and meiosis	2	13-12-2023	Lecture
	Cyclins and CDKs, Cell differentiation: Stem cells	2	18-12-2023	Lecture
	Differentiation of stem cells into different cell types and organization into specialized tissues,apoptosis, necrosis & autophagy	2	19-12-2023	Lecture
	Molecular mechanisms of membrane transport active, passive and facilitated, Receptor mediatedendocytosis.	2	20-12-2023 To 26-12-2023	Lecture
Module III **Cancer Biology**	Introduction, Historical account, classification	2	27-12-2023	Lecture
	Characteristics of cancer cells, hallmark features of cancer cells, Carcinogenesis,	2	31-12-2023	Lecture
	Exogenous and endogenous carcinogens, cancer initiation	2	01-01-2024	Lecture
	promotion and progression, Cancer cell cycle, Viruses and cancer, Oncogenes	2	02-01-2024	Lecture
	Tumor suppressor genes with examples, cancer therapy present and future,	2	03-01-2024 To 08-01-2024	Lecture
	Role of p53 in cancer. Role of phytochemicals in cancer treatment, cancer stem cells.	2	09-01-2024	Lecture

Module IV **Basics of Signal Transduction**	Extra-cellular matrix components, Cell junctions, Cell adhesion molecules,	2	10-01-2024 To 17-01-2024	Lecture
	Hormones and their receptors, Cell surface receptors as reception of extra- cellular signals,	2	18-01-2024	Lecture
	Types of cell signalling, Growth factors- EGFR, VEGF, PDGF and theirSignalling,	2	22-01-2024 To 24-01-2024	Lecture
	signalling through G-protein coupled receptors	2	05-02-2024 To 07-02-2024	Lecture
	Second messengers in signal transduction pathways:	2	12-02-2024	Lecture
	cAMP and calcium ions (Ca2+), signalling through Receptor tyrosine kinases	1	19-02-2024 To 21-02-2024	Lecture
	MAP kinase pathway,P13K - Akt pathway.	1	26-02-2024	Lecture

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Lesson Plan – 1 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Bioorganic and Bioinorganic Chemistry [Course code: **23F104**]
Term Period: November to March
Hrs./week:03
Total Hrs.: 48

Prescribed Curriculum	**Topics**	**No. of hours required to complete**	**Date**	**Method of deployment**
Module 1 Bonding	Covalent bond; coordinate bond; coordinate bond formation in transition metals.	03	23.11.2023 24.11.2023	Lecture
	Bonding of iron in hemologibin and cytochromes, cobalt in Vit B12, magnesium in chlorophyll. Special properties of water; Structure and bonding.	03	28.11.2023 2.12.2023 5.12.2023	Lecture
	Crystal field theory; Ligand field theory and Valence bond theory.	03	6.12.2023 9.12.2023	Lecture
	Chelators; types of ligands and complexes.	03	13.12.2023 18.12.2023	Lecture
Module 2 Electrolytes, Non-Electrolytes and Electrodes	Osmotic pressure, vapor pressure, osmometer, Donnan membrane equilibrium.	06	19.12.2023 20.12.2023 10.01.2024	Lecture
	Hydrogen electrode, electrode potential, and redox potential.	06	16.01.2024 17.01.2024 23.01.2024	Lecture
Module 3 Stereochem	Importance of stereochemistry, position and order of groups	03	24.01.2024	Lecture

istry:	around carbon.			
	Geometric and optical isomerism; absolute and relative configuration.	03	10.02.2024	Lecture
	Symmetry view of chirality, relation between chirality and optical activity, representation of chiral structures by Fischer.	03	13..02.2024	Lecture
	Structure and stereochemistry of sugars and amino acids; anomer, epimer, diastereomer, sterioisomer, D and L, (+) and (-), R and S.	03	14.02.2024	Lecture
Module 4 Mechanism of organic reactions and Heterocyclic compounds:	Intermediates and rearrangements in organic reaction. Reaction energetic. Classification of rearrangement reactions.	03	15.02.2024	Lecture
	Reaction rates, order and molecularity of reaction. Mechanisms and stereochemistry of substitution (electrophilic and nucleophilic - sN1 and sN2 reactions) addition, elimination and rearrangement reactions.	03	16.02.2024	Lecture
	Mechanisms of ester hydrolysis. Property of aromaticity and resonance.	03	19.02.2024	Lecture
	Chemistry of furan, indole, thiazole, pterine, pteridine, isoalloxazine, pyrrole. Chemistry of porphyrins and heme and their biological importance.	03	27.02.2024 28.02.2024	Lecture

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Lesson Plan – 1 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Practical IA
Experiments in Biological techniques and Bioorganic chemistry & Tour Report (Laboratory Visit and Tour Report) [Course code: **23F105**]
Term Period: December to March
Hrs/week:12
Total Hrs: 64

Prescribed curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Collection of Distilled water, Preparation of Buffers, Molarity calculation	Collection of Distilled water, Preparation of Buffers, Molarity calculation	03	08.12.2023	Practical
Preparation of Buffers	Preparation of Buffers	03	13.12.2023	Practical
Microscopic examination of prokaryotic and eukaryotic cells using staining techniques	Microscopic examination of prokaryotic and eukaryotic cells using staining techniques	03	14.12.2023	Practical
Cell Counting using hemocytometer	Cell Counting using hemocytometer	03	18.12.2023	Practical
Micrometry.	Micrometry.	03	19.12.2023	Practical
Assessment of cell viability and cytotoxicity.	Assessment of cell viability and cytotoxicity.	03	20.12.2023	Practical
Preparation of	Preparation of liquid	03	21.12.2023	Practical

liquid and solid media for growth of microorganisms	and solid media for growth of microorganisms			
Isolation and maintenance of microorganisms (from soil and water) by plating, streaking and serial dilution methods, slants and stab cultures.	Isolation and maintenance of microorganisms (from soil and water) by plating, streaking and serial dilution methods, slants and stab cultures.	03	26.12.2023	Practical
Culturing the anaerobic bacteria by candle jar method.	Culturing the anaerobic bacteria by candle jar method.	03 03	26.12.2023 28.12.2023	Practical Practical
Gram staining	Gram staining	03 03	01.01.2024 02.01.2024	Practical
Ultra-violet killing curve and determination of mutant types in *Saccharomyces cerevisiae*	Ultra-violet killing curve and determination of mutant types in *Saccharomyces cerevisiae*	03	03.01.2024	Practical
Isolation of cell organelles.: Isolation of mitochondria from the animal sources and MTT reduction assay.	Isolation of cell organelles.: Isolation of mitochondria from the animal sources and MTT reduction assay.	03	04.01.2024	Practical
Estimation of mitochondrial enzymes : Succinate Dehydrogenase (ETC complex II)	Estimation of mitochondrial enzymes : Succinate Dehydrogenase (ETC complex II)	03	08.01.2024	Practical
Study of mitosis in onion root tips.	Study of mitosis in onion root tips.	03	10.01.2024	Practical
Study of meiosis in onion flower buds	Study of meiosis in onion flower buds	03	11.01.2024	Practical

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Lesson Plan – 1 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Practical IB
Experiments in Cell Biology, Genetics and Bioinorganic chemistry & Seminar
[Course code: **23F106**]
Term Period: December to March
Hrs/week:12
Total Hrs: 64

Prescribed curriculum	**Topics**	**No. of hours required to complete**	**Date**	**Method of deployment**
Determination of pKa of amino acids	Determination of pKa of amino acids	03	16.01.2024	Practical
Estimation of λmax and molar extinction coefficient (Beer Lambert's Law).	Estimation of λmax and molar extinction coefficient (Beer Lambert's Law).	03	17.01.2024	Practical
Isolation of starch from potatoes and estimation of purity	Isolation of starch from potatoes and estimation of purity	03	18.01.2024	Practical
Isolation of glycogen from chicken liver and estimation of purity.	Isolation of glycogen from chicken liver and estimation of purity.	03	19.01.2024	Practical
Estimation of reducing sugar by DNS method.	Estimation of reducing sugar by DNS method.	03	22.01.2024	Practical
Centrifugation.	Centrifugation.	03	23.01.2024	Practical

Purification of casein from cow's milk	Purification of casein from cow's milk	03	24.01.2024	Practical
Estimation of proteins by Lowry's method	Estimation of proteins by Lowry's method	03	25.01.2024	Practical
Estimation of proteins by Biuret Method	Estimation of proteins by Biuret Method	03 03	30.01.2024	Practical Practical
Estimation of saponification of lipids	Estimation of saponification of lipids	03 03	14.02.2024	Practical
Estimation of iodine value of lipids	Estimation of iodine value of lipids	03	15.02.2024	Practical
Wavelength scans of proteins and nucleic acids using a spectrophotometer	Wavelength scans of proteins and nucleic acids using a spectrophotometer	03	20.02.2024	Practical
Chromatography	Circular paper chromatography for separation of amino acids.	03	21.02.2024	Practical
	Ascending paper chromatography for separation of amino acids.	03	22.02.2024	Practical
	Descending paper chromatography for separation of amino acids.	03	22.02.2024	Practical
	2D paper chromatography for amino acids.	03	22.02.2024	Practical
	Thin layer chromatography of amino acids (1D and2D).	03	22.02.2024	Practical
	Column chromatography for the separation of plant pigments.	03	02.03.2024	Practical
	Gel filtration	03	06.03.2024	Practical

	(Size exclusion chromatography).	03	06.03.2024	Practical
Photometry	Estimation of Phosphate ions using Fiske-Subbarow method.	03	24.01.2024	Practical
	Estimation of calcium.	03	18.01.2024	Practical
	Estimation of Iron using Wong's method.	03	16.01.2024	Practical
	Synthesis and purification of aspirin.	03	17.01.2024	Practical
	Estimation of polyphenols from plant samples.	03	24.01.2024	Practical
	Estimation of anthocyanins from plant samples	03	25.01.2024	Practical
Laboratory Visits:	Demonstration of native Poly Acrylamide Gel Electrophoresis (PAGE).	03	05..03.2024	Tutorial
	Demonstration of Sodium Dodecyl Sulphate-Poly Acrylamide Gel Electrophoresis (SDS-PAGE) and estimation of molecular weight of proteins.	03	05..03.2024	Tutorial
	Demonstration of High Performance Liquid Chromatography.	03	05..03.2024	Tutorial
	Demonstration of Liquid Chromatography Mass Spectroscopy (LC-MS).	03	05..03.2024	Tutorial
	Demonstration of X-Ray Diffraction crystallography (XRD).	03	05..03.2024	Tutorial

	Demonstration of Nuclear Magnetic Resonance (NMR).	03	05..03.2024	Tutorial
	Demonstration of Infra-Red Spectroscopy (IR).	03	05..03.2024	Tutorial
	Demonstration of Atomic	03	05..03.2024	Tutorial
	Absorption Spectroscopy (AAS		05..03.2024	Tutorial

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Lesson Plan – 1 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Membrane Biology [Course code: **23F108**]
Term Period: December to March
Hrs/week:03
Total Hrs: 48

Prescribed Curriculum	**Topics**	**No. of hours required to complete**	**Date**	**Method of deployment**
Module 1 Physico-chemical properties of membranes **Membrane asymmetry**	Compositions and supra molecular organization..	03	23.11.2023 24.11.2023	Lecture
	Membrane lipid phases; bilayer phase, non-bilayer phase, phase transition and membrane potential.	03	28.11.2023 2.12.2023 5.12.2023	Lecture
	Models of membrane: Evolution in concept of membrane models, Gorter and Grendel's experiment	03	6.12.2023 9.12.2023	Lecture
	Bilayer structure; Danielle - Davson model of membrane, Singer and Nicholson's model and Newer models	03	13.12.2023 18.12.2023	Lecture
Module 2 Methods of study of membrane structure	Lipid transfer proteins, phospholipases, chemical methods, amino-phospholipid translocation, TNBS reagent, freeze fracture and freeze etching. Lipid vesicles; liposome preparations and application, function of sterols in membranes.	06	19.12.2023 20.12.2023 10.01.2024	Lecture
	FRET, FRAP, single particle tracking, EM of membranes, calorimetry, confocal	06	16.01.2024 17.01.2024 23.01.2024	Lecture

	microscopy of membrane dynamics. Cell fusion, shedding of membrane			
Module 3 Membrane transport	Laws of diffusion across membranes; simple diffusion, facilitated diffusion and active transport.	03	24.01.2024	Lecture
	Glucose transporters, Ca2+ ATPase, Na+-K+ATPase (Structure and mechanism of action).	03	10.02.2024	Lecture
	Endocytosis, receptor mediated endocytosis, exocytosis.	03	13..02.2024	Lecture
	ion channels; gated and non-gated, aquaporin channel.Bacterial phosphotransferase system.	03	14.02.2024	Lecture
Module 4 Nerve transmission & Muscle contraction	Structure and types of Neuron. Acetylcholine receptor and neurotransmitters, mechanisms of nerve conduction, resting and action potential, ion channels, ionophores, patch clamp technique.	06	15.02.2024	Lecture
	Presynaptic and postsynaptic membranes. Nicotinic and muscarinic neurons. GABA, NMDA, structure and function.	03	16.02.2024	Lecture
	Mechanisms, role of calcium, calmodulin, and phospholamban	03	19.02.2024	Lecture

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Lesson Plan – 2 Semester 2023-24

Sl. No.	Course	Course Type	Credit Pattern			Total Credits
			L	T	P	
1	Molecular Biology	FCHC	3	1	0	4
2	Enzymology	HC	3	0	0	3
3	**Practical 2A:** (Experiments in Molecular Biology and EnergyMetabolism; Laboratory visits and Tour report)	HC	0	0	2	2
4	**Practical 2B:** (Experiments in Enzymology and Research Paperpresentation)	HC	0	0	2	2
	Soft Core (Any Two)					
5	Metabolism of Lipids	SC	3	0	0	3
6	Metabolism of Carbohydrates	SC	3	0	0	3
	Endocrinology	SC	3	0	0	3
	Dissertation – Review of Literature	SC	0	2	0	2
	Open Elective papers offered for students of other disciplines					
7	**OE: Biology for Non-biologists**	OE	2	2	0	4
	OE: Nutrition in Health and Disease	OE	2	2	0	4
	Students of M.Sc. Biochemistry can opt from OE courses offered by non-science Master programs (minimum requirement 4 credits)					
TOTAL CREDITS: 21 4 Hard Core (HC): 11 Credits; 2 Soft Core (SC): 06 credits; 1 Open elective (OE): 04 credits						

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Lesson Plan – 2 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Molecular Biology [Course code:**23F201**]
Term Period: May to August
Hrs./week:03
Total Hrs.: 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module I: **A) Genome organization** **B) DNA**:	Prokaryotic and eukaryotic genome organization,	1	02-05-2024	Lecture
	Central dogma, structural organization of chromosome,	2	03-05-2024	Lecture
	structure and functions of DNA & RNA,	2	04-05-2024	Lecture
	Biochemical evidences for DNA as genetic material.	1	06-05-2024	Lecture
	Chemistry of DNA	2	08-05-2024	Lecture
	Forces stabilizing DNA structure, Physical Properties of Ds DNA	1	13-05-2024	Lecture
	(UV absorption spectra Denaturation and renaturation),	1	14-05-2024	Lecture
	Chemical that react with DNA, Interaction with small ions	1	15-05-2024 To 20-05-2023	Lecture

	DNA binding motifs: Zinc finger, leucine zipper, helix-turn-helix others motifs, DNA binding and kinks.	1	21-05-2024	Lecture
Module II: **A) DNA topology:** **B) DNA Replication:**	Supercoiled form of DNA	1	22-05-2024	Lecture
	Biology of super coiled DNA,	1	24-05-2024 To 27-052024	Lecture
	DNA topoisomerases,	1	28-05-2024	Lecture
	Effect of supercoiling on structure of DNA and role of supercoiling in gene expression and DNA replication.	2	04-06-2024	Lecture
	Characteristics and functions of bacterial DNA polymerases I,	1	05-06-2024	Lecture
	Mechanism of prokaryotic DNA replication,	1	08-06-2024	Lecture
	Models of replications in prokaryotes.	1	19-6-2024	Lecture
	Fidelity of replication, Eukaryotic DNA polymerases and mechanism of replication.	1	20-06-2024 To 24-06-2024	Lecture
	Replication of viral DNA, DNA replication in telomeric regions, Telomerases	1	25-06-2024	Lecture
	Telomerases,mechanism of action of topoisomerase I and II	1	02-07-2024	Lecture

	Models of DNA replication, Inhibitors of replication	1	03-07-2024	Lecture
Module III: **Transcription & Translation:**	Characteristics and function of bacterial RNA polymerases Eukaryotic RNA polymerases,	2	08-07-2024	Lecture
	Mechanism of transcription and regulation. transcription factors, Stringent response	2	09-07-2024	Lecture
	Post transcriptional modifications of mRNA mechanism of splicing ,Processing of tRNA and rRNA	2	10-07-2024	Lecture
	Inhibitors of transcription. Mechanism of action of ribozymes	2	11-07-2024 To 15-07-2023	Lecture
	Structure and role of tRNA in protein synthesis, ribosome structure,	1	16-07-2024	Lecture
	Initiation, elongation and termination in detail in prokaryotes as well as eukaryotes and Post translational processing,Control of translation in eukaryotes (Antisense RNA, Heme andinterferon).	2	16-07-2024	Lecture

Module IV **Regulation of Gene expression in prokaryotes and eukaryotes: localization & Gene Silencing**: **Non coding RNA**:	Positive and negative regulation. lac-, ara-, his- and trp- operon regulation;	2	18-07-2024	Lecture
	antitermination,global regulatory responses;	1	19-07-2024	Lecture
	Regulation of gene expression in eukaryotes	1	22-07-2024 To 24-07-2024	Lecture
	Transcriptional, translational and processing level control mechanisms.	2	25-07-2024	Lecture
	Export of secretory proteins- signal hypothesis,	1	26-07-2024	Lecture
	transport and targeting of proteins to mitochondria, chloroplast	1	27-07-2024	Lecture
	peroxisomes, Gene Silencing: Definition, types, RNAi pathway, shRNA& CRISPR-CAS.	1	27-07-2024	Lecture
	coding and non-coding RNA,types of ncRNA	1	29-07-2024	Lecture

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Lesson Plan – 2 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Enzymology [Course code: **23F202**]
Term Period: May to August
Hrs./week:03
Total Hrs.: 48

Prescribed Curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Module 1 General aspects:	Nature of enzymes, localization, isolation, purification and characterization of enzymes. Criteria of purity of enzymes, fold purity.	04	14.05.2024 15.05.2024	Lecture
	Nomenclature and IUB classification of enzymes.Enzyme specificity, specific activity, assay methods; coupled enzyme assays, continuous, end point and kinetic assay.	04	16.05.2024 16.05.2024	Lecture
	Units of enzyme activity, IU and Katal.	04	21.05.2024 22.05.2024	Lecture
Module 2 Enzyme kinetics	Michaelis-Menten equation for uni substrate reactions, initial velocity approach, steady state approach.	01	27.05.2024	Lecture
	Vmax, Km and their significance.Linear transformation of Michaelis-Menten equation; Lineweaver-Burk plot, Eadie-Hofstee, Wolf and Cornish-Bowden.Scatchard plot. Rate of a	02	28.05.2024	Lecture

	reaction, order and molecularity. I order reaction kinetics. Rectangular hyperbola, Michaelis-			
	Menten equation as rectangular hyperbola, linear transformation, calculation of slope, intercept.	03	29.05.2024	Lecture
	Reversible and irreversible inhibition; competitive, non-competitive, uncompetitive product inhibition and suicide inhibition. Determination of Ki and Kd.	03	04.06.2024 25.06.2024	Lecture
	Bisubstrate reaction: Cleland's notation with examples of ordered, ping-pong, and random reactions. General rate equation.	03	01..07.2024	Lecture
Module 3 Cooperativity; Isozymes and Multifunctional enzymes	Binding of ligands to macromolecules; Scatchard plot, positive and negative cooperativity. Oxygen binding to hemoglobin.	03	02.07.2024	Lecture
	Hill equation, homotropic and heterotropic effectors, aspartyl trans carbamylase as an allosteric enzyme.	03	03.07.2024	Lecture
	Metabolic regulation of enzyme activity: Feedback regulation, fine control of enzyme activity.	03	03.07.2024	Lecture
	Isoenzymes; LDH, multifunctional enzymes (DNA polymerase) and multi enzyme complex (PDC).	03	03.07.2024 10.07.2024	Lecture
Module 4 Mechanisms of enzyme catalysis:	Active site structure; methods of determining active site structure. Isolation of ES complex, affinity labeling, chemical modification studies, site directed mutagenesis.	03	15.07.2024 16.07.2024	Lecture

	Nature of enzyme catalysis: Transition state theory, proximity and orientation, orbital steering, acid base catalysis, covalent catalysis, metal ion catalysis, nucleophilic and electrophilic catalysis, intramolecular catalysis, entropy effects.	03	18.07.2024	Lecture
	Effect of temperature and pH on enzyme catalysed reaction. Fast reactions - Stopped flow, temperature jump method with examples of enzymes.	03	14.05.2024 15.05.2024	Lecture
	Mechanisms of action of specific enzyme: Chymotrypsin; zymogen activation, acid-base catalysis, charge relay network. Lysozyme, alcohol dehydrogenase, ribonuclease, carboxypeptidase A, RNA as an enzyme, abzymes, coenzymic action of NAD+, FAD, TPP, PLP, Biotin, CoA, folic acid and lipoic acid.	03	16.05.2024 16.05.2024	Lecture

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Lesson Plan – 2 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Practical 2A: (Experiments in Molecular Biology and Energy Metabolism; Laboratory visits and Tour report) [Course code: **22F203**]
Term Period: May to August
Hrs/week:12
Total Hrs: 64

Prescribed Curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Experiment	Isolation of Genomic DNA from yeast cells and determination of purity	03	6.05.2024	Practical
Experiment	Estimation of DNA by diphenyl amine method	03	7.05.2024	Practical
Experiment	Isolation of RNA from yeast or plant cells	03	8.05.2024	Practical
Experiment	Estimation of RNA by orcinol method	03	9.05.2024	Practical
Experiment	Restriction digestion of DNA and agarose gel electrophoresis	03	13.05.2024	Practical
Experiment	Determination of RNAse activity	03	14.05.2024	Practical
Experiment	Restriction digestion of plasmid and analysis	03	15.05.2024	Practical
Experiment	Polymerase Chain Reaction	03	15.05.2024	Practical
Experiment	Estimation of Blood glucose: fasting, post prandial, random	03	16.05.2024	Practical
Experiment	Isolation of phospholipids and	03	17.05.2024	Practical

	neutral lipids from hen yolk			
Experiment	Estimation of phospholipids and neutral lipids using thin layer chromatography	03	20.05.2024	Practical
Experiment	Estimation of neutral lipids (cholesterol) using Zak's method	03	21.05.2024	Practical
Experiment	Estimation of triglycerides.	03	22.05.2024	Practical
Experiment	Estimation of HDL, LDL.	03	23.05.2024	Practical
Experiment	Assessment of membrane stability of RBCs	03	24.05.2024	Practical
Experiment	Estimation of a keto acid	03	27.05.2024	Practical
Experiment	Activity of lipases	03	29.05.2024	Practical
Experiment	Estimation of acid value of lipids	03	30.05.2024	Practical
Experiment	Estimation of peroxide value of lipids	03	04.06.2024	Practical
	Study tour to Molecular Biology based industries and institutes			Tutorial

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Lesson Plan – 2 Semester 2022-23

Department: Department of Studies in Biochemistry
Subject: Practical 2B (Experiments in Enzymology and Research Paper Presentation) [Course code: **22F204**]
Term Period: May to August
Hrs/week:12
Total Hrs: 64

Prescribed Curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Experiment	Estimation of activity of Salivary amylase	03	18.06.2024	Practical
	Estimation of Specific activity of Salivary amylase.	03	20.06.2024	Practical
	Estimation of optimum pH for the activity of Salivary amylase.	03	21.06.2024	Practical
	Estimation of optimum buffer conjugates for activity of Salivary amylase.	03	18.06.2024	Practical
	Estimation of optimum buffer concentration for activity of Salivary amylase.	03	20.06.2024	Practical
	Estimation of temperature optimum for Salivary amylase. Time kinetics of Salivary amylase.	03	21.06.2024	Practical
	Estimation of energy of activation of Salivary amylase.	03	02.07.2024	Practical
	Effect of enzyme concentration on activity of Salivary amylase.	03	03.07.2024	Practical
	Estimation of Km and Vmax of Salivary amylase.	03	04.03.2024	Practical
	Plotting Lineweaver-Burk plot for Salivary amylase.	03	08.07.2024	Practical

	Assessment of effects of selected metal ions and drugs on the activity of Salivary amylase	03	09.07.2024	Practical
			02.07.2024	
Experiment	Purification of Alkaline phosphatase from bovine milk by differential centrifugation.	03	03.07.2024	Practical
	Estimation of activity of Alkaline phosphatase.	03	04.03.2024	Practical
	Estimation of Specific activity of Alkaline phosphatase and fold purity.	03	02.07.2024	Practical
	Calculation of fold purity of Alkaline phosphatase.	03	24.06.2024	Practical
			25.06.2024	
Experiment	Purification of Invertase from plant latex.	03	01.07.2024	Practical
	Estimation of activity of Invertase.	03	24.06.2024	Practical
	Estimation of Specific activity of Invertase.	03	25.06.2024	Practical
	Calculation of fold purity of Invertase.	03	01.07.2024	Practical
			24.06.2024	
Experiment	Purification of Esterase from peas by using ammonium sulphate precipitation.	03	25.06.2024	Practical
	Estimation of activity of Esterase.	03		Practical
	Estimation of Specific activity of Esterase and fold purity.	03	24.06.2024	Practical
	Calculation of fold purity of Esterase.	03	25.06.2024	Practical
Experiment	Purification of Proteases from plant latex.	03	01.07.2024	Practical
	Estimation of activity of Protease.	03	24.06.2024	Practical
	Estimation of Specific activity of Protease.	03	16.07.2024	Practical
	Calculation of fold purity of Protease	03	03.07.2024	Practical
Experiment	Estimation of catalase activity and specific activity.	03	03.07.2024	Practical

	Assessment of clinically relevant enzymes: SGOT, SGPT, Creatine Kinase, Lactate Dehydrogenase.	03	08.07.2024	

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Lesson Plan – 2 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Metabolism of Lipids [Course code: **23F205**]
Term Period: May to August
Hrs./week:03
Total Hrs.: 48

Prescribed Curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Module 1 Phospholipids, TG and Fatty acid degradation:	Degradation of triacylglycerols, phospholipids and sphingolipids and regulations; lipase, hormone sensitive lipase, phospholipases and sphingomyelinase.	03	14.05.2024 15.05.2024	Lecture
	β-oxidation Knoop's experiment, saturated and unsaturated fatty acids.	03	16.05.2024 16.05.2024	Lecture
	Regulatory aspects. Oxidation α , β and γ oxidation. Energetics and biosynthesis of fatty acids; fatty acid synthetase complex, chain elongation and desaturation.	03	21.05.2024 22.05.2024	Lecture
	Pathways in plants and animals, conversion of linoleate to arachiodnante. Regulatory aspects.	03	27.05.2024	Lecture
Module 2 Cholesterol synthesis, degradation, and regulations:	Metabolism of circulating lipids; chylomicrons, HDL, LDL and VLDL.	04	28.05.2024	Lecture
	Reverse cholesterol transport by HDL. Oxidized lipids and their metabolism, Mechanism of foam cell formation.	04	29.05.2024	Lecture

	Obesity, and mechanisms, exercise and regulation of energy metabolism.	04	04.06.2024 25.06.2024	Lecture
Module 3 Phospholipid biosynthesis and regulations:	Denovo pathway and inter conversion, biosynthesis of phospholipids, sphingolipids, ether lipids and glycolipids.	03	01..07.2024	Lecture
	Degradation and biosynthesis of gangliosides and cerebrosides.	03	02.07.2024	Lecture
	Biosynthesis of prostaglandins, thromboxanes, leukotrienes, and lipoxins.	03	03.07.2024	Lecture
	Role of Hormones in the regulation of lipid metabolism: HPA axis. Adrenal gland and pancreatic hormones.	03	03.07.2024	Lecture
Module 4 Lipid mediators:	Eicosanoids, prostaglandins, leukotrienes, prostacyclins, thrombaxanes, DAG, ceramide and PAF.	04	03.07.2024 10.07.2024	Lecture
	Role of anti-inflammatory drugs and eicosanoids.	04	15.07.2024 16.07.2024	Lecture
	Integration of metabolic pathways: Integration of carbohydrate and lipid metabolism, and their regulation and manipulation.	04	18.07.2024	Lecture

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Lesson Plan – 2 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Metabolism of Carbohydrates [Course code: **23F206**]
Term Period: May to August
Hrs./week:03
Total Hrs.: 48

Prescribed Curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Module 1 Introduction & Energy Utilization:	Catabolism, anabolism, and amphibolic pathways.	04	14.05.2024 15.05.2024	Lecture
	I, II and III laws of thermodynamics. Enthalpy, entropy, free energy and chemical equilibrium.	04	16.05.2024 16.05.2024	Lecture
	High energy compounds: Energy currency, ATP, ADP, creatine phosphate, phosphoenol pyruvate as energy rich compound.	04	21.05.2024 22.05.2024	Lecture
Module 2 Catabolism and Anabolism of Carbohydrates	Cellular ingestion of glucose, glycolysis, energetics regulation.	04	27.05.2024	Lecture
	Pathways of utilization of pyruvate-lactate, ethanol, gluconeogenesis, regulation, Cori cycle, glucose paradox, citric acid cycle and its regulation, energetics,anaplerosis, glyoxylate cycle.	04	28.05.2024	Lecture

	HMP shunt pathway, inter conversion of hexoses. Utilization of non-glucose sugars. Biosynthesis of sucrose, lactose, starch and glycogen.	04	29.05.2024	Lecture
Module 3 Mitochondrial electron transport:	Entry of reducing equivalents for oxidation; malate-aspartate shuttle, glycerol phosphate shuttle.	03	04.06.2024 25.06.2024	Lecture
	Organization of respiratory chain complexes, structure and function of the components; Fe-S proteins, cytochromes, Q cycle, proton transfer, P/O ratio, respiratory control, oxidative phosphorylation, uncouplers and inhibitors, sequence of electron carriers based on red-ox potentials.	03	01..07.2024	Lecture
	ATP synthesis, ATP synthase complex, binding change mechanism, proton motive force, Mitchell's hypothesis.	03	02.07.2024	Lecture
	Substrate level phosphorylation, futile cycles and their application.	03	03.07.2024	Lecture
Module 4 Hormonal regulation of glucose metabolism	Effect of hormones on carbohydrate metabolism; insulin, glucagon, catecholamines, growth hormones, corticosteroids and thyroid hormones in different tissues.	03	03.07.2024	Lecture
	Secretion of Insulin and glucagon in response to various stimuli (Fasting, food, intestinal hormones etc.,)	03	03.07.2024 10.07.2024	Lecture
	Role of Hormones in the regulation of carbohydrate metabolism: HPA axis. Adrenal gland and pancreatic hormones.	03	15.07.2024 16.07.2024	Lecture
	Disorders of carbohydrate metabolism: diabetes mellitus, classification and clinical diagnosis.	03	18.07.2024	Lecture

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Lesson Plan – 2 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Endocrinology [Course code: **23F207**]
Term Period: May to August
Hrs./week:03
Total Hrs.: 48

Prescribed Curriculum	**Topics**	**No. of hours required to complete**	**Date**	**Method of deployment**
Module 1 Cell & Endocrine System:	Structure of a cell, mitosis**,** meiosis**,** cell cycle and its regulation, different phases of cell cycle.	04	07.05.2024 09.05.2024 13.05.2024 14.05.2024	Lecture
	Apoptosis, cyclins and CDKs. Cell-cell and cell-ECM interaction and ECM structure and function.	04	16.05.2024 20.05.2024 21.05.2024 23.05.2024	Lecture
	Endocrine organs in man. Location and inter relationship of endocrine glands in man; classification and chemistry of hormones, hormones of hypothalamus, pituitary, thyroid, parathyroid, pancreas, liver, adrenals, gonads and intestine	04	27.05.2024 28.05.2024 30.05.2024 04.06.2024	Lecture
Module 2 Functions and abnormalities **Structure and**	Hypo and hyper production of hormones secreted by;pituitary, thyroid, pancreas, adrenals and gonads.	04	06.06.2024 18.06.2024	Lecture

control of hypothalamus function **Pituitary gland & Testes and ovaries**	Hormones produced; GRH, somatostatin,TRH, CRH, GnRH.	04	20.06.2024 21.06.2024	Lecture
	Structure, hormones of anterior, posterior and median lobes. Pro-opiomelanocortin. Structure, hormones produced by testes and ovaries, menstrual cycle. Regulation of hormone production and release: hypothalamus-pituitary-target organ axis and regulation by feedback mechanism	04	25.06.2024 27.06.2024	Lecture
Module 3 **Mechanism of hormone action: Peptide hormones** **&** **Second messengers** **&** **Growth factors**	General mechanisms of cell signaling by hydrophilic factors, transmembrane receptors, transmembrane receptors, G proteincoupled receptors, receptor tyrosine kinase, eicosanoid receptors.	04	28.06.2024 01.07.2024	Lecture
	IP3, DAG, cAMP, protein kinases. Nitric oxide signaling; generation and action.	04	02.07.2024 04.07.2024	Lecture
	Structure, mechanism of action and receptors of EGF, PDGF, NGF andIGF. insulin receptor	04	05.07.2024 08.07.2024	Lecture
Module 4 **Mechanism of action of steroid hormones** **&** **Insect hormones**	Conversion of cholesterol to steroid hormone.Steroid receptors, isolation and characterization of steroid receptors.	03	09.07.2024 11.07.2024	Lecture
	Receptor downregulation, desensitization and up regulation.	03	16.07.2024 18.07.2024	Lecture
	Pineal gland, melotonin and circadian rhythm.Chemistry and action of prostaglandins, prostacyclins and thromoxanes.Newly discovered hormones.	03	19.07.2024	Lecture
	Structure and function of moulting hormone, ecdysone, juvenile hormones, Pheromones. Application of insect hormones.	03	22.07.2024 23.07.2024	Lecture

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Lesson Plan – 2 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Dissertation-Review of Literature [Course code:**23F208**]
Term Period: May to August
Total Hrs: 48

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Lesson Plan – 2 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Nutrition in Health and Disease Course code: **23F210**]
Term Period: May to August
Total Hrs: 48

Prescribed Curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Module 1	*Food Physiology*: Concept of balanced diet and energy content of foods; Basal and resting metabolism- influencing factors,	04	17.05.2024	Lecture
	Absorption of carbohydrates, lipids, proteins, nucleic acids, anti- oxidants, defense against free radicals. Role of free radicals and antioxidants in health and disease.	04	18.05.2024	Lecture
	Nutrition and lifestyle choices impact the life cycle before and during pregnancy, during lactation and infancy, during childhood and adolescence, and through adulthood and aging. The function of the RDA, DRI, and Tolerable Upper Intake Level.	04	24.05.2024	Lecture

Module 2	*Vitamins*: Dietary sources, biochemical functions and specific deficiency diseases associated with fat and water soluble vitamins; Hypervitaminosis symptoms of fat-soluble vitamins. .	04	25.05.2024	Lecture
	Minerals: Dietary sources and deficiency disorders of dietary calcium, phosphorus, magnesium, iron, iodine, zinc and copper	04	31.05.2024	Lecture
	Malnutrition and blood disorders: Etiology, clinical features, metabolic disorders and management of Marasmus and Kwashiorkor, Nutritional anemia - vitamin B_{12}, folate and iron deficiency anemia; hemoglobinopathies and thalassemias.	04	01.06.2024	Lecture
Module 3	Selection of foods, preliminary preparation of food, principles of cooking, methods of cooking - Boiling, Steaming, Pressure cooking, Microwave oven, Frying (shallow, deep fat), Smoking point of oil,.	04	07.06.2024	Lecture
	Combination method, methods of cooking: advantages and disadvantages	04	08.06.2024	Lecture
	Effect of cooking on nutritive value, methods of enhancing nutritive value	04	14.06.2024	Lecture
Module 4	*Obesity*: Definition, classification and biochemical basis; Genetic and environmental factors leading to obesity; Obesity related diseases and management of obesity.	03	15.06.2024	Lecture

	Cardiovascular disease: Diseases of Liver, Gall bladder & Pancreas-Hepatitis, (A, B, and C), alcoholic liver disease, Gall stones, pancreatitis, Prevention and dietary management.	03	21.06.2024	Lecture
	Clinical significance of aspartate aminotransferase, alanine aminotransferase, lactate dehydrogenase, amylase, lipase and trypsin.Diagnosis of jaundice and clinical importance of bilirubin.	03	22.06.2024 05.07.2024	Lecture
	Questionnaire based Survey by students. Setting up Diagnostic test camps. Arranging for nutrition counseling. Seminars by students.	03	12.07.2024 16.07.2024	Practical

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Lesson Plan – 3 Semester 2022-23

Sl. No.	Course	Course Type	Credit Pattern			Total Credits
			L	T	P	
1	Immunology	FCHC	3	1	0	4
2	Metabolism of Amino Acids and Proteins	HC	3	1	0	4
3	**Practical-3A:** Experiments in Immunology and amino acid metabolism. Study tour and tour report.	HC	0	0	2	2
4	**Practical 3B:** Experiments in Metabolism and Review of Literature.	HC	0	0	2	2
	Soft Core (Any Two)					
5	Metabolism of Nucleic Acids	SC	3	1	0	4
6	Research Methodology, Biostatistics, and Bioinformatics	SC	3	1	0	4
	Human Physiology	SC	3	1	0	4
	Internship	SC	0	0	2	2
TOTAL CREDITS: 20 4 Hard Core (HC): 12 Credits; 2 Soft Core (SC): 08 credits						

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Lesson Plan – 3 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Immunology [Course code:**23F301**]
Term Period: November to March
Hrs./week:03
Total Hrs.: 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module I:	**Innate immunity:** anatomic barriers, physiologic barriers, phagocytic barriers,	02	23-11-2023	Lecture
	microbial antagonism, acute phase reactants, anti-microbial peptides, interferons, inflammation,	02	24-11-2023	Lecture
	Pattern Recognition Receptors (PRRs), Pathogen Associated Molecular Patterns (PAMPs) and Damage Associated Molecular Patterns (PAMPs).	02	25-11-2023	Lecture
	Complement system: components,pathways of activation and biological consequences.	02	30-11-2023	Lecture
	Acquired immunity: Active **(**Naturally acquired and artificially acquired), Passive (Naturally acquired and artificially acquired),	02	1-12-2023	Lecture

	Adaptive immunity, Humoral and Cell mediated immune response	02	02-12-2023	Lecture
	Tissues of immune system: Structural organization and functions of Lymphatic system, Primary lymphoid organs (Bone marrow, Thymus)	02	04-12-2023 To 06-12-2023	Lecture
	Secondary lymphoid organs and tissues (Spleen, Lymph node, Tonsils, Adenoids, Peyer's patches, Lamina propria, Mucosa- associated lymphoid tissue, Gut-associated lymphoid tissue).	02	08-12-2023 To 09-12-2023	Lecture
	Cells of the immune system: Hematopoiesis, Biology, Development and Functions of PMNLs, NK cells, Macrophages,T- Lymphocytes, B-Lymphocytes, Dendritic cells	02	12-12-2023	Lecture
Module II	**Antigens, and Antibodies:** Antigens, Immunogens and Haptens, Factors influencing immunogenicity, adjuvants, epitopes,	01	14-12-2023	Lecture
	Structure and functions of immunoglobulins,	01	15-12-2023	Lecture
	Synthesis of immunoglobulins,	02	16-12-2023	Lecture
	Genetic basis of immunoglobulin diversity.	02	19-12-2023 To 20-12-2023	Lecture

	MHC molecules: Types, structure, diversity and functions	02	21-12-2023 To 23-12-2023	Lecture
	Antigen recognition: Thymus dependent and independent Antigens, Clonal selection and immunological memory of B and T cells,	02	28-12-2023 To 30-12-2023	Lecture
	Antigen processing and presentation (Endogenous pathway, Exogenous pathway, Cross presentation), Superantigens.	02	04-01-2024	Lecture
	Monoclonal Antibodies: Hybridoma technology and production of mAbs, types, andapplications.Advantages and disadvantages of mAbs in therapy.	02	05-01-2024 To 06-01-2024	Lecture
Module III :	**Immune System in Health and Disease:** Immunological Tolerance and Autoimmunity, Autoimmune Diseases (Organ specific autoimmune diseases-Graves' disease, Myasthenia Gravis, Systemic autoimmune diseases-Multiple Sclerosis, Rheumatoid Arthritis, Systemic Lupus Erythematosus),	02	11-01-2024 To 13-01-2024	Lecture
	Immunosuppression, Hypersensitivity(Type I, II, III & IV).	02	18-01-2024 To 27-01-2024	Lecture
	Vaccines and Vaccination: Principles of vaccination,	02	02-02-2-24	Lecture

	Immune response to vaccines (Primary and Secondary response), Whole-Organism vaccines, Purified macromolecules asvaccines,			
	Recombinant vaccines, DNA vaccines, Multivalent subunit vaccines and Edible vaccines, Vaccine safety, Reverse vaccinology. Overview of COVID-19 vaccines.	02	10-02-2024	Lecture
	Primary & Secondary Immuno-Deficiency Disorders: **Primary:**Wiscott-Aldrich syndrome, Severe combined immunodeficiency disease (SCID), DiGeorge syndrome, Ataxia-telangectasia,Complement deficiencies. Gammopathies	02	15-02-2024	Lecture
	Leucocyteadhesion defects, Chronic granulomatous disease,X-linked agammaglobulinemia,	02	17-02-2024	Lecture
	Multiple myeloma	02	22-02-2024	Lecture
	Secondary: AIDS, Malnutrition, Drug regimen, Diabetes, Chronic infection.		24-02-2024	Lecture
Module IV :	**Clinical Immunology**: **Transplantation of tissues and organs:** Nomenclature of transplantations, Transplantation reactions, HvG and GvH. Exception from rejections, Major and minor	02	29-02-2024	Lecture

	blood groups, Blood transfusion, tissue typing, Kidney and bone marrow transplantations. Immunosuppressive drugs.			
	Immunological Techniques:.*In vitro* antigen-antibody reactions, serotyping, agglutination,	02	07-03-2024	Lecture
	complement fixation, immunoprecipitation, Immunodiffusion, ELISA, RIA, IHC, Immunoelectrophoresis.	02	09-03-2024	
	Tumor immunology: Neoplasms, tumor- associated antigens, immune response to tumor antigens, immunologic factors favoring tumor growth, immune surveillance,Tumor necrosis factor α and β.Metastatic processes,	02	11-03-2024	Lecture
	Immunodiagnosis, Antitumour drugs, Immunotherapy.	02	12-03-2024	Lecture

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Lesson Plan – 3 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Metabolism of Amino acids and proteins [Course code:**23F302**]
Term Period: November to March
Hrs./week:03
Total Hrs.: 48

Prescribed Curriculum	**Topics**	**No. of hours required to complete**	**Date**	**Method of deployment**
Module 1 Proteins:	General mechanisms of degradation in cells; ubiquitin-proteosome pathway, lysosomal pathway.	04	01.12.2023 02.12.2023 08.12.2023	Lecture
	Degradation and biosynthesis of glycoproteins and proteoglycans.	04	14.12.2023 21.12.2023 22.12.2023	Lecture
	Degradation and Biosynthesis of heme and porphryns.	04	28.12.2023 29.12.2023 04.01.2024	Lecture
Module 2 Non ribosomal peptide synthesis and Biosynthesis of physiologically active amines:	glutathione, gramicidine.	02	11.01.2024 12.01.2024 24.01.2024	Lecture
	Biosynthesis of physiologically active amines; serotonin, histamine, dopamine, norepinephrine and epinephrine.	08	25.01.2024 26.01.2024 27.01.2024	Lecture

Module 3 Degradation and biosynthesis of individual amino acids:	Aliphatic, aromatic, and branched chain amino acids.	02	30.01.2024 31.01.2024 01.02.2024	Lecture
	Role of cofactors; PLP and THF in amino acid metabolism.	03	02.02.2024 03.02.2024 05.02.2024	Lecture
	Deamination, transamination, decarboxylation desulphuration process.	03	06.02.2024 07.02.2024 08.02.2024	Lecture
	Differences in the pathways in microorganisms, plants and animals.	02	10.02.2024 12.02.2024	Lecture
	Regulation of amino acid biosynthesis;transglutaminase cycle, urea cycle.	02	13.02.2024	Lecture
Module 4 Intermediatory metabolism and In born errors of metabolism:	Ketogenic and glucogenic amino acids.	04	14.02.2024 15.02.2024	Lecture
	In born errors of amino acid degradation; PhenylKetonuria, alkaptonuria, maple syrup urine.	04	20.02.2024 28.02.2024 05.03.2024	Lecture
	Role of Hormones in the regulation of protein and amino acid metabolism: HPA axis. Adrenal gland and pancreatic hormones	04	07.03.2024 21.03.2024	Lecture

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Lesson Plan – 3Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Practical-3A: Experiments in Immunology and amino acid metabolism. Study tour and tour report. [Course code:**23F303**]
Term Period: November to March
Hrs/week:12
Total Hrs: 64

Prescribed Curriculum	**Topics**	**No. of hours required to complete**	**Date**	**Method of deployment**
Experiment	Estimation of proteins using Bradford's method.	03	28.11.2023	Practical
Experiment	Estimation of proteins using Bicinchoninic acid method.	03	28.11.2023	Practical
Experiment	Estimation of A/G ratio in blood	03	29.11.2023	Practical
Experiment	Estimation of aminoacids using ninhydrin method.	03	29.11.2023	Practical
Experiment	Purification of IgG	03	01.12.2023	Practical
Experiment	Slide agglutination test/ Blood grouping	03	04.12.2023	Practical
Experiment	Immunoprecipitation test: Ochterlony double diffusion assay	03	05.12.2023	Practical
Experiment	Estimation of nitric oxide	03	06.12.2023	Practical
Experiment	Estimation of Urea by DAMO method and Clinical significance	03	18.12.2023	Practical
Experiment	Estimation of uric acid and Clinical significance	03	19.12.2023	Practical
Experiment	Estimation of Creatinine and Clinical significance	03	20.12.2023	Practical
	Study tour and report			Tutorial

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Lesson Plan – 3 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Practical 3B: Experiments in Metabolism; Review ofLiterature [Course code:**23F304**]
Term Period: November to March
Hrs./week:12
Total Hrs.: 64

Prescribed Curriculum	**Topics**	**No. of hours required to complete**	**Date**	**Method of deployment**
Experiment	Estimation of uric acid.	03	21.12.2023	Practical
Experiment	Estimation of purines	03	26.12.2023	Practical
Experiment	Photo-oxidation of methylene blue	03	27.12.2023	Practical
Experiment	Photosynthetic reduction of 2,6 di chloro phenol indophenol	03	28.12.2023 08.01.2024	Practical
Experiment	Identification and assessment of leguminous root nodules for Rhizobium	03	01.01.2024	Practical
Experiment	Oxygen generation during photosynthesis	03	02.01.2024	Practical
Experiment	Estimation of glutathione	03	03.01.2024	Practical
Experiment	Estimation of bilirubin	03	04.01.2024	Practical
	Review of Literature			Tutorial

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Lesson Plan – 3 Semesters 2023-24

Department: Department of Studies in Biochemistry
Subject: Metabolism of NucleicAcids [Course code: **23F305**]
Term Period: November to March
Hrs/week:03
Total Hrs: 48

Prescribed Curriculum	**Topics**	**No. of hours required to cover**	**Date**	**Method of deployment**
Module 1 Purines and pyrimidines:	Pathways of biosynthesis and degradation of nucleic acids,	03	01.12.2023 02.12.2023 08.12.2023	Lecture
	purines and pyrimidines, uric acid formation.	03	14.12.2023 21.12.2023 22.12.2023	Lecture
	Salvage pathways, de novo biosynthetic pathways and regulations.	03	28.12.2023 29.12.2023 04.01.2024	Lecture
	Gout and Lysch-Nyhan syndrome.	03	11.01.2024 12.01.2024 24.01.2024	Lecture.
Module 2	Conversion of nucleotides to deoxynuclotides. Mchanisms of action of methotrexate, 5-fluorouridine, azathymidine.	06	25.01.2024 26.01.2024 27.01.2024	Lecture
	Biosynthesis of cofactors: NAD+, FAD and coenzyme A, polyamine biosynthesis and	06	30.01.2024 31.01.2024 01.02.2024	Lecture

	their metabolic role.			
Module 3 Photosynthesis	Photosynthetic apparatus in plants, photosystems I and II, light harvesting antenna complex.	03	02.02.2024 03.02.2024 05.02.2024	Lecture
	Electron flow and phosphorylation; cyclic and noncyclic, oxygen evolution,	03	06.02.2024 07.02.2024 08.02.2024	Lecture
	Calvin cycle. C3, C4 and CAM cycle. Photorespiration, bacterial photosynthesis.	03	10.02.2024 12.02.2024	Lecture
	Regulation of photosynthesis. RUBISCO.	03	13.02.2024	Lecture
Module 4 Nitrogen metabolism:	Importance of nitrogen in biological systems, nitrogen cycle.	04	14.02.2024 15.02.2024	Lecture
	Nitrogen fixation; symbiotic and non-symbiotic,nitrogenase complex,energetics and regulation.	04	20.02.2024 28.02.2024 05.03.2024	Lecture
	Formation of root nodules in legumes. Assimilation of nitrate and ammonium ion.	04	07.03.2024 21.03.2024	Lecture

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Lesson Plan – 3 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Research Methodology,Biostatistics and Bioinformatics
[Course code:**23F306**]
Term Period: November to March
Hrs/week:03
Total Hrs: 48

Prescribed Curriculum	**Topics**	**No. of hours required to cover**	**Date**	**Method of deployment**
Module 1 Research Methodology & Ethical Issues	Definition –Characteristics, types. Identification of the problem, assessing the status of the problem, formulating the objectives, preparing the design (experimental or otherwise), actual investigation.	04	01.12.2023 02.12.2023 08.12.2023	Lecture
	Review of literature, Hypothesis, Data– Categorical, nominal & Ordinal. Methods of Collecting Data: Observation, field investigations, direct studies, questionnaires: Sources, methods-questionnaires, records, archives. Validation and standardization of the methods, modification and experimental design. Types of Report – Technical Reports and Thesis – Significance – Different steps in the preparation – Layout, structure and Language of typical reports - Illustrations and tables. Bibliography: Citations and references; Plagiarism – Citation and Acknowledgement (citation softwares)	04	14.12.2023 21.12.2023 22.12.2023	Lecture

	Ethical Committees, Types of experiments that require ethical clearance –GMO, animal ethics and human ethical guidelines, socio-environmental responsibilities. Commercialization – copy right – royalty – Intellectual Property rights (IPR) and patent law; Indian and International scenario, WIPO, – Reproduction of published material – Plagiarism – Citation and Acknowledgement – Reproducibility and accountability. Helsinki declaration.	04	28.12.2023 29.12.2023 04.01.2024	Lecture
Module 2 Introduction to Biostatistics, Statistical tests & Statistics softwares	Introduction: Population, sample, sampling techniques, random sample. Mean, median, mode, range, variance, coefficient of variation, frequency, standard deviation, standard error.	06	11.01.2024 12.01.2024 24.01.2024	Lecture
	Probability: Rules of probability, binomial distribution, normal distribution, area under the curve, Z value, choosing sample size, hypothesis testing, Student's t test. One way ANOVA, correlation and regression. Goodness of fit, test of independence. Non parametric statistics, sign test, rank sum test, rank correlation.	03	25.01.2024 26.01.2024 27.01.2024	Lecture
	Representation of statistical data line graph, histogram, bar diagram, pie chart, scatterdiagram. Collection of data: Relevance of sample size	03	30.01.2024 31.01.2024 01.02.2024	Lecture
Module 3 Bioinformatics	Biological databases: Introduction, classification of biological databases, retrieval of biological database systems. Molecular Modeling Database at NCBI, PDB, Molecular visualization software (RASMOL).	04	02.02.2024 03.02.2024 05.02.2024	Lecture
	Prediction of genes (Gene finder, ORF finder). Sequence comparison and database search: Introduction, different types of alignment. Iterative refinement methods, pattern matching in DNA and protein sequences, PAM matrices, BLAST, FAST and FASTA.	04	06.02.2024 07.02.2024 08.02.2024	Lecture

	nucleotide sequence analysis, single nucleotide polymorphism, primer designing.			
	Phylogenetics Clustal. Emboss, prosite, prodom, protein expression profiling. Prediction of Secondary structure of proteins, softwares for secondary structure prediction, protein famil ies and classification, (trans membrane regions). CATH and SCOP. Introduction to drug designing: In silico analysis, physico-chemical property prediction, aqueous solubility, Lipinski's rule of five.	04	10.02.2024 12.02.2024	Lecture
Module 4 Docking methods	Three dimensional descriptions of binding site environment and energy calculation, automatic docking method.	06	13.02.2024	Lecture
	Three dimensional database search approaches, protein-protein interactions, design of ligands, drug-receptor interactions, automated structure construction methods	06	14.02.2024 15.02.2024	Lecture

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Lesson Plan – 3 Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Human Physiology with clinical relevance
[Course code:**23F307**]
Term Period: November to March
Hrs/week:03
Total Hrs: 48

Prescribed Curriculum	**Topics**	**No. of hours required to cover**	**Date**	**Method of deployment**
Module 1	**Blood:** Composition, cells, plasma proteins and lipoproteins, preparation of plasma,serum, and different blood cells. Erythrocytes; shape and function. WBC; types, differential count and functions. Platelets and their function. Half-life of blood cells	04	01.12.2023 02.12.2023 08.12.2023	Lecture
	Buffer systems, hemostasis, blood clotting, different pathways of blood clotting, mechanisms of initiation of clotting pathways, various enzyme complexes digestion of clot, anticoagulants, blood volume, blood pressure and its regulations.	04	14.12.2023 21.12.2023 22.12.2023	Lecture
	Plasma lipoproteins and their functions, HDL, LDL, VLDL, chylomicrons	04	28.12.2023 29.12.2023 04.01.2024	Lecture
Module 2	**Respiratory System**: Lungs, structure and functions, gas exchange, oxygen binding by hemoglobin, factors affecting oxygenation and acid-base balance.	06	11.01.2024 12.01.2024 24.01.2024	Lecture
	Nervous system: Structure of a neuron, nerve transmission, mechanism ofneurotransmission,	03	25.01.2024 26.01.2024 27.01.2024	Lecture

	action potential, synapse, different types of neurotransmitters, stimulatory and inhibitory, central and peripheral nervous system, neuro-muscular junction.			
	Parts of brain, brain-gut interaction, ion channels, types of ion-channels, secretion of neurotransmitters, CSF; composition and function.	03	30.01.2024 31.01.2024 01.02.2024	Lecture
Module 3	**Excretory System**: Ultra structure of the nephron, glomerular filtration, filtration rate, mechanism of formation of urine, acid-base balance.	04	02.02.2024 03.02.2024 05.02.2024	Lecture
	Consequences of imbalance in acid-base balance, formation of kidney stones. Kidney function tests	04	06.02.2024 07.02.2024 08.02.2024	Lecture
	Hepatobiliary System: Anatomy of the liver, blood supply, cells; hepatocytes, endothelial cells and Kupffer cells, secretory and excretory functions and formationof bile. Role of liver in detoxification.	04	10.02.2024 12.02.2024	Lecture
Module 4	**Digestive System**: GI tract, digestion and absorption of carbohydrates, proteins and lipids. Mechanism of HCI production in the stomach. Gastrointestinal hormones and role of pancreas in digestion.	06	13.02.2024	Lecture
	Muscle physiology: Types of muscle, structure of skeletal muscle and smooth muscle, muscle proteins; actin, myosin, tropomyosine, troponins. Mechanisms ofskeletal and smooth muscle contraction, sliding filament model.	06	14.02.2024 15.02.2024	Lecture

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Lesson Plan – 4 Semester 2023-24

Sl. No.	Course	Course Type	Credit Pattern			Total Credits
			L	T	P	
1	Research Project Work, Report and Viva Voce	HC	0	0	10	10
	Soft Core (Any One)					
2	Clinical Biochemistry	SC	3	0	0	3
3	Biotechnology	SC	3	0	0	3
4	Plant Biochemistry	SC	3	1	0	4
5	Human Nutrition	SC	3	1	0	4
TOTAL CREDITS: 13 1 Hard Core (HC): 10 Credits; 1 Soft Core (SC): 03 credits						

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Lesson Plan – 4 Semester 2023-23

Department: Department of Studies in Biochemistry
Subject: Project Work [Course code: **23F401]**
Term Period: May to August
Total Hrs: 320

Project work:

Each student shall identify an individual/unique research problem and conduct an independent mini research project for 3-4 months (non-class hours) and submit a dissertation with the research findings and conclusion. The student shall be evaluated for C1 and C2 by the internal faculty while for C3 the student shall be evaluated by two examiners (internal and external) for the students' "Knowledge on the scientific problem, protocols and inference of results presented in the report". The quality of work and efficiency of the defense will be evaluated by two examiners (internal and external) during the end semester examination.

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Lesson Plan – 4th Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Clinical Biochemistry[Course code:**23F402**]
Term Period: May to August
Hrs/week:03
Total Hrs: 48

Prescribed Curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Module 1 **Basic concepts:**	Health and disease. Normal and pathological changes, affecting cells in the body. Celldeath and the physiological causes; physical, chemical, biological agents and nutritional deficiency..	04	14.05.2024 15.05.2024	Lecture
	Blood: Composition, cells, functions of plasma proteins and lipo-proteins in diseases. Disorders of hemoglobin; thalassemia, sickle cell anemia. Anemias; microcytic, normocytic and macrocytic	04	16.05.2024 16.05.2024	Lecture
	Diagnostic enzymology: Clinically important enzymes; alkaline phosphatase, AST, ALT and isoenzymes of creatine kinase and LDH	04	21.05.2024 22.05.2024	Lecture
Module 2 Endocrine system	Overview of the physiology of endocrine system.	02	27.05.2024	Lecture

	Laboratory diagnosis to assess the function of pituitary, thyroid, adrenals and gonads.	08	28.05.2024	Lecture
	Disroders; graves disease, Hashimoto disease, Addission's disease, hypo and hyper secretion of hormones. Acromegaly, gigantism.	02	29.05.2024	Lecture
Module 3 Hepatobiliary, Kidney, and GI System	Hepatobiliary system: Overview of hepatobiliary system. Biochemical indices of hepatobiliary diseases. Diagnosis of liver function tests. Bile pigments - formation of bilirubin, urobilinogen, bile acids. Jaundice; prephapatic, hepatic and post hepatic.	03	04.06.2024 25.06.2024	Lecture
	. Diseases of the liver - Hepatitis cholestasis, cirshosis, fatty liver and gallstones. Overview of renal system. Assessment of renal function; creatine clearance, renal calculi, uremia, laboratory investigation of kidney disorders.	03	01..07.2024	Lecture
	Gastrointestinal disorders: Fractional gastric analysis, hypo and hyper acidity, gastric ulcers, malabsorption syndrome, steatorrhea and diarrhoea.	02	02.07.2024	Lecture
Module 4 Cardiac, Skeletal Muscles and Nervous System	Overview of heart and skeletal muscles, CNS.	02	03.07.2024	Lecture
	Major Cardio vascular system, atherosclerosis, risk factors and pathogenesis	04	03.07.2024	Lecture
	Diagnosis and prognosis. Assessmentof CSF	04	03.07.2024 10.07.2024	

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Lesson Plan – 4th Semester 2023-24

Department: Department of Studies in Biochemistry
Subject: Human Nutrition [Course code:**23F405**]
Term Period: May to August
Hrs/week:03
Total Hrs: 48

Prescribed Curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Module 1	Nutrition: Concepts of macro and micro nutrients, essential nutrients and their classification.	04	07.05.2024 09.05.2024 13.05.2024	Lecture
	Food groups, proximate analysis of foods, chemical and biological analysis for nutrients.	04	16.05.2024 20.05.2024 21.05.2024	Lecture
	Food as source of energy, methods of determining energy value of foods, calorimetry, physiological fuel value, daily requirement of energy, high and low calorie diets. Basal metabolic rate (BMR), factors affecting BMR, specific dynamic action of foods.	04	27.05.2024 28.05.2024 30.05.2024 04.06.2024	Lecture
Module 2 Carbohydr	Dietary sources, dietary fiber, essentiality of	02	06.06.2024 18.06.2024	Lecture

ates	carbohydrate		14.05.2024	
	.Proteins: Essential amino acids, evaluation of nutritive value of dietary proteins, PER, BV, nutritional classification of proteins	08	20.06.2024 21.06.2024	Lecture
	supplementary value of proteins, protein calorie malnutrition; Kwashiorkar and Marasmus.	02	25.06.2024 27.06.2024	Lecture
Module 3	Fats: Sources, invisible fat, essential fatty acids, PUFA.	03	28.06.2024 01.07.2024	Lecture
	. Vitamins: Fat soluble and water soluble vitamins, provitamines, antivitamins, dietary sources, daily requirements, structure and function. Deficiency symptoms of B and C vitamins and fat soluble vitamins,	03	02.07.2024 04.07.2024	Lecture
	hypervitaminosis, vitamin - like compounds.	02	05.07.2024 08.07.2024	Lecture
Module 4	Minerals: Macro and micro nutrients, sources, requirements, functions and deficiency symptoms.	02	09.07.2024 11.07.2024	Lecture
	Water metabolism; distribution in body, water balances and factors affecting water balance.	04	16.07.2024 18.07.2024	Lecture

	Diet: Recommended daily allowances, special nutrition for infants, children, during pregnancy, lactation and old age.	04	19.07.2024 23.05.2024	
	Nutrition for diabetes and cardiovascular disease patients. Wellness diets, fitness diets, obesity and BMI,			Lecture

Education to Excel

POOJA BHAGAVATH MEMORIAL MAHAJANA EDUCATION CENTRE

PG WING OF SBRR MAHAJANA FIRST GRADE COLLEGE

METAGALLI, KRS ROAD, MYSURU

DEPARTMENT OF MICROBIOLOGY

Lesson Plan: 2023-24

I Semester

Department: PG MICROBIOLOGY
Subject: HARDCORE: BACTERIOLOGY
Term Period: January to May 2023

Hrs/week: 4/week **Total Hours: 48**

Learning Objectives: Students should study this paper to know –

1. **The structure of bacteria and its identification**
2. **The different agents to inhibit bacteria**

Module-I **12hrs**

Introduction: Important events in development of bacteriology, Scope and relevance of bacteriology. Economic importance of bacteria.

Cell Structure: An overview of bacterial size, shape and arrangement, structure, chemical composition of cell wall of Archaebacteria, gram-negative bacteria, gram-positive bacteria and acid fast bacteria, cell wall deficient organisms including L-form structure, composition and function of cell membrane, capsule, flagella, pili, Inclusion bodies, ribosomes, mesosomes, reserve food materials , magnetosomes and phycobilisomes, endospores, bacterial nucleic acids – chromosome, plasmid, transposons, integrons and antibiotic resistance cassettes. **Microscopy:** Working Principles of bright field microscope, fluorescent microscope, dark field microscope, phase contrast microscope, stereomicroscope, confocal microscopy and electron microscope. Preparation of sample for electron microscopic studies. Application and importance of above microscopes. Measurement of microscopic objects.

Module-III **12 hrs**

Bactericidal and bacteriostatic agents - Factors affecting static and cidal activity, phenols and phenolic compounds, alcohols, halogens, heavy metals, dyes, detergents,

aldehydes Non-medical uses of antibiotics. Assay methods of antimicrobial agents – Phenol coefficient, qualitative assay of drugs (drug sensitivity testing), quantitative assays – liquid tube assay (MIC), agar tube assay. Agar plate assay

Module-III 12 hrs

Growth, Cultivation and control of Bacteria: Nutrient requirements, nutritional types of bacteria, culture media, classification of media.Growth: Nutritional uptake, Growth kinetics, generation time, growth curve, factors affecting growth. Methods for measurement of microbial growth – direct microscopy, viable count estimates, turbidometry, and biomass. Aerobic, anaerobic, batch, continuous and synchronous cultures. Methods of pure culture isolation, Enrichment culturing techniques, single cell isolation, and pure culture development. Preservation and Maintenance of Microbial cultures: Repeated subculturing, preservation at low temperature, sterile soil preservation, mineral oil preservation, deep freezing and liquid nitrogen preservation, lyophilization. Advantages and disadvantages of each method. Control of microorganisms: Antimicrobial agents, physical and chemical methods. Principles, functioning and types of Biosafetycabinets.

Module-IV 12 hrs

Characteristics and Salient features of major groups of Bacteria: Archaebacteria: general **c**haracteristics and classification; extremophiles, halophiles, thermophiles and barophiles; General characteristics, classification, diversity and distribution, economic importance of .**Actinomycetes, Cyanobacteria**. **Bioluminescent bacteria;** characteristics and examples, mechanism of bioluminescence. General characteristics, life cycle, growth, multiplication and significance of Mycoplasma, Rickettsiae and Chlamydia

Learning Outcomes: After studying this paper the students will know –

1. The concept and working principles of microscopes
2. Classification and salient features of different groups of bacteria

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Subject: HARDCORE: BACTERIOLOGY
Hrs/week: 4/week Total Hours: 48
Term Period: January to May 2023

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module I- 12hrs **Introduction &** **Cell Structure** **Cell Structure** **Microscopy**	Important events in development of bacteriology , Scope and relevance of Bacteriology Economic importance of bacteria	02	23-01-2023	Lecture method(Using power point, video and audio visual)
	Bacterial size shape arrangement chemical composion of cell wall of Archaea bacteria and Gram negative and positive bacteria	02	24-01-2023 To 25-01-2023	Lecture method(Using power point, video and audio visual)
	Acid fast, Cell wall deficient and Cell envelopes	02	27-01-202 to 28-01-2023	Lecture method(Using power point,

				video and audio visual)
	Cytoplasmic constituents	02	30-01-2023	Lecture method(Using power point, viedo and audio visual)
	Working principles of bright field, confocal, fluroscent dark field, phase contrast and electron microscope	02	06-02-2023 To 07-02-2023	Lecture method(Using power point, viedo and audio visual)
	Application and importance above microscope	02	10-02-2023	Lecture method(Using power point, viedo and audio visual)
	Transposons, integrons and antibiotic resistance cassettes.	02	17-02-2023 & 21-02-2023	Lecture method(Using power point, viedo and audio visual)
Module II-12 hrs Bactericidal and bacteriostatic agents	Introduction to bactericidal and bacteriostatic agents	02	24-02-2023	Lecture method(Using power point, viedo and audio visual
	Factors affecting static and cidal	02	25-02-2023	Lecture method(Using

	activity			power point, video and audio visual)
	Phenols and phenolic compounds	02	09-03-2023	Lecture method(Using power point, video and audio visual)
	alcohols, halogens, heavy metals, dyes, detergents, aldehydes Non-medical uses of antibiotics	02	13-03-2023 to 15-03-2023	Lecture method(Using power point, video and audio visual)
	Phenol coefficient, qualitative assay of drugs (drug sensitivity testing), quantitative assays.	02	17-03-2023 & 21-03-2023	Lecture method(Using power point, video and audio visual)

	Liquid tube assay (MIC), agar tube assay. Agar plate assay	02	16-03-2023	Lecture method(Using power point, video and audio visual)
Module III-12 hrs Growth, Cultivation and control of Bacteria	Bacterial types on nutritional requirement , types of media, nutritional uptake, growth kinetics and factor affecting grwoth	02	28-03-2023 To 31-03-2023	Lecture method(Using power point, video and audio visual)
	Methods for measurement of microbial growth – direct microscopy, viable count estimates, turbidometry, and biomass.	02	05-04-2023	Lecture method(Using power point, video and audio visual)

	Aerobic, anaerobic, batch, continuous and synchronous cultures. Methods of pure culture isolation, Enrichment culturing techniques	02	06-04-2023 To 08-04-2023	Lecture method(Using power point, video and audio visual)
	Single cell isolation, and pure culture development. Preservation and Maintenance of Microbial cultures: Repeated subculturing, preservation at low temperature, sterile soil preservation, mineral oil preservation, deep freezing and liquid nitrogen preservation, lyophilization	03	11-04-2023 To 17-04-2023	Lecture method(Using power point, video and audio visual)
	Advantages and disadvantages of each method. Control of microorganisms: Antimicrobial agents, physical and	03	24-04-2023 to 27-04-2023	Lecture method(Using power point, video and audio visual)

	chemical methods. Principles, functioning and types of Biosafety cabinets			
Module IV 12 hours **A) Characteristics and Salient features of major groups of Bacteria:** **B) Archaebacteria:** **C) Economic importance of Actinomycetes, Cyanobacteria.** **D) Bioluminescent bacteria** **E) Mycoplasma, Rickettsiae and Chlamydia**	General characteristics and classification; extremophiles, halophiles, thermophiles and barophiles	03	28-04-2023	Lecture method(Using power point, video and audio visual)
	General characteristics, classification, diversity and distribution, economic importance of .**Actinomycetes,**	03	29-04-2023	Lecture method(Using power point, video and audio visual)
	General characteristics, classification, diversity and distribution, economic importance of. **Cyanobacteria**. **Bioluminescent bacteria**	03	02-05-2023	Lecture method(Using power point, video and audio visual)

	General characteristics, life cycle, growth, multiplication and significance of **Mycoplasma,**	03	03-05-2023	Lecture method(Using power point, video and audio visual)
	General characteristics, life cycle, growth, multiplication and significance of Rickettsiae and Chlamydia	02	04-05-2023 To 05-05-2023	Lecture method(Using power point, video and audio visual)

Department: PG MICROBIOLOGY

Subject: HARDCORE: VIROLOGY

Term Period: January to May 2023

Hrs/week: 4/week Total Hours: 48

Module-I **12hrs**

Learning Objectives: Students should study this paper to know –

1. Structure and functioning of viruses
2. Infectious cycle and replication pattern

A) The science of virology: Concept and scope of virology. Definitive

properties of viruses: Morphology, Ultra structure, Chemical composition - proteins, nucleic acids, and other contents. Classification and nomenclature of viruses. Evolutionary importance ofviruses.

B) **Working with viruses**: Visualization and enumeration of virus particles, Biological activity of viruses, Physical and chemical manipulation of the structural components of viruses, Characterization of viral product expressed in the infected cells. Isolation and purification of viruses, Detection of viruses: physical, biological, immunological and molecularmethods.

Module-II 12hrs

A) **Virus Infectious Cycle**: Adsorption/attachment, Entry, Disassembly/uncoating, Nucleic acid and Protein synthesis, Intracellular trafficking, Assembly, Maturation andRelease.

B) **Replication patterns of specific viruses**: Viruses with RNA genomes; DNA genomes. Identification of virus prototypes associated with different virus replication schemes; Details on important viruses namely Herpes virus, Poliovirus, Influenza virus, coronavirus, SV40 and AdenoVirus, Poxviruses, Hepatitis Viruses, Retroviruses.

Module-III 12hrs

A) **Virus-Host Interactions: Types of infections:** Acute (RSV, influenza, viral encephalitis), Persistent (Hepatitis B, C, HIV), Latent (HSV), Slow (scrapie). Maternal-fetal transmission, Transformation and oncogenesis resulting from virus infections (warts, lymphoma, hepato- cellular carcinoma). Vector- borne and emerging diseases (sources andcauses).

B) **Host-responses to viruses:** Innate (cytokines, interferons, NK cells) and adaptiveimmunity to viruses (antibody and cell-mediated immunity)

C) **Prevention and control of viral diseases:** Vaccines: History (smallpox, rabies, polio, measles, mumps, HPV, hepatitis B). Live-attenuated and killed-virus vaccines, subunit vaccines, nucleic acid based, & viral-vector-based vaccines. Pre- and post-exposure prophylaxis. **Antiviral drugs:** Nucleoside analogs, reverse transcriptase inhibitors, fusion inhibitors, maturation/protease inhibitors.

Module-IV 12hrs

A) **Propagation, purification, characterization and identification and genomics of plant viruses**: General methods of propagation of plant viruses; purification of plant viruses using centrifugation, chromatography and

electrophoresis techniques, methods employed in identification of plantviruses.

B) Sub-viral particles: Discovery, Structure, Classification, replication and diseases causedbySatellite, Satellites virus, Virusoids, ViroidsandPrions.

C) Microbial viruses: Diversity, classification, characteristics and applications of bacteriophages, and general account on algal, fungal and protozoanviruses.

D) Viruses as tools: Study of gene expression and regulation in host cells, use as gene delivery vehicles to treat genetic disorders or asvaccines.

Learning Outcomes: After studying this paper the students will know –

1. Viruses as tool for vaccination
2. Host and virus specific responses

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Department: PG MICROBIOLOGY

Subject: HARDCORE: VIROLOGY

Term Period: January to May 2023

Hrs/week: 4/week Total Hours: 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment

Module-I-12 hrs **A) The science of virology** **B) Working with viruses**:	Concept and scope of virology.	1	23-01-2023	Lecture method(Using power point, video and audio visual)
	Definitive properties of viruses: Morphology, Ultra structure,	2	24-01-2023	Lecture method(Using power point, video and audio visual)
	Chemical composition - proteins, nucleic acids, and other contents.	2	25-01-2023	Lecture method(Using power point, video and audio visual)
	Classification and nomenclature of viruses. Evolutionary importance of viruses.	2	27-01-2023 To 28-01-2023	Lecture method(Using power point, video and audio visual)
	Visualization and enumeration of virus particles,	1	30-01-2023	Lecture method(Using power point, video and audio visual)
	Biological activity of viruses, Physical and chemical manipulation of the structural components of viruses,	2	31-01-2023 & 1-02-2023	Lecture method(Using power point, video and audio visual)

	Characterization of viral product expressed in the infected cells. Isolation and purification of viruses,	2	02-02-2023 To 04-02-2023	Lecture method(Using power point, video and audio visual)
	Detection of viruses: physical, biological, immunological and molecular methods.	2	07-02-2023 To 09-02-2023	Lecture method(Using power point, video and audio visual)
Module-II 12 hrs **A)Virus Infectious Cycle** **B) Replication patterns of specific viruses**	Adsorption/attachment, Entry, Disassembly/uncoating,	1	13-02-2023	Lecture method(Using power point, video and audio visual)
	Nucleic acid and Protein synthesis, Intracellular trafficking, Assembly,	2	14-02-2023	Lecture method(Using power point, video and audio visual)
	Maturation and Release.	2		Lecture method(Using power point, video and audio visual)
	Viruses with RNA genomes; DNA genomes.	2	21-02-2023	Lecture method(Using power point, video and audio visual)
	Identification of virus prototypes associated with different virus replication schemes	2	22-02-2023 To 23-02-2023	Lecture method(Using power point, video and audio visual)
	Details on important viruses namely Herpes virus, Poliovirus, Influenza virus, coronavirus	2	25-02-2023	Lecture method(Using power point, video and audio visual)

	SV40 and AdenoVirus, Poxviruses, Hepatitis Viruses,Retroviruses .	1	28-02-2023	Lecture method(Using power point, video and audio visual)
Module-III 12 hrs **A) Virus-Host Interactions** **B) Types of infections: Host-responses to viruses** **C) Prevention and control of viral diseases** **D) Antiviral drugs**	Acute (RSV, influenza, viral encephalitis), Persistent (Hepatitis B, C, HIV), Latent (HSV), Slow (scrapie)	2	09-03-2023	Lecture method(Using power point, video and audio visual)
	Maternal-fetal transmission, Transformation and oncogenesis resulting from virus infections (warts, lymphoma, hepato-cellular carcinoma).	1	10-03-2023 To 11-03-2023	Lecture method(Using power point, video and audio visual)
	Vector- borne and emerging diseases (sources andcauses).	2	17-03-2023	Lecture method(Using power point, video and audio visual)
	Host-responses to viruses: Innate (cytokines, interferons, NK cells)	1	20-03-2023	Lecture method(Using power point, video and audio visual)
	Adaptiveimmunity to viruses (antibody and cell-mediated immunity)	1	23-03-2023 To 25-03-2023	Lecture method(Using power point, video and audio visual)

	Vaccines: History (smallpox, rabies, polio, measles, mumps, HPV, hepatitis B).	2	28-03-2023	Lecture method(Using power point, video and audio visual)
	Live-attenuated and killed- virus vaccines, subunit vaccines, nucleic acid based, & viral-vector-based vaccines	2	29-03-2023 To 30-03-2023	Lecture method(Using power point, video and audio visual)
	Pre- and post-exposure prophylaxis.	1	30-03-2023	Lecture method(Using power point, video and audio visual)
	Nucleoside analogs, reverse transcriptase inhibitors, fusion inhibitors, maturation/proteas e inhibitors.	1	08-04-2023 To 11-04-2023	Lecture method(Using power point, video and audio visual)
Module-IV 12 hrs **A) Propagation, purification, characterization and identification and genomics of plant viruses** **B) Sub-viral particles** **C) Microbial viruses**: **D) Viruses as tools**	General methods of propagation of plant viruses	1	17-04-2023 To 18-04-2023	Lecture method(Using power point, video and audio visual)
	purification of plant viruses using centrifugation	1	24-04-2023	Lecture method(Using power point, video and audio visual)
	chromatography and electrophoresis techniques,	1	25-04-2023	Lecture method(Using power point, video and audio visual)
	methods employed in identification of plantviruses.	2	26-04-2023	Lecture method(Using power point, video and audio visual)

	Discovery, Structure, Classification, replication and diseases causedbySatellite	1	27-04-2023	Lecture method(Using power point, video and audio visual)
	Satellites virus, Virusoids, Viroids and Prions.	2	28-04-2023	Lecture method(Using power point, video and audio visual)
	Diversity, classification, characteristics and applications of bacteriophages,	1	29-04-2023	Lecture method(Using power point, video and audio visual)
	General account on algal, fungal and protozoan viruses	1	02-05-2023	Lecture method(Using power point, video and audio visual)
	Study of gene expression and regulation in host cells,	1	03-05-2023	Lecture method(Using power point, video and audio visual)
	Use as gene delivery vehicles to treat genetic disorders or as vaccines.	1	05-05-2023	Lecture method(Using power point, video and audio visual)

Department: PG MICROBIOLOGY
Subject: HARD CORE: TECHNIQUES IN BIOLOGY (FCHC)
Term Period: January to May 2023
Hrs/week: 4/week Total Hours: 48

Learning Objectives: Students should study this paper to know –

a. This paper is designed to give a brief introduction to most of the techniques used in the field of biological analyses
b. Nevertheless the topics in this paper are to be taught compendiously.

Module I

A) Biological samples: Types and preparation 12 hours

Study Models: *In vivo* and *in vitro* models; Microbial, Animal, Plants; choice of models;types of studies, auxotrophs. Routes of exposure of test chemicals in animals. Culture: microbes, animal and plant cells inlaboratory.

B) Cell fractionation techniques: Tissue homogenization, Cell lysis techniques, extraction of cell cellular contents. Protein purification techniques: salting in, salting out, dialysis and ultrafiltration.

C) Centrifugation: Svedberg's constant, sedimentation velocity and sedimentation equilibrium. Ultra centrifugation: Differential and density gradient centrifugation, centrifugal elutriation, isolation of cell organelles (e.g. Mitochondria) from biological tissue samples.

ModuleII

A) Spectroscopic analysis 12 hours

Principles and applications of colorimeter, spectrophotometer, fluorimeter, multiwell plate reader. Beer-Lambert's Law and its limitations. Extinction coefficient, chromogenic and fluorescent probes, their applications. Principle of flame photometry, and X-ray crystallography, IR, ESR,NMR& Raman's spectroscopy.

Module III

A) Chromatographic and electrophoretic techniques: 12 hours

Principles, working and applications of paper chromatography(radial, ascending, descending andThinlayer chromatography, Brief introduction, application of adsorption, Ion exchange, Gel- filtration, Affinity, Gas chromatography, HPLC, UPLC and FPLC.

B) Protein electrophoresis: Polyacrylamide gel electrophoresis, SDS-PAGE, IEF &2DEF.Visualizing proteins using CBB, silver stain; glycoproteinsandlipoproteins staining, Brief introduction to Zymogram and reverse zymogram;

C) Nucleic acid electrophoresis: Agarose gel electrophoresis, Visualizing nucleic acids in using Ethidium bromide and UV. Fluorescence probes: SYBR green and Eeva green, Taq man, PFGE and capillaryelectrophoresis.

Module IV

A) Radiochemistry andMassspectroscopy 12 hours

Isotopes: Heavy isotopes and radio isotopes, half-life, decay constant, detection and quantitation; Principle and working of GM counter and scintillation counter (solid/liquid).

Mass spectroscopy

Principle and construction of mass spectrometer.m/e, tof, MALDI and ESI. LC-MS, LC-MS-MS.

B) Applications of radioactivity: Radio isotopes in biology 3H, 14C, 32P, 131I,35S; Labeling of proteins and nucleic acids, autoradiography, pulse chase method, carbon dating.

Learning Outcomes: After studying this paper the students will know –

1. Techniques inBiology
2. The fundamental principles in cellhomogenization
3. Importance of bioanalytical techniques

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Hrs/week: 4/week Total Hours: 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module-I 12 hrs **A) Biological samples** **Types and preparation** **Cell fractionation techniques** **B) Centrifugation**	Tissue homogenization, Cell lysis techniques, extraction of cell cellular contents.	2	23-01-2023	Lecture method(Using power point, video and audio visual)
	Protein purification techniques: salting in, salting out,	2	24-01-2023	Lecture method(Using power point, video and audio visual)
	Dialysis and ultrafiltration.	2	25-01-2023	Lecture method(Using power point, video and audio visual)
	Centrifugation: Svedberg's constant, sedimentation velocity and sedimentation equilibrium	2	27-01-2023	Lecture method(Using power point, video and audio visual)
	Differential and density gradient centrifugation	2	28-01-2023	Lecture method(Using power point, video and audio visual)
	centrifugal elutriation, isolation of cell organelles (e.g. Mitochondria) from biological tissue samples	2	30-01-2023	Lecture method(Using power point, video and audio visual)
Module-II 12 hrs	Principles and applications of colorimeter, IR, ESR,NMR& Raman's spectroscopy	3	31-01-2023	Lecture method(Using power point, video and audio visual)

A) Spectroscopic analysis	spectrophotometer, fluorimeter	2	01-02-2023	Lecture method(Using power point, video and audio visual)
	multiwell plate reader. Beer-Lambert's Law and its limitations	2	02-02-2023	Lecture method(Using power point, video and audio visual)
	Extinction coefficient, chromogenic and fluorescent probes their applications	3	04-02-2023	Lecture method(Using power point, video and audio visual)
	Principle of flame photometry, and X-ray crystallography	2	09-02-2023 To 11-02-2023	Lecture method(Using power point, video and audio visual)
Module-III 12 hrs **A) Chromatographic and electrophoretic techniques:** **B)Protein electrophoresis** **C) Nucleic acid electrophoresis**	Principles,working and applications of paper chromatography (radial, ascending, descending and 2-D),	2	13-02-2023 To 15-02-2023	Lecture method(Using power point, video and audio visual)
	Brief introduction, application of Adsorption, Ion exchange,Gel Filtration	1	21-02-2023 To 24-02-2023	Lecture method(Using power point, video and audio visual)
	Affinity, Gas chromatography. Chromatofocusing	2	27-02-2023	Lecture method(Using power point, video and audio visual)
	HPLC, UPLC and FPLC.	1	28-02-2023	Lecture method(Using power point, video and audio visual)
	Polyacrylamide gel electrophoresis, SDS-PAGE, IEF & 2DEF. Visualizingproteins using CBB, silver stain; glycoproteinsandlipopr	2	13-03-2023 To 15-03-2023	Lecture method(Using power point, video and audio visual)

	oteins staining			
	Brief introduction to Zymogram and reverse zymogram	1	11-04-2023 To 15-04-2023	Lecture method(Using power point, video and audio visual)
	Agarose gel electrophoresis, Visualizing nucleic acids in using Ethidium bromide	2	17-04-2023 To 19-04-2023	Lecture method(Using power point, video and audio visual)
	Fluorescence probes: SYBR green and Eeva green, Taq	1	20-04-2023	Lecture method(Using power point, video and audio visual)
Module-IV 12 hrs **A) Radiochemistry and Mass spectroscopy Isotopes** **B) Mass spectroscopy** **C) Applications of radioactivity**	Heavy isotopes and radio isotopes, half-life, decay constant, detection and quantitation	3	26-04-2023 To 28-04-2023	Lecture method(Using power point, video and audio visual)
	Principle and working of GM counter and scintillation counter (solid/liquid).	3	29-04-2023	Lecture method(Using power point, video and audio visual)
	Spectroscopy Principle and construction of mass spectrometer. m/e, tof, MALDI and ESI. LC-MS, LC-MS-MS	3	02-05-2023	Lecture method(Using power point, video and audio visual)
	Radio isotopes in biology 3H, 14C, 32P, 131I,35S; Labeling of proteins and nucleic acids, autoradiography, pulse chase method, carbon dating	3	03-05-2023 To 05-05-2023	Lecture method(Using power point, video and audio visual)

Department: PG MICROBIOLOGY

Subject: SOFTCORE: ENVIRONMENTAL MICROBIOLOGY

Term Period: January to May 2023

Hrs/week: 4/week Total Hours: 48 hrs

Module-I 12hrs

Introduction to Microbial Ecology: Evolution of Life on Earth; History and scope of ecology, Concept of autecology, synecology, population, community, biome. Ecological succession. Microorganism in aquatic Environment: major physical and chemical factors (light, temperature, gases, nutrients). Aquatic biota: phytoplankton, zooplankton, benthos, periphyton, macrophytes. Biofilms, Production in lakes, rivers, estuaries and wetlands. Nutrient dynamics in lakes, rivers, estuaries and wetland, Airspora of indoor and outdoor environment, factors affecting airspora, Techniques of trapping air bornemicroorganisms.

Module-II 12hrs

Soil Microbiology: Characteristics and classification of soil. Interactions between microorganisms: Mutualism, commensalism, ammensalism synergism, parasitism, predation, competition. Rhizosphere, rhizospheremicroflora and its beneficial activity. Role of microorganism in nitrogen, phosphorous and sulphur cycles. Detrimental effects of diverted biogeochemical cycles. Biological nitrogen fixation in detail: Symbiotic, asymbiotic and associated nitrogen fixation. Structure, function and gentic regulation of nitrogenases.Viable but nonculturable bacteria. Impact of crop residues burning on soil fertility and agriculturally important microbes.

Module-III 12hrs

A) Microbes in extreme environment: Microbes of extreme environments,

Thermophiles, acidophiles, alkaliphiles, halophiles. barophiles and their survival mechanisms.

B) Space microbiology: Historical development of space microbiology, Life detection methods a) Evidence of metabolism (Gulliver) b) Evidence of photosynthesis (autotrophic andheterotrophic).

Module-IV **12hrs**

Microbes in the degradation of wastes: Treatment of solid and liquid industrial wastesMicrobialdegradationofpesticide, Xenobiotic,degradationoflignin, cellulose and pectin. Bioremediation.Geomicrobiology: Microbes in metal extraction, mineral leaching and mining, copper extraction by leaching and microbes in petroleum product formation. Global Environmental Problems: Global Warming, Acid rain, Ozone depletion. Biodeterioration of wood and metals.

Learning Outcomes: After studying this paper the students will know –

1. The ecological succession of microorganisms and itsadaptation
2. Bioremediation concept ofmicroorganisms

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Department: PG MICROBIOLOGY
Subject: SOFTCORE: ENVIRONMENTAL MICROBIOLOGY
Term Period: January to May 2023
Hrs/week: 4/week Total Hours: 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module-I 12 hrs Introduction to Microbial Ecology	Evolution of Life on Earth; History and scope of ecology, Concept of autecology, synecology, population, community, biome. Ecological succession.	2	27-01-2023 To 28-05-2023	Lecture method(Using power point, video and audio visual)
	Microorganism in aquatic Environment: major physical and chemical factors (light, temperature, gases, nutrients).	2	30-01-2023 To 31-01-2023	Lecture method(Using power point, video and audio visual)
	Aquatic biota: phytoplankton, zooplankton, benthos, periphyton,	2	03-02-2023 To 04-02-2023	Lecture method(Using power point,

	macrophytes.			video and audio visual)
	Biofilms, Production in lakes, rivers, estuaries and wetlands. Nutrient dynamics in lakes, rivers, estuaries and wetland	2	06-02-2023	Lecture method(Using power point, video and audio visual)
	Airspora of indoor and outdoor environment, factors affecting airspora	2	07-02-2023	Lecture method(Using power point, video and audio visual)
	Techniques of trapping air borne microorganisms	2	09-02-2023	Lecture method(Using power point, video and audio visual)
Module-II 12 hrs Soil Microbiology	Characteristics and classification of soil.	1	13-02-2023	Lecture method(Using power point, video and audio visual)
	Interactions between microorganisms: Mutualism, commensalism, ammensalism synergism, parasitism, predation, competition	2	17-02-2023 To 19-02-2023	Lecture method(Using power point, video and audio visual)
	Rhizosphere, rhizosphere microflora and its beneficial activity	1	23-02-2023 To 24-02-2023	Lecture method(Using power point, video and audio visual)
	Role of microorganism in nitrogen, phosphorous and sulphur cycles	2	27-02-2023	Lecture method(Using power point, video and audio visual)

	Detrimental effects of diverted biogeochemical cycles	2	28-02-2023	Lecture method(Using power point, video and audio visual)
	Biological nitrogen fixation in detail: Symbiotic, asymbiotic and associated nitrogen fixation.	2	01-03-2023	Lecture method(Using power point, video and audio visual)
	Structure, function and gentic regulation of nitrogenases	1	02-03-2023	Lecture method(Using power point, video and audio visual)
	Viable but non-culturable bacteria. Impact of crop residues burning on soil fertility and agriculturally important microbes	2	11-03-2023 and 13-03-2023	Lecture method(Using power point, video and audio visual)
Module-III 12 hrs **A) Microbes in extreme environment** **B) Space microbiology**	Microbes of extreme environments	2	17-03-2023	Lecture method(Using power point, video and audio visual)
	Thermophiles, acidophiles, alkaliphiles, halophiles. barophiles and their survival mechanisms.	2	21-03-2023 To 23-03-2023	Lecture method(Using power point, video and audio visual)
	Historical development of space microbiology,	2		Lecture method(Using power point,

				video and audio visual)
	Life detection methods a) Evidence of metabolism (Gulliver)	3	28-03-2023	Lecture method(Using power point, video and audio visual)
	Evidence of photosynthesis	3	29-03-2023	Lecture method(Using power point, video and audio visual)
Module-IV 12 hrs Microbes in the degradation of wastes.	Treatment of solid and liquid industrial wastes	02	10-04-2023 To 12-04-2023	Lecture method(Using power point, video and audio visual)
	Microbial degradation of pesticides,	02	13-04-2023	Lecture method(Using power point, video and audio visual)
	Xenobiotics,degradationoflignin, cellulose and pectin.	02	17-04-2023 To 19-03-2023	Lecture method(Using power point, video and audio visual)
	Bioremediation	02	25-04-2023	Lecture method(Using power point, video and audio visual)
	Geomicrobiology: Microbes in metal extraction, mineral leaching and mining, copper extraction by leaching and microbes in petroleum product	2	26-04-2023 To 28-04-2023	Lecture method(Using power point, video and audio visual)

	formation			
	Global Environmental Problems: Global Warming, Acid rain, Ozone depletion.	1	02-05-2023 To 03-05-2023	Lecture method(Using power point, video and audio visual)
	Biodeterioration of wood and metals.	1	05-05-2023	Lecture method(Using power point, video and audio visual)

Department: PG MICROBIOLOGY
Subject: SOFTCORE: MOLECULAR CELL BIOLOGY (FCSC)
Term Period: January to May 2023
Hrs/week :4/week Total Hours: 48

Learning Objectives: Students should study this paper to know –

1. The Cellularorganization.
2. Study of phytochemicals in cancerbiology.
3. Signaling transduction incells.

Module- I **12hrs**

Organization of the cell

Universal features of cells, Ultra-structure of prokaryotic and eukaryotic cells (Plants and animals), Structure of plant cell wall, Structure of cell membrane and models, functions of cell membrane, Intracellular organelles: Structure and functions of Ribosomes, Golgi apparatus; Mitochondria, Chloroplast, Lysosomes, Centrosome, Endoplasmicreticulum, Nucleus-Internal organization, Chromatin- structure and function, cellularcytoskeleton.

Module-II 12hrs

Cellular processes

Cell cycle and its regulation, Cell cycle check points, Molecular dynamics of cell division, interphase, Mitosis and meiosis, Cyclins and CDKs, Cell differentiation: Stem

cells, Differentiation of stem cells into different cell types and organization into specialized tissues, apoptosis, necrosis &autophagyMolecular mechanisms of membrane transport active, passive and facilitated, Receptor mediatedendocytosis.

Module-III 12hrs

Cancer Biology

Introduction,Historical account, classification, Characteristics of cancer cells, hallmark features of cancer cells,Carcinogenesis, Exogenous and endogenous carcinogens, cancer initiation, promotion and progression, Cancer cell cycle, Viruses and cancer, Oncogenes, Tumor suppressor genes with examples, cancertherapy present and future, Role of p53 in cancer. Role of phytochemicals in cancer treatment, cancer stem cells.

Module–IV 12hrs

Basics of Signal Transduction

Extra-cellular matrix components, Cell junctions, Cell adhesion molecules, Hormones and their receptors, Cell surface receptors as reception of extra- cellular signals, Types of cell signalling, Growth factors- EGFR, VEGF, PDGF and theirSignalling, signalling through G-protein coupled receptors; Second messengers in signal transduction pathways: cAMP and calcium ions (Ca2+), signalling through Receptor tyrosine kinases ,MAP kinase pathway,P13K -Akt pathway.

Learning Outcomes: After studying this paper the students will know

1. Structure and function ofcell.
2. Phytochemical role in cellular process and cancerbiology
3. Importance of growth factors and cellularsignalling.

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Department: PG MICROBIOLOGY
Subject: SOFTCORE: MOLECULAR CELL BIOLOGY (FCSC)
Term Period: January to May 2023
Hrs/week: 4/week Total Hours: 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module-I 12 hrs **Organization of the cell**	Universal features of cells,	2	24-01-2023	Lecture method(Using power point, video and audio visual)
	Ultra structure of prokaryotic and eukaryotic cells (Plants and animals),	2	27-01-2023 To 29-01-2023	Lecture method(Using power point, video and audio visual)
	Structure of plant cell wall, Structure of cell membrane and models,	2	31-01-2023	Lecture method(Using power point, video and audio visual)
	functions of cell membrane, Intracellular organelles:	2	04-02-2023	Lecture method(Using power point, video and audio visual)

	Structure and functions of Ribosomes, Golgi apparatus; Mitochondria,	1	09-02-2023	Lecture method(Using power point, video and audio visual)
	Chloroplast, Lysosomes, Centrosome, Endoplasmicreticulum, Nucleus-Internal organization,	1	16-02-2023	Lecture method(Using power point, video and audio visual)
	Chromatin- structure and function, cellularcytoskeleton.	2	22-02-2023	Lecture method(Using power point, video and audio visual)
Module-II 12 hrs **Cellular processes**	Cell cycle and its regulation	1	27-02-2023	Lecture method(Using power point, video and audio visual)
	Cell cycle check points, Molecular dynamics of cell division, interphase,	1	28-02-2023	Lecture method(Using power point, video and audio visual)
	Mitosis and meiosis	2	06-03-2023	Lecture method(Using power point, video and audio visual)
	Cyclins and CDKs, Cell differentiation: Stem cells	2	14-03-2023	Lecture method(Using power point, video and audio visual)
	Differentiation of stem cells into different cell types and organization into specialized tissues,	2	17-03-2023 To 18-03-2023	Lecture method(Using power point, video and audio visual)
	apoptosis, necrosis & autophagy			Lecture method(Using power point, video and audio visual)

	Molecular mechanisms of membrane transport active, passive and facilitated, Receptor mediatedendocytosis.	2	20-03-2023 To 21-03-2023	Lecture method(Using power point, video and audio visual)
Module-III 12 hrs **Cancer Biology**	Introduction, Historical account, classification	2	27-03-2023	Lecture method(Using power point, video and audio visual)
	Characteristics of cancer cells, hallmark features of cancer cells, Carcinogenesis,	2	31-03-2023	Lecture method(Using power point, video and audio visual)
	Exogenous and endogenous carcinogens, cancer initiation	2	08-04-2023	Lecture method(Using power point, video and audio visual)
	promotion and progression, Cancer cell cycle, Viruses and cancer, Oncogenes	2	11-04-2023 To 13-04-2023	Lecture method(Using power point, video and audio visual)
	Tumor suppressor genes with examples, cancer therapy present and future,	2	017-04-2023 To 19-04-2023	Lecture method(Using power point, video and audio visual)
	Role of p53 in cancer. Role of phytochemicals in cancer treatment, cancer stem cells.	2	25-04-2023 To 27-04-2023	Lecture method(Using power point, video and audio visual)

Module–IV 12 hrs **Basics of Signal Transduction**	Extra-cellular matrix components, Cell junctions, Cell adhesion molecules,	2	28-04-2023	Lecture method(Using power point, video and audio visual)
	Hormones and their receptors, Cell surface receptors as reception of extra- cellular signals,	2	29-04-2023	Lecture method(Using power point, video and audio visual)
	Types of cell signalling, Growth factors- EGFR, VEGF, PDGF and theirSignalling,	2	01-05-2023	Lecture method(Using power point, video and audio visual)
	signalling through G-protein coupled receptors	2	02-05-2023	Lecture method(Using power point, video and audio visual)
	Second messengers in signal transduction pathways:	2	03-05-2023	Lecture method(Using power point, video and audio visual)
	cAMP and calcium ions (Ca2+), signalling through Receptor tyrosine kinases	1	04-05-2023	Lecture method(Using power point, video and audio visual)
	MAP kinase pathway,P13K -Akt pathway.	1	05-05-2023	Lecture method(Using power point, video and audio visual)

Department: PG MICROBIOLOGY
Term Period: January to May 2023

Subject: PRACTICAL IA: (TECHNIQUES IN BIOLOGY & BACTERIOLOGY & VIROLOGY)

Hrs/week: 8/week Total Hours: 32

1. Laboratory safety rules
2. Isolation and enumeration of bacteria from soil and water
3. Staining techniques – simple (positive and negative), differential (Grams and acid fast), structural (endospore and capsule)
4. Motility test (hanging drop method and soft agar method)
5. Biochemical tests for the identification of bacteria – catalase, IMViC, Urease, TSIA.
6. TLC of amino acids.
7. Bacterial growth curve.
8. Diauxic growth curve in *E.coli*
9. Isolation of coliphages from sewage
10. Study of morphological changes due to viral infection in plants
11. Ascending chromatography
12. Descending chromatography
13. Circular paper chromatography
14. Wavelength scan of proteins and Nucleic acids

Department: PG MICROBIOLOGY
Term Period: January to May 2023

Subject: PRACTICAL IA: (TECHNIQUES IN BIOLOGY & BACTERIOLOGY & VIROLOGY)

Hrs/week: 8/week Total Hours: 32

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
1. Laboratory safety rules 2. Isolation and enumeration of bacteria from soil and water 3. Staining techniques – simple (positive and negative),	➢ Isolation of coliphages from sewage and testing for plaque formation by infecting susceptible ➢ bacterial culture.	04 Hours	30-01-2023	Hands on experience, lecture method
	➢ Simple, positive and negative staining.	04 Hours	06-02-2023	Hands on experience, lecture method

differential (Grams and acid fast), structural (endospore and capsule) 4. Motility test (hanging drop method and soft agar method) 5. Biochemical tests for the identification of bacteria – catalase, IMViC, Urease, TSIA. 6. TLC of amino acids. 7. Bacterial growth curve. *8.* Diauxic growth curve in *E.coli* 9. Isolation of coliphages from sewage 10. Study of morphological changes due to viral infection in plants 11. Ascending chromatography 12. Descending chromatography 13. Circular paper chromatography 14. Wavelength scan of proteins	➢ Acid fast and endospore staining	04 Hours	07-02-2023	Hands on experience, lecture method
	➢ Isolation of bacteria from soil, water and air.	04 Hours	08-02-2023	Hands on experience, lecture method
	➢ As study of bacterial growth curve with determination of growth rate of *E.coli*culture	04 Hours	13-02-2023	Hands on experience, lecture method
	➢ Evaluation of bacterial growth in liquid media: Diauxic growth curve.	04 Hours	14-02-2023	Hands on experience, lecture method
	➢ TLC of amino acids	04 Hours	20-02-2023	Hands on experience, lecture method
	➢ Motility test	04 Hours	22-02-2023	Hands on experience, lecture method
	➢ IMViC and Urease test	04 Hours	13-03-2023	Hands on experience, lecture method
	➢ TSI and Capsule staining	04 Hours	15-03-2023	Hands on experience, lecture method
	➢ Ascending Chromatography.	04 Hours	21-03-2023	Hands on experience, lecture method
	Wavelength scan of proteins and Nucleic acids	04hours	28-03-2023	Hands on experience, lecture method

and Nucleic acids				

Department: PG MICROBIOLOGY
Term Period: January to May 2023

Subject: PRACTICAL IB: (Molecular Cell Biology & Environmental Microbiology)
-

Hrs/week: 8/weekTotal Hours: 32

1. Microscopic examination of prokaryotic and eukaryotic cells using staining techniques.
2. Measurement of cell dimension by micrometery.
3. Cell Counting and viability by tryphan blue exclusion method.
4. Study of mitosis in onion root tips.
5. Study of meiosis in onion flower buds.
6. Polytene chromosomes.
7. Determination of BOD of pollution water.
8. Determination of COD of polluted water.
9. Degradation of cellulose by *Chaetomiumglobosum*.
10. Bacterial examination of drinking water by membrane filters technique.
11. Identification and study of soil associated Mycorrhiza.
12. Study of important microbes in the degradation of wastes.

Department: PG MICROBIOLOGY
Subject: PRACTICAL IB: (Molecular Cell Biology & Environmental Microbiology)
Term Period: January to May 2023

Hrs/week: 8/week Total Hours: 32

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
1. Microscopic examination of prokaryotic and eukaryotic cells using staining techniques. 2. Measurement of cell dimension by micrometery. 3. Cell Counting and viability by tryphan blue exclusion method. 4. Study of mitosis in onion root tips. 5. Study of meiosis in onion flower buds.	Microscopic examination of prokaryotic and eukaryotic cells using staining techniques	04 Hours	30-01-2023	Hands on experience, lecture method
	Measurement of cell dimension by micrometery.	04 Hours	02-02-2023	Hands on experience, lecture method
	Cell Counting and viability by tryphan blue exclusion method	04 Hours	13-02-2023	Hands on experience, lecture method
	Study of mitosis in onion root tips.	04 Hours	14-02-2023	Hands on experience,

6. Polytene chromosomes. 7. Determination of BOD of pollution water. 8. Determination of COD of polluted water. 9. Degradation of cellulose by *Chaetomiumglobosum*. 10. Bacterial examination of drinking water by membrane filters technique. 11. Identification and study of soil associated Mycorrhiza. 12. Study of important microbes in the degradation of wastes.				lecture method
	Study of meiosis in onion flower buds.	04 Hours	20-02-2023	Hands on experience, lecture method
	Polytene chromosomes.	04 Hours	21-02-2023	Hands on experience, lecture method
	Determination of BOD of pollution water.	04 Hours	27-02-2023	Hands on experience, lecture method
	Determination of COD of polluted water.	04 Hours	13-03-2023	Hands on experience, lecture method
	Degradation of cellulose by *Chaetomiumglobosum*.	04 Hours	14-03-2023	Hands on experience, lecture method
	Bacterial examination of drinking water by membrane filters technique	04 Hours	21-04-2023	Hands on experience, lecture method
	Identification and study of soil associated Mycorrhiza	04 Hours	27-04-2023	Hands on experience, lecture method
	Study of important microbes in the degradation of wastes	04hours	28-04-2023	Hands on experience, lecture method

Education to Excel

POOJA BHAGAVATH MEMORIAL MAHAJANA EDUCATION CENTRE

PG WING OF SBRR MAHAJANA FIRST GRADE COLLEGE

METAGALLI, KRS ROAD, MYSURU

DEPARTMENT OF MICROBIOLOGY

Lesson Plan: 2023-24

II Semester

Department: PG MICROBIOLOGY
Subject: HARDCORE: MOLECULAR BIOLOGY (FCHC)
Term Period: June to September

Hrs/week: 4/week Total Hours: 48

Learning Outcomes: After studying this paper the students will know –

1. To understand biological activities and metabolism at DNA and protein level
2. The course gives an in-depth insight into the molecular aspects of life - the central dogma.
3. It explains molecular aspects of genes and its regulation- genome- gene expressions heredity- recombination- protein synthesis- molecular basis of diseases-mutations genetic analysis etc.

ModuleI: 12 Hours

A) Genome organization: Prokaryotic and eukaryotic genome organization, central dogma, structural organization of chromosome, structure and functions of DNA & RNA, Biochemical evidences for DNA as geneticmaterial.

B) DNA: Chemistry of DNA, Forces stabilizing DNA structure, Physical Properties of

Ds DNA (UV absorption spectra Denaturation and renaturation), chemical that react with DNA, Interaction with small ions, DNA binding motifs: Zinc finger, leucine zipper, helix-turn- helix others motifs, DNA binding and kinks

Module II 12 Hours

A) DNA topology: Supercoiled form of DNA, Biology of supercoiled DNA, DNA topoisomerases, effect of supercoiling on structure of DNA and role of supercoiling in gene expression and DNAreplication.

B) DNA Replication: Characteristics and functions of bacterial DNA polymerases I, Mechanism of prokaryotic DNA replication, models of replications in prokaryotes. Fidelity of replication,Eukaryotic DNA polymerases and mechanism of replication. Replication of viral DNA, DNA replication in telomeric regions,Telomerases,mechanisms of action of topoisomerase I and II Models of DNA replication, Inhibitors of replication.

ModuleIII 14Hours

A) Transcription: Characteristics and function of bacterial RNA polymerases EukaryoticRNApolymerases,mechanismoftranscriptionandregulation, transcription factors, Stringent response. Post transcriptional modifications of mRNA mechanism of splicing,Processing of tRNA and rRNA. Inhibitors of transcription. Mechanism of action of ribozymes ,

B) Translation: Structure and role of tRNA in protein synthesis, ribosome structure, basic feature of genetic code and its deciphering, translation (initiation, elongation and termination in detail in prokaryotes as well as eukaryotes), Post translational processing,Control of translation in eukaryotes (Antisense RNA, Heme andinterfero

Module IV 14Hours

A) Regulation of Gene expression in prokaryotes and eukaryotes: Positive and negative regulation. lac-, ara-, his- and trp- operon regulation; antitermination,global regulatory responses; Regulation of gene expression in eukaryotes: Transcriptional, translational and processing level control mechanisms.

B) Protein localization & Gene Silencing: Export of secretory proteins- signal hypothesis, transport and targeting of proteins to mitochondria, chloroplast, peroxisomes, Gene Silencing: Definition, types, RNAi pathway, shRNA& CRISPR-CAS.

C) Non coding RNA: coding and non codingRNA,types of ncRNA : Short ncRNA(mi RNA,SnRNA,PiRNA,t-RNA & its fragments,SnoRNA)long ncRNA ,functional significance of RNA.

Learning Outcomes: After studying this paper the students will know –

1. The student will get an idea about the principles behind molecularbiology
2. Makes students to understand the basic molecular tools and its application in basic research and applied research in various fields of lifesciences.

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Department: PG MICROBIOLOGY

Subject: HARDCORE: MOLECULAR BIOLOGY (FCHC)

Term Period: June to September

Hrs/week: 4/week Total Hours: 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment

Module I 12 hrs **A) Genome organization** **B) DNA**	Prokaryotic and eukaryotic genome organization,	1	02-05-2024	Lecture method(Using power point, video and audio visual)
	Central dogma, structural organization of chromosome,	2	03-05-2024	Lecture method(Using power point, video and audio visual)
	structure and functions of DNA & RNA,	2	04-05-2024	Lecture method(Using power point, video and audio visual)
	Biochemical evidences for DNA as genetic material.	1	06-06-2024	Lecture method(Using power point, video and audio visual)
	Chemistry of DNA	2	08-05-2024	Lecture method(Using power point, video and audio visual)
	Forces stabilizing DNA structure, Physical Properties of Ds DNA	1	13-05-2024	Lecture method(Using power point, video and audio visual)
	(UV absorption spectra Denaturation and renaturation),	1	14-05-2024	Lecture method(Using power

				point, video and audio visual)
	Chemical that react with DNA, Interaction with small ions	1	15-05-2024 To 20-05-2023	Lecture method(Using power point, video and audio visual)
	DNA binding motifs: Zinc finger, leucine zipper, helix-turn- helix others motifs, DNA binding and kinks.	1	21-05-2024	Lecture method(Using power point, video and audio visual)
Module II: 12 hrs **A) DNA topology** **B) DNA Replication** .	Supercoiled form of DNA	1	22-05-2024	Lecture method(Using power point, video and audio visual)
	Biology of super coiled DNA,	1	24-05-2024 To 27-052024	Lecture method(Using power point, video and audio visual)
	DNA topoisomerases,	1	28-05-2024	Lecture method(Using power point, video and audio visual)
	Effect of supercoiling on structure of DNA and role of supercoiling in gene expression and DNA replication.	2	04-06-2024	Lecture method(Using power point, video and audio visual)

	Characteristics and functions of bacterial DNA polymerases I,	1	05-06-2024	Lecture method(Using power point, video and audio visual)
	Mechanism of prokaryotic DNA replication,	1	08-06-2024	Lecture method(Using power point, video and audio visual)
	Models of replications in prokaryotes.	1	19-6-2024	Lecture method(Using power point, video and audio visual)
	Fidelity of replication, Eukaryotic DNA polymerases and mechanism of replication.	1	20-06-2024 To 24-06-2024	Lecture method(Using power point, video and audio visual)
	Replication of viral DNA, DNA replication in telomeric regions, Telomerases	1	25-06-2024	Lecture method(Using power point, video and audio visual)
	Telomerases,mechanism of action of topoisomerase Iand II	1	02-07-2024	Lecture method(Using power point, video and audio visual)
	Models of DNA replication, Inhibitors of replication	1	03-07-2024	Lecture method(Using power

				point, video and audio visual)
Module III 14 hrs **A) Transcription** **B) Translation**	Characteristics and function of bacterial RNA polymerases Eukaryotic RNA polymerases,	3	08-07-2024	08-07-2024
	Mechanism of transcription and regulation. transcription factors, Stringent response	3	09-07-2024	09-07-2024
	Post transcriptional modifications of mRNA mechanism of splicing ,Processing of tRNA and rRNA	2	10-07-2024	10-07-2024
	Inhibitors of transcription. Mechanism of action of ribozymes ,	2	11-07-2024 To 15-07-2023	11-07-2024 To 15-07-2023
	Structure and role of tRNA in protein synthesis, ribosome structure,	2	16-07-2024 17-07-2024	16-07-2024 17-07-2024
	Initiation, elongation and termination in detail in prokaryotes as well as eukaryotes and Post translational processing,Control of translation in eukaryotes (Antisense RNA, Heme andinterferon).	2	08-07-2024	08-07-2024

Module IV 14 hrs **A) Regulation of Gene expression in prokaryotes and eukaryotes** **B) Protein localization & Gene Silencing**: **Non coding RNA**	Positive and negative regulation. lac-, ara-, his- and trp- operon regulation;	3	18-07-2024	Lecture method(Using power point, video and audio visual)
	antitermination,global regulatory responses;	3	19-07-2024	Lecture method(Using power point, video and audio visual)
	Regulation of gene expression in eukaryotes	2	22-07-2024 To 24-07-2024	Lecture method(Using power point, video and audio visual)
	Transcriptional, translational and processing level control mechanisms.	2	25-07-2024	Lecture method(Using power point, video and audio visual)
	: Export of secretory proteins- signal hypothesis,	2	26-07-2024	Lecture method(Using power point, video and audio visual)
	, transport and targeting of proteins to mitochondria, chloroplast	1	27-07-2024	Lecture method(Using power point, video and audio visual)
	peroxisomes, Gene Silencing: Definition, types, RNAi pathway,	1	28-07-2024	Lecture method(Using power

	shRNA& CRISPR-CAS.			point, video and audio visual)
	coding and non coding RNA,types of ncRNA	2	29-07-2024	Lecture method(Using power point, video and audio visual)

Department: PG MICROBIOLOGY

Subject: HARDCORE: GENETIC ENGINEERING (FCHC)

Term Period: June to September

Hrs/week: 4/weekTotal Hours: 48

Learning Objectives: Students should study this paper to know –

a. The basics of Geneticengineering.
b. Basic principles of gene cloning and geneproducts.
c. Applied aspects of Geneticengineering

Module-I **12hours**

Cloning and Expression vectors: Plasmids, lambda vectors, M13 Phage, cosmids,phagemids, Artificial chromosome vectors-YACs, PACs and BACs, plant and animal viruses as vectors, Transposons, Expression vectors- prokaryotic (pRSET, pET), eukaryotic (pcDNA3, pCEP), Baculovirus and Pichia vector system, plant based vectors- Ti and Ri, binary and shuttle vectors,Gene cloning: genomic cloning,c-DNAcloning,

Module-II **12hours**

Gene manipulation Restriction enzymes, restriction mapping, cloning in plasmid, Phage and cosmid vectors, insertion of foreign DNA into host cells- transformation, electroporation, Transfection transient and stable, screening methods for transformants, downstream processing of recombinant proteins, affinity tags- His-tag, GST-tag, MBP-tag, Fc-tag. Construction and screening of genomic and cDNA libraries, chromosome walking, Chromosome Jumping, BAC libraries and assembly of BACs intocontigs.

Module-III **14hours**

Gene analysis techniques

Hybridization techniques- Southern, Northern, South-western, Far-western, Colony hybridization, fluorescence in situ hybridization, molecular probes- preparation, labelling, amplification, applications, Polymerase chain reaction- Principle, primer designing, Types- RT-PCR, Realtime PCR, colony PCR, Multiplex PCR, Hot-start PCR, asymmetric PCR, Sequencing methods- chemical sequencing of DNA (Maxam and Gilberts methods andSangersdideoxy method), automated DNA sequencing, sequencing by DE-MALDI- TOFMS,microarray.

ChIP and Chip-on-chip techniques Chromogenic in situ hybridization, qPCR, next generation sequencing.

Module-IV **10hours**

Gene therapy, transgenics and Genome editing

Ex vivo and in vivo gene therapy, Vectors and other delivery systems for gene therapy, Invitro gene therapy, gene therapy of genetic diseases: eg.Neurologocal, metabolic disorders and cystic fibrosis, viruses for gene therapy- lentivirus, adenovirus. Gene targeting, knockout mice, genome editing by CRISPR-CAS

Learning Outcomes: After studying this paper the students will know –

a. Importance of Recombinant DNA Technology.
b. The fundamental cloning vectors.
c. Preparation of probes and its application in scientific fields.

REFERENCES

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10. Setlow and Jane, K. 2004. Genetic Engineering: Principles and Methods (3rded.) Springer Publication.

Department: PG MICROBIOLOGY

Subject: HARDCORE: GENETIC ENGINEERING (FCHC)

Term Period: June to September

Hrs/week: 4/weekTotal Hours: 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module-I 12 hrs **Cloning and Expression vectors**	Plasmids, lambda vectors, M13 Phage, cosmids,phagemids,	2	02-05-2024	Lecture method(Using power point, video and audio visual)
	Artificial chromosome vectors-YACs, PACs and BACs	2	03-05-2024	Lecture method(Using power point, video and audio visual)
	plant and animal viruses as vectors, Transposons	2	04-05-2024	Lecture method(Using power point, video and audio visual)
	Expression vectors-prokaryotic (pRSET, pET), eukaryotic (pcDNA3, pCEP),	2	06-06-2024	Lecture method(Using power point, video and audio visual)
	Baculovirus and Pichia vector system, plant based vectors-Ti and Ri,	2	08-05-2024	Lecture method(Using power point, video and audio visual)

	binary and shuttle vectors,Geneclo ning: genomic cloning,c-DNAcloning,	2	19-06-2023	Lecture method(Using power point, video and audio visual)
Module-II 12 hrs Gene manipulation	Restriction enzymes, restriction mapping, cloning in plasmid, Phage and cosmid vectors	2	15-05-2024 To 20-05-2023	Lecture method(Using power point, video and audio visual)
	insertion of foreign DNA into host cells-transformation, electroporation,	2	21-05-2024	Lecture method(Using power point, video and audio visual)
	Transfection transient and stable, screening methods for transformants	2	22-05-2024	Lecture method(Using power point, video and audio visual)
	downstream processing of recombinant proteins, affinity tags- His-tag	2	15-05-2024 To 20-05-2023	Lecture method(Using power point, video and audio visual)
	GST-tag, MBP-tag, Fc-tag.	1	21-05-2024	Lecture method(Using power point, video and audio visual)

	Construction and screening of genomic and cDNA libraries,	1	22-05-2024	Lecture method(Using power point, video and audio visual)
	chromosome walking, Chromosome Jumping,	1	24-05-2024 To 27-052024	Lecture method(Using power point, video and audio visual)
	BAC libraries and assembly of BACs intocontigs	1	28-05-2024	Lecture method(Using power point, video and audio visual)
Module-III 14 hrs **Gene analysis techniques**	Hybridization techniques-Southern, Northern, South-western	2	08-06-2024	Lecture method(Using power point, video and audio visual)
	Far-western, Colony hybridization	1	19-6-2024	Lecture method(Using power point, video and audio visual)
	fluorescence in situ hybridization, molecular probes-preparation, labelling, amplification	2	20-06-2024 To 24-06-2024	Lecture method(Using power point, video and audio visual)
	Polymerase chain reaction-Principle, primer designing,	1	25-06-2024	Lecture method(Using power point, video and audio

	Types- RT-PCR,			visual)
	Realtime PCR, colony PCR, Multiplex PCR, Hot-start PCR,	2	02-07-2024	Lecture method(Using power point, video and audio visual)
	asymmetric PCR, Sequencing methods-chemical sequencing of DNA (Maxamand Gilberts methods andSangersdide oxy method),	1	03-07-2024	Lecture method(Using power point, video and audio visual)
	automated DNA sequencing, sequencing by DE-MALDI-TOFMS,	1	08-07-2024	Lecture method(Using power point, video and audio visual)
	microarray.ChIP and Chip-on-chip techniques	1	09-07-2024	Lecture method(Using power point, video and audio visual)
	Chromogenic in situ hybridization, qPCR, next generation	1	10-07-2024	Lecture method(Using power point, video and audio visual)

	sequencing.			
Module-IV 10 hrs **Gene therapy, transgenics and Genome editing**	Ex vivo and in vivo gene therapy	2	11-07-2024 To 15-07-2023	Lecture method(Using power point, video and audio visual)
	Vectors and other delivery systems for gene therapy,	2	16-07-2024	Lecture method(Using power point, video and audio visual)
	Invitro gene therapy, gene therapy of genetic diseases	2	17-07-2024	Lecture method(Using power point, video and audio visual)
	Neurologocal, metabolic disorders and cystic fibrosis, ,	2	18-07-2024	Lecture method(Using power point, video and audio visual)
	viruses for gene therapy- lentivirus	1	19-07-2024	Lecture method(Using power point, video and audio visual)
	Adenovirus. Gene targeting, knockout mice, genome editing by CRISPR-CAS	1	22-07-2024 To 24-07-2024	Lecture method(Using power point, video and audio visual)

Subject: SOFTCORE: MICROBIAL PHYSIOLOGY
Term Period: June to September

Hrs/week: 4/week Total Hours: 48

Module-I **12Hours**

Microbial Physiology: Microbial Physiology: Role of ATP in metabolism. Microbial enzymes: Structure and Classification, Mechanism of Enzyme actions: Lock and Key model, induced fit Theory, Factors affecting rates of enzyme mediated reactions (pH, temperature and substrate and enzyme concentration), Enzyme Inhibition and Enzyme regulation- types ofenzymes

Module-II **12Hours**

Metabolism of Carbohydrate: Metabolism of Carbohydrate: Glycolysis, Citric acid Cycle and different types of Phosphorylation, Homo and Hetero Lactic Fermentation, Utilization of sugars other than glucose: Lactose, Galactose, Maltose, Mannitol. Degradation of cellulose, Starch and Glycogen (bioenergetics).

Module-III **12Hours**

A) Metabolism of other Substrates: Movement of Molecules: Facilitated transport, Channels, Carrier Proteins, Primary Active Transport, ABC Transporters, Siderophores, Group Translocation.

B) Lipid metabolism: β- oxidation, Biosynthesis of fatty acids, degradation of fatty acids.

C) Nitrogen metabolism: Nitrogen metabolism, Biological nitrogen fixation process, symbiotic and non symbiotic nitrogen fixation. Ureolytic bacteria and its fertility, degradation and biosynthesis of essential and non-essential amino acids.

D) Nucleic acid metabolism: Biosynthesis and degradation of purines andpyrimidines.

Module-IV **12Hours**

A) Microbial Photosynthesis: Photosynthetic Pigments and apparatus in bacteria. Oxygenic andAnoxygenic.Photosynthesis.Autotropic CO2 fixation and mechanism of photosynthesis.Utilization of light energy byHalobacteria.

B) Autotrophic Mechanisms in bacteria: Hydrogen bacteria, Nitrifying bacteria, Purple sulphurbacteria,Non-sulfur bacteria, Green sulfur bacteria, Iron bacteria,Methylotrophs.

C) Microbial Stress Responses: Oxidative stress, Thermal stress, Starvation stress, Aerobic to anaerobictransitions. Biofilm and quorumsensing

Learning Outcomes: After studying this paper the students will know –

a. The student develops understanding of the laws of thermodynamics, concepts of entropy, enthalpy and free energy changes and their application to biological systems and various biochemical studies andreactions.
b. Conceptual knowledge of aerobic and anaerobic respiration and various intermediary mechanisms involved,oxidativephosphorylation.
c. Overview of major biomolecules: Classification, structure, function of carbohydrates, lipids, proteins, aminoacids, nucleicacids.
d. Discuss the biosynthesis and the degradation pathways involved in the physiology ofmicrobes.
e. Conceptual knowledge of properties, structure, function of enzymes, enzyme kinetics and their regulation, enzyme engineering, Application of enzymes in large scale

REFERENCES

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3. Frederick, C., and Neidhardt, John, L. I., and Schaechter, M.1990. Physiology of the Bacterial Cell: A Molecular Approach (2nded.). Sinauer Associates Incpress.
4. Kim , B H., Gadd , G.M. 2008. Bacterial Physiology and Metabolism(2nd ed.) Cambridge UniversityPress.
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Department: PG MICROBIOLOGY

Subject: SOFTCORE: MICROBIAL PHYSIOLOGY
Term Period: June to September

Hrs/week: 4/week Total Hours: 48 hrs

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module-I Microbial Physiology	Microbial Physiology: Role of ATP in metabolism	2	17-05-2024	Lecture method(Using power point, video and audio visual)
	Microbial enzymes: Structure and Classification,	2	20-05-2024	Lecture method(Using power point, video and audio visual)
	Mechanism of Enzyme actions: Lock and Key model, induced fit Theory,	2	22-05-2024 To 24-05-2024	Lecture method(Using power point, video and audio visual)
	Factors affecting rates of enzyme mediated reactions (pH, temperature and substrate and enzyme concentration)	2	06-06-2024 To 08-06-2024	Lecture method(Using power point, video and audio visual)
	Enzyme Inhibition and Enzyme regulation-	2	10-06-2024	Lecture method(Using power point, video and audio

				visual)
	Types of enzymes	2	12-06-2024	Lecture method(Using power point, video and audio visual)
Module-II A) **Metabolism of Carbohydrate**	Metabolism of Carbohydrate	2	13-06-2024	Lecture method(Using power point, video and audio visual)
	Glycolysis, Citric acid Cycle and different types of Phosphorylation	2	22-06-2024	Lecture method(Using power point, video and audio visual)
	Homo and Hetero Lactic Fermentation,	2	25-06-2024	Lecture method(Using power point, video and audio visual)
	Utilization of sugars other than glucose:	2	26-06-2024	Lecture method(Using power point, video and audio visual)
	Lactose, Galactose, Maltose, Mannitol.	2	4-07-2024	Lecture method(Using power point, video and audio visual)
	Degradation of cellulose, Starch and Glycogen (bioenergetics).	2	5-07-2024	Lecture method(Using power point, video and audio visual)

Module-III **A) Metabolism of other Substrates** **B) Movement of Molecules:** **C) Lipid metabolism** **D) Nitrogen metabolism** **E) Nucleic acid metabolism**	Movement of Molecules:Facilitated transport,	2	8-07-2024	Lecture method(Using power point, video and audio visual)
	Channels, Carrier Proteins, Primary Active Transport, ABC Transporters,	2	19-07-2024	Lecture method(Using power point, video and audio visual)
	Siderophores, Group Translocation.	2	22-07-2024	Lecture method(Using power point, video and audio visual)
	β- oxidation, Biosynthesis of fatty acids, degradation of fatty acids.	1	23-07-2024	Lecture method(Using power point, video and audio visual)
	Nitrogen metabolism: Nitrogen metabolism, Biological nitrogen fixation process	1	24-07-2024	Lecture method(Using power point, video and audio visual)
	Symbiotic and non symbiotic nitrogen fixation.	1	25-07-2024	Lecture method(Using power point, video and audio visual)
	Ureolytic bacteria and its fertility,	1	29-07-2024	Lecture method(Using power point, video and audio visual)

	Degradation and biosynthesis of essential and non-essential amino acids	1	31-07-2024	Lecture method(Using power point, video and audio visual)
	Nucleic acid metabolism: Biosynthesis and degradation of purines andpyrimidines	1	11-07-2024	Lecture method(Using power point, video and audio visual)
Module-IV **A) Microbial Photosynthesis** **B) Autotrophic Mechanisms in bacteria** **C) Microbial Stress Responses**	Photosynthetic Pigments and apparatus in bacteria.	2	12-07-2024	Lecture method(Using power point, video and audio visual)
	Oxygenic andAnoxygenic. Photosynthesis	2	13-07-2024	Lecture method(Using power point, video and audio visual)
	Autotropic CO2 fixation and mechanism of Photosythesis	2	15-07-2024	Lecture method(Using power point, video and audio visual)
	Utilization of light energy byHalobacteria	1	16-07-2024	Lecture method(Using power point, video and audio visual)
	Hydrogen bacteria, Nitrifying bacteria, Purple sulphur bacteria	1	18-07-2024	Lecture method(Using power point, video and audio visual)

	Non-sulfur bacteria, Green sulfur bacteria	1	19-07-2024	Lecture method(Using power point, video and audio visual)
	Iron bacteria,Methylotrophs. Aerobic to anaerobictransitions. Biofilm and quorumsensing	2	20-07-2024	Lecture method(Using power point, video and audio visual)

Department: PG MICROBIOLOGY

Subject: PRACTICALS IIA: (MOLECULAR BIOLOGY & GENETIC ENGINEERING)
Term Period: June to September

Hrs/week: 8/weekTotal Hours: 32

1. Estimation of DNA by diphenylaminemethod.
2. Estimation of RNA by orcinolmethod.
3. Isolation of Genomic DNA from yeastcell
4. Determination of purity and concentration of isolated DNA using spectrophotometer and agarosegelelectrophoresis.
5. Determination of RNAse&DNAseactivity
6. Restriction digestion of plasmid and analysis
7. DNAligation
8. Isolation of plasmids from bacteria by agarosegelelectrophoresis.
9. Preparation of competent *E. coli* cells for Bacterialtransformation.
10. Induction of gene expression and purification of the induced proteinfromthehost.
11. Amplification, Purification and separation of PCRproduct.
12. Determination of Proteinase activity on proteins.

Department: PG MICROBIOLOGY
Subject: PRACTICALS IIA: (MOLECULAR BIOLOGY & GENETIC ENGINEERING) -
Term Period: June to September

Hrs/week: 8/weekTotal Hours: 32

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
1. Estimation of DNA by diphenyl aminemethod. 2. Estimation of RNA by orcinolmethod. 3. Isolation of Genomic DNA from yeastcell 4. Determination of purity and concentration of isolated DNA using spectrophotometer and agarose gelelectrophoresis. 5. Determination of RNAse&DNAseactivity 6. Restriction digestion of plasmid	Estimation of DNA by diphenyl aminemethod.	**4**	3-06-2024	Hands on experience, lecture method
	Estimation of RNA by orcinolmethod.	**4**	4-06-2024	Hands on experience, lecture method
	Isolation of Genomic DNA from yeastcell,	**4**	10-06-2024	Hands on experience, lecture method
	Determination of purity and concentration of isolated DNA using spectrophotometer and agarose gelelectrophoresis.	**4**	18-06-2024	Hands on experience, lecture method

and analysis 7. DNAligation 8. Isolation of plasmids from bacteria by agarose gelelectrophoresis. 9. Preparation of competent *E. coli* cells for Bacterialtransformation. 10. Induction of gene expression and purification of the induced proteinfrom thehost. 11. Amplification, Purification and separation of PCRproduct. 12. Determination of Proteinase activity on proteins	Determination of DNAse and RNAse activity	**4**	24-06-2024	Hands on experience, lecture method
	Restriction digestion of plasmid andanalysis	**4**	25-06-2024	Hands on experience, lecture method
	DNA ligation by Restriction enzymes	**4**	3-07-2024	Hands on experience, lecture method
	Isolation of plasmids from bacteria by agarosegelelectrophoresis	4	4-07-2024	Hands on experience, lecture method
	. Preparation of competent *E. coli* cells for Bacterialtransformation	4	9-07-2024	Hands on experience, lecture method
	. Induction of gene expression and purification of the induced proteinfromthe host	4	10-07-2024	Hands on experience, lecture method
	. Amplification, Purification and separation of PCRproduct.	4	11-07-2024	Hands on experience, lecture method

	Determination of Proteinase activity onproteins	4	15-07-2024	Hands on experience, lecture method

Department: PG MICROBIOLOGY
Subject: PRACTICALS IIB: (MICROBIAL PHYSIOLOGY)
Term Period: June to September

Hrs/Week: 8/weekTotal Hours: 32

1. Population growth of yeast – *S. cerevisiae*.
2. Population growth of bacteria – *E coli*.
3. Sugar fermentation tests.
4. Catalase activity.
5. Hydrolytic rancidity.
6. Casein hydrolysis.
7. Carbohydrate catabolism by microbes
8. Study of acid and pH stress tolerance by microbes.
9. Effect of molecular oxygen on microbial growth.
10. Effect of osmotic pressure on microbial growth.
11. Effect of relative humidity on microbial growth.
12. Effect of different wavelengths of light on microbial growth

Department: PG MICROBIOLOGY
Subject: PRACTICALS IIB: (MICROBIAL PHYSIOLOGY)
Term Period: June to September

Hrs/Week: 8/weekTotal Hours: 32

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
1. Population growth of yeast – *S. cerevisiae*. 2. Population growth of bacteria – *E coli*. 3. Sugar fermentation tests. 4. Catalase activity. 5. Hydrolytic rancidity. 6. Casein hydrolysis. 7. Carbohydrate catabolism by microbes 8. Study of acid and pH stress tolerance by microbes. 9. Effect of molecular oxygen on microbial growth.	Population growth of yeast cells- *S. cerevisiae*	4	5-06-2024	Hands on experience, lecture method
	Population growth of bacteria – *E coli*.	4	6-06-2024	Hands on experience, lecture method
	Different sugar fermentation analysis	4	12-06-2024	Hands on experience, lecture method
	Catalase test	4	13-06-2024	Hands on experience, lecture method
	Hydrolytic rancidity test	4	19-06-2024	Hands on experience, lecture method

10. Effect of osmotic pressure on microbial growth. 11. Effect of relative humidity on microbial growth. 12. Effect of different wavelengths of light on microbial growth	Casein hydrolysis test	4	26-06-2024	Hands on experience, lecture method
	Carbohydrate catabolism by Microbes	4	27-06-2024	Hands on experience, lecture method
	Determination of acid and pH stress tolerance by microbes.	4	3-07-2024	Hands on experience, lecture method
	Effect of oxygen by microbes	4	10-07-2024	Hands on experience, lecture method
	Effect of osmotic pressure on microbial growth.	4	11-07-2024	Hands on experience, lecture method
	Effect of relative humidity on microbial growth.	4	25-07-2024	Hands on experience, lecture method

Education to Excel

POOJA BHAGAVATH MEMORIAL MAHAJANA EDUCATION CENTRE

PG WING OF SBRR MAHAJANA FIRST GRADE COLLEGE

METAGALLI, KRS ROAD, MYSURU

DEPARTMENT OF MICROBIOLOGY

Lesson Plan: 2023-24

III Semester

Department: PG MICROBIOLOGY
Subject: MB 3.4 Softcore: MEDICAL MICROBIOLOGY
Term Period: November to March 2023- 2024
Hrs/week: 3/week **Total Hours: 32**

MODULE I **10 hours**

A) Introduction to Medical Microbiology: History, Development and scope of Medical Microbiology. Concept of Disease, disorder, syndrome, Communicable diseases- Microbial infections and diseases.Factors responsible for microbial pathogenicity.

B) Microbial infections**:** Types of infections, modes of transmission, portal of entry: Urinary tract infection, sexually transmissible infection, Infection of the central nervous system, Infections of circulatory system, Oral cavity and respiratory infection, gastrointestinal infection.

MODULE II **14 hours**

A) Nosocomial infection**:** Incidence of nosocomial infections, types of nosocomical infections, emergence of antibiotic resistant microorganisms, hospital infection control programmes, preventing nosomical infections and surveillance, General concepts for specimen collection and handing of specimen, specimen processing and biosafety.

B**)** Chemotherapeutic agents-antibiotics (Classification based on chemical structure, mode of action and range of effectiveness). Recent trends-Drug resistance and its consequences, antibiotic policy, NCCLS (CLSI) guidelines and standards, WHO guidelines.

MODULE III **12 hours**

A) Epidemiology, Pathogenesis, Spectrum of disease, Laboratory diagnosis and Prevention**:** Diseases caused by Viruses**:** Chicken pox, Rabies virus, hepatitis, encephalitis, AIDS, Herpes simplex infections, Influenza, Dengue

B) Diseases caused by Bacteria**:** Tuberculosis, Leprosy, cholera, Typhoid, Botulism, Shigellosis, Helicobacter pylori infection, Salmonellosis, Tetanus. Diseases caused by Fungi**:** Candidiasis, Histoplasmosis, Blastomycosis, Coccidiomycosis, Dermatomycosis, Aspergillosis and Cryptococcosis, Anthrax

MODULE IV **12 hours**

a. Diseases caused by Mycoplasma**:** *Mycoplasma pneumoniae, M. urealyticum, M.homonis*.

b. Diseases caused by Protozoa**:** Giardiasis, Trichomoniasis, Celebral Malaria, Toxoplasmosis, Cryptosporidium.
c. Disease caused by Chlamydiae**:** Psittacosis, LymphogranulomaVenereum, Trachoma and Inclusion conjunctivitis.
d. Emergent Diseases**:** Hemorrhagic fever, Swine flu, SARS, Chikungunya, Ebola, Hanta, Leptospoirosis, Marburg

References:

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Department: PG MICROBIOLOGY
Subject: MB 3.4 Softcore: MEDICAL MICROBIOLOGY
Term Period: November to March 2023- 2024
Hrs/week: 3/week **Total Hours: 32**

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module I 8 hours **A) Introduction to Medical Microbiology** **B) Microbial infections**	➢ History, Development and scope of Medical Microbiology	01 Hour	21-10-2023 To 22-11-2023	Lecture method(Using power point, video and audio visual)
	➢ Concept of Disease, disorder, syndrome, Communicable diseases. ➢ Microbial infections and diseases	02 Hours	23-11-2023 To 25-11-2023	Lecture method(Using power point, video and audio visual)
	➢ Factors responsible for microbial pathogenicity	01 Hour	30-11-2023 To 31-11-2023	Lecture method(Using power point, video and audio visual)
	➢ Microbial infections**:** Types of infections, modes of transmission	01 Hour	1-11-2023 To 4-12-2023	Lecture method(Using power point, video and audio visual)
	➢ Portal of entry: Urinary tract infection, sexually transmissible infection, Infection of the central nervous system, Infections of	02 Hours	6-11-2023 To 10-11-2023	Lecture method(Using power point, video and audio visual)

	circulatory system			
	➢ Oral cavity and respiratory infection, gastrointestinal infection	01 Hour	13-11-2023 To 16-12-2023	Lecture method(Using power point, video and audio visual)
Module II: 8 hours **A) Nosocomial infection** **B) Chemotherapeutic agents-antibiotics**	➢ Nosocomial infection**:** Incidence of nosocomial infections, types of nosocomical infections, emergence of antibiotic resistant microorganisms. ➢ Hospital infection control programmes, preventing nosomical infections and surveillance	02 Hours	17-11-2023 To 18-11-2023	Lecture method(Using power point, video and audio visual)
	➢ General concepts for specimen collection and handing of specimen, specimen processing and biosafety.	01 Hour	20-11-2023 To 22-11-2023	Lecture method(Using power point, video and audio visual)
	➢ Chemotherapeutic agents-antibiotics: Classification based on chemical structure, mode of action and range of effectiveness.	02 Hours	23-11-2023 To 25-11-2023	Lecture method(Using power point, video and audio visual)

	➢ Recent trends-Drug resistance and its consequences	02 Hours	27-11-2023 To 29-11-2023	Lecture method(Using power point, video and audio visual)
	➢ NCCLS (CLSI) guidelines and standards, WHO guidelines.	01 Hours	30-11-2023 To 01-12-2023	Lecture method(Using power point, video and audio visual)
Module III 8 hours **A) Epidemiology, Pathogenesis, Spectrum of disease, Laboratory diagnosis and Prevention:** **B) Diseases caused by Viruses: C) Diseases caused by Bacteria:** **D) Diseases caused by Fungi:**	➢ Epidemiology, Pathogenesis, Spectrum of disease (Definitions).	01 Hours	02-12-2023 To 4-12-2023	Lecture method(Using power point, video and audio visual)
	➢ **Diseases caused by Viruses:** Chicken pox, Rabies virus, hepatitis, encephalitis,	01 Hours	6-12-2023 To 9-12-2023	Lecture method(Using power point, video and audio visual)
	➢ **Diseases caused by Viruses:** AIDS, Herpes simplex infections, Influenza, Dengue	02 Hours	13-12-2023 to 16-12-2023	Lecture method(Using power point, video and audio visual)
	➢ **Diseases caused by Bacteria:** Tuberculosis, Leprosy, cholera, Typhoid, Botulism.	01 Hours	18-12-2023 To 21-12-2023	Lecture method(Using power point, video and audio visual)
	➢ **Diseases caused by Bacteria:** Shigellosis, Helicobacter pylori	01 Hour	23-12-2023	Lecture method(Using power point,

	infection, Salmonellosis, Tetanus			video and audio visual)
	➢ **Diseases caused by Fungi:** Candidiasis, Histoplasmosis, Blastomycosis, Coccidiomycosis, Dermatomycosis, Aspergillosis and Cryptococcosis, Anthrax.	02 Hours	27-12-2023 To 29-2-2023	Lecture method(Using power point, video and audio visual)
Module IV :8 hours **A) Diseases caused by Mycoplasma** **B) Diseases caused by Protozoa** **C) Disease caused by Chlamydiae** **D) Emergent Diseases**	➢ Diseases caused by Mycoplasma**:** *Mycoplasma pneumoniae, M. urealyticum, M.homonis.*	02 Hours	5-12-2024 to 10-12-2024	Lecture method(Using power point, video and audio visual)
	➢ Diseases caused by Protozoa**:** Giardiasis, Trichomoniasis, Celebral Malaria, Toxoplasmosis, Cryptosporidium.	02 Hours	18-12-2024 To 22-12-2024	Lecture method(Using power point, video and audio visual)
	➢ Disease caused by Chlamydiae**:** Psittacosis, LymphogranulomaVenereum, Trachoma and Inclusion conjunctivitis .	02 Hours	29-12-2024 To 31-12-2024	Lecture method(Using power point, video and audio visual)

	➢ Emergent Diseases**:** Hemorrhagic fever, Swine flu, SARS, Chikun gunya, Ebola, Hanta, Leptospoirosis, Marburg.	02 Hours	5-3-2024 To 8-3-2024	Lecture method(Using power point, video and audio visual)

Department: PG MICROBIOLOGY
Subject: MB 3.4 Softcore: IMMUNOLOGY (FCHC)
Term Period: November to March 2022- 2023

Total Hours: 48 hoursHrs/week: 3/week

Module-I **14Hrs.**

Over view and Types of immunity:
A) Innate immunity: anatomic barriers, physiologic barriers, phagocytic barriers, microbial antagonism, acute phase reactants, anti-microbial peptides, interferons, inflammation, Pattern Recognition Receptors (PRRs), Pathogen Associated Molecular Patterns (PAMPs) and Damage Associated Molecular Patterns (PAMPs). Complement system: components, pathways of activation and biological consequences.

B) Acquired immunity: Active **(**Naturally acquired and artificially acquired), Passive (Naturally acquired and artificially acquired), Adoptive immunity, Humoral and Cell mediated immune response

C) Tissues of immune system: Structural organization and functions of Lymphatic system, Primary lymphoid organs (Bone marrow, Thymus) Secondary lymphoid organs and tissues (Spleen, Lymph node, Tonsils, Adenoids, Peyer's patches, Lamina propria, Mucosa-associated lymphoid tissue, Gut-associated lymphoidtissue).

D) Cells of the immune system: Hematopoiesis, Biology, Development and Functions of PMNLs, NK cells, Macrophages, T-Lymphocytes, B-Lymphocytes, Dendritic cells

Module-II **12Hrs**

A) Antigens, and Antibodies: Antigens, Immunogens and Haptens, Factors influencing immunogenicity, adjuvants, epitopes, Structure and functions of immunoglobulins, Synthesis of immunoglobulins, Genetic basis of immunoglobulindiversity.

B) MHC molecules: Types, structure, diversity andfunctions

C) Antigen recognition: Thymus dependent and independent Antigens, Clonal selection and immunological memory of B and T cells, Antigen processing and presentation (Endogenous pathway, Exogenous pathway, Cross presentation),Superantigens.

D) Monoclonal Antibodies: Hybridoma technology and production of mAbs, types, and applications. Advantages and disadvantages of mAbsintherapy.

Module-III **12Hrs**

A) Immune System in Health and Disease: Immunological Tolerance and Autoimmunity, Autoimmune Diseases (Organ specific autoimmune diseases-Graves' disease, Myasthenia Gravis, Systemic autoimmune diseases-Multiple Sclerosis, Rheumatoid Arthritis, Systemic Lupus Erythematosus), Immunosuppression, Hypersensitivity (Type I, II, III &IV).

B) Vaccines and Vaccination: Principles of vaccination, Immune response to vaccines (Primary and Secondary response), Whole-Organism vaccines, Purified macromolecules as vaccines, Recombinant vaccines, DNA vaccines, Multivalent subunit vaccines and Edible vaccines, Vaccine safety, Reverse vaccinology. Overview of COVID-19 vaccines.

C) Primary & Secondary Immuno-Deficiency Disorders:

Primary: Wiscott-Aldrich syndrome, Severe combined immunodeficiency disease (SCID), DiGeorge syndrome, Ataxia-telangectasia, Leucocyte adhesion defects, Chronic granulomatous disease, X-linked gammaglobulinemia, Complement deficiencies. Gammopathies (Multiple myeloma).

Secondary: AIDS, Malnutrition, Drug regimen, Diabetes, Chronic infection.

Module-IV **10Hrs.**

A) Clinical Immunology: **Transplantation of tissues and organs:** Nomenclature of transplantations, Transplantation reactions, HvG and GvH. Exception from rejections, Major and minor blood groups, Blood transfusion, tissue typing, Kidney and bone marrow transplantations. Immunosuppressive drugs.**Tumor immunology**: Neoplasms, tumor-associated antigens, immune response to tumor antigens, immunologic factors favoring tumor growth, immune surveillance,Tumor necrosis factor α and β.Metastatic processes, Immunodiagnosis, Antitumourdrugs,Immunotherapy.

B) Immunological Techniques:.*In vitro* antigen-antibody reactions, serotyping, agglutination, complement fixation, immunoprecipitation, Immunodiffusion, ELISA, RIA, IHC,Immunoelectrophoresis.

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Department: PG MICROBIOLOGY
Subject: SOFTCORE: IMMUNOLOGY
Term Period: November to March 2023- 2024
Hrs/week: 3/week Total Hours 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module I: Overview andTypesofimmunity:	**Innate immunity:** anatomic barriers, physiologic barriers, phagocytic barriers,	02	23-11-2023	Lecture
	microbialantagonism,acutephasereactants,anti-microbialpeptides,interferons,inflammation,	02	24-11-2023	Lecture
	Pattern Recognition Receptors (PRRs), Pathogen Associated Molecular Patterns (PAMPs)and Damage Associated Molecular Patterns (PAMPs).	02	25-11-2023	Lecture
	Complement system: components, pathwaysofactivationandbiological consequences.	02	30-11-2023	Lecture
	Acquiredimmunity: Active(Naturallyacquireda	02	1-12-2023	Lecture

	ndartificiallyacquired),Passive(Naturallyacquirendartificiallyacquired),			
	Adaptiveimmunity,Humoraland Cellmediatedimmunere sponse	02	02-12-2023	Lecture
	Tissues of immune system: Structural organization and functions of Lymphatic system,Primary lymphoid organs (Bone marrow, Thymus)	02	04-12-2023 To 06-12-2023	Lecture
	Secondary lymphoid organs and tissues(Spleen,Lymphnode,Tonsils,Adenoids,Peyer' spatches,Laminapropria, Mucosa-associatedlymphoidtissue, Gut-associatedlymphoidtissue).	02	08-12-2023 To 09-12-2023	Lecture
	Cells of the immune system: Hematopoiesis, Biology, Developmentand Functions	02	12-12-2023	Lecture

	ofPMNLs,NKcells,Macrophages,T-Lymphocytes,B-Lymphocytes,Dendriticcells			
Module II: Antigens,andAntibodies	**:**Antigens,ImmunogensandHaptens,Factorsinfluencingimmunogenicity,adjuvants,epitopes,	01	14-12-2023	Lecture
	Structureandfunctionsofimmunoglobulins,	01	15-12-2023	Lecture
	Synthesisofimmunoglobulins,	02	16-12-2023	Lecture
	Geneticbasisofimmunoglobulindiversity.	02	19-12-2023 To 20-12-2023	Lecture
	MHCmolecules: Types,structure,diversityandfunctions	02	21-12-2023 To 23-12-2023	Lecture
	Antigen recognition: Thymus dependent and independent Antigens, Clonal selection andimmunologicalmemoryofBandTcells,	02	28-12-2023 To 30-12-2023	Lecture
	Antigenprocessingandpresentation(Endogenouspath	02	04-01-2024	Lecture

	way,Exogenouspathway,Crosspresentation),Superantigens.			
	MonoclonalAntibodies: Hybridomatechnologyand productionofmAbs,types,andapplications. Advantagesanddisadvantagesofm Absintherapy.	02	05-01-2024 To 06-01-2024	Lecture
Module III: Immune System in Health and Disease:	Immunological Tolerance and Autoimmunity,Autoimmune Diseases (Organ specific autoimmune diseases-Graves' disease, MyastheniaGravis, Systemic autoimmune diseases-Multiple Sclerosis,Rheumatoid Arthritis, SystemicLupus Erythematosus),	02	11-01-2024 To 13-01-2024	Lecture
	Immunosuppression,Hypersensitivity (TypeI,II,III&IV).	02	18-01-2024 To 27-01-2024	Lecture
	VaccinesandVaccination : Principlesofvaccination,Immuneresponsetovaccines(Primary and Secondary response), Whole-Organism vaccines,	02	02-02-2-24	Lecture

	Purified macromolecules asvaccines,			
	Recombinant vaccines, DNA vaccines, Multivalent subunit vaccines and Ediblevaccines,Vaccinesafety,Reversevaccinology. OverviewofCOVID-19vaccines.	02	10-02-2024	Lecture
	Primary&SecondaryImmuno-DeficiencyDisorders: **Primary:** Wiscott-Aldrich syndrome, Severe combined immunodeficiency disease (SCID),DiGeorgesyndrome,Ataxia-telangectasia, Complementdeficiencies. Gammopathies	02	15-02-2024	Lecture
	Leucocyte adhesiondefects,Chronicgranulomatousdisease,, X-linkedagammaglobulinemia,	02	17-02-2024	Lecture
	Multiplemyeloma	02	22-02-2024	Lecture

	Secondary: AIDS,Malnutrition,Drugregimen,Diabetes,Chronicinfection.		24-02-2024	Lecture
Module IV ClinicalImmunology :	**Transplantationoftissues andorgans:**Nomenclatureoftransplantations,Transplantationreactions,HvGandGvH.Exceptionfrom rejections,Major and minor blood groups, Blood transfusion, tissue typing, Kidney and bone marrowtransplantations. Immunosuppressivedrugs.	02	29-02-2024	Lecture
	Immunological Techniques:.*Invitro*antigen-antibodyreactions,serotyping,agglutination,	02	07-03-2024	Lecture
	complement fixation, immunoprecipitation, Immunodiffusion, ELISA, RIA,IHC,Immunoelectrophoresis.	02	09-03-2024	Lecture
	Tumorimmunology:Neoplasms,tumor-associatedantigens,immuneresponsetotumorantigens,immunologicfactorsfavor	02	11-03-2024	Lecture

	ing tumorgrowth,immunesurveillance, Tumornecrosisfactorαand β.Metastaticprocesses,			
	Immuno diagnosis,Anti tumourdrugs,Immunotherapy.	02	12-03-2024	Lecture

Department: PG MICROBIOLOGY

Subject: MB Hardcore: FOOD MICROBIOLOGY Total Hours: 32

Term Period: November to March 2023- 2024

Hrs/week: 3/week

MODULE-I **12hours**

A) Introduction to food microbiology:

Definition, concepts and scope. Food as substrate for microbes. Factors influencing microbial growth in food-Extrinsic and intrinsic factors. Principles of food preservation-chemical preservatives and food additives asepsis-Removal of microorganisms.

Contamination and food spoilage: fruits/ Vegetables, meat and meat products, Fish and sea foods spoilage of cannedfoods.

MODULE- II **12hours**

A) Dairy Microbiology: Microbiology of raw milk, Milk as a vehicle of pathogens, Prevention of contamination of raw milk, Microbiology of processed milk, Spoilage and defects fermented milk and milk products, Microbiological standards for milk and milk products. Cream and butterbacteriology.

B) Probiotics: definition, types, properties, microbial group. Prebiotics: synbiotics and neutraceuticals, Taxonomy of Lactobacilli and Bifidobacteria, The Microecology of Lactobacilli in the Gastrointestinal Tract, Exopolysaccharide Production by IntestinalLactobacilli

MODULE-III **12hours**

A) Food poisoning and intoxication: Significance of food borne diseases, Staphylo Food poisoning and intoxication: Significance of food borne diseases, Staphylococcal, Gasteroenteritis and enterotoxins: Types and incidence, Prevention of Staphylococcal and other food poisoning syndromes, *Clostridium perfringens*food poisoning and Botulism, *Bacillus cereus* food poisoning, Food borne Listeriosis by *Listeria monocytogenes*, Food borne Gastroenteritis by *Salmonella* and *Shigella, Vibrio, Campylobacter* and *Yersinia*, fungal spoilage andMycotoxins.

B) Food produced by Microbes: Microbial cells as food (single cell proteins) – mushroom cultivation. Bioconversions- production of alcohol-fermented beverages- beer and wine.Genetically modified foods.Application of fungal pigments in food industry.

MODULE- IV **12 hours**

A) Detection of food-borne microorganisms: Culture, Microscopic and Sampling methods. Chemical: Thermostable nuclease *Limulus* Lysate for Endotoxins, Nucleic Acid (DNA) probes, DNA Amplification (PCR), Adenosine- Triphosphate Measurement, Radiometry, Fluoro-and Chromogenic substrates. Immunologic Methods: Fluorescent Antibody, Enrichment Serology, Salmonella 1-2. Test, Radioimmunoassay,ELISA.

B) Microbial indicators of food safety and quality control: Principles of quality control and microbiological criteria, Indicators of product quality and

microbiological safety of foods, Food safety laws and standards, international – HACCP, ISO 9000 Series, GMP and LP, India – PFAA, FSSAI, FPO, MPO, CSO, the Agmark Standards, bureau of Indian Standard (BIS). Food testing laboratories in India SRI, FRAC.

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Department: PG MICROBIOLOGY

Subject: MB Hardcore: FOOD MICROBIOLOGY Total Hours: 32

Term Period: November to March 2023- 2024

Hrs/week: 3/week

MODULE-I **12hours**

B) Introduction to food microbiology:

Definition, concepts and scope. Food as substrate for microbes. Factors influencing microbial growth in food-Extrinsic and intrinsic factors. Principles of food preservation-chemical preservatives and food additives asepsis-Removal of microorganisms.

Contamination and food spoilage: fruits/ Vegetables, meat and meat products, Fish and sea foods spoilage of cannedfoods.

MODULE- II **12hours**

A) Dairy Microbiology: Microbiology of raw milk, Milk as a vehicle of pathogens, Prevention of contamination of raw milk, Microbiology of processed milk, Spoilage and defects fermented milk and milk products, Microbiological standards for milk and milk products. Cream and butterbacteriology.

B) Probiotics: definition, types, properties, microbial group. Prebiotics: synbiotics and neutraceuticals, Taxonomy of Lactobacilli and Bifidobacteria, The Microecology of Lactobacilli in the Gastrointestinal Tract, Exopolysaccharide Production by IntestinalLactobacilli

MODULE-III **12hours**

A) Food poisoning and intoxication: Significance of food borne diseases,

Staphylo Food poisoning and intoxication: Significance of food borne diseases, Staphylococcal, Gasteroenteritis and enterotoxins: Types and incidence, Prevention of Staphylococcal and other food poisoning syndromes, *Clostridium perfringens*food poisoning and Botulism, *Bacillus cereus* food poisoning, Food borne Listeriosis by *Listeria monocytogenes*, Food borne Gastroenteritis by *Salmonella* and *Shigella*, *Vibrio*, *Campylobacter* and *Yersinia*, fungal spoilage andMycotoxins.

B) Food produced by Microbes: Microbial cells as food (single cell proteins) – mushroom cultivation. Bioconversions- production of alcohol-fermented beverages- beer and wine.Genetically modified foods.Application of fungal pigments in food industry.

MODULE- IV **12 hours**

A) Detection of food-borne microorganisms: Culture, Microscopic and Sampling methods. Chemical: Thermostable nuclease *Limulus* Lysate for Endotoxins, Nucleic Acid (DNA) probes, DNA Amplification (PCR), Adenosine- Triphosphate Measurement, Radiometry, Fluoro-and Chromogenic substrates. Immunologic Methods: Fluorescent Antibody, Enrichment Serology, Salmonella 1-2. Test, Radioimmunoassay,ELISA.

B)Microbial indicators of food safety and quality control: Principles of quality control and microbiological criteria, Indicators of product quality and microbiological safety of foods, Food safety laws and standards, international – HACCP, ISO 9000 Series, GMP and LP, India – PFAA, FSSAI, FPO, MPO, CSO, the Agmark Standards, bureau of Indian Standard (BIS). Food testing laboratories in India SRI, FRAC.

REFERENCES

1. Adams, M R and Moss MO. 2007. Food Microbiology 3rd Edition.Royal Society of Chemistry.UK.

2.Ahmed, EY and Carlstrom, C. 2003. Food Microbiology: ALaboratory Manual, John Wiley and Sons, Inc. NewJeresy.
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4. Forsythe, SJ. 2010. The Microbiology of Safe Food, 2nd Edition.Wiley-Blackwell.
4. Fratamico, PM., Bhunia,AK., Smith, JL. 2008. Foodborne Pathogens: Microbiology and Molecular Biology. CaisterAcademicPress.
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7. John, PI and Ailsa, HD. 2009. Fungi and Food Spoilage 3rdEdition.Springer.
8. Liu, D. 2009. Molecular Detection of Foodborne Pathogens.CRCPress.
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Department: PG MICROBIOLOGY
Subject: HARD CORE: FOOD MICROBIOLOGY
Term Period: November to March 2022- 2023
Hrs/week: 3/week Total Hours 32

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
MODULE-I 12 hours **A) Introduction to Food Microbiology:** **B) Contamination and food spoilage**	➢ Introduction to Food Microbiology	02 Hours	25-10-2023	Lecture method(Using power point, video and audio visual)
	➢ Food as substrate for microbes. ➢ Factors influencing microbial growth in food-extrinsic and intrinsic factors. ➢	02 Hours	27-10-2023 To 28-10-2023	Lecture method(Using power point, video and audio visual)
	➢ Principles of food preservation-chemical preservatives .	02 Hour	31-10-2023	Lecture method(Using power point, video and audio visual)
	➢ ➢ Asepsis-removal of microorganisms	02 Hour	7-11-2023	Lecture method(Using power point, video and audio visual)

	➢ Fruits/ Vegetables, meat and meat products	02 Hours	10-11-2023	Lecture method(Using power point, video and audio visual)
	➢ Fish and sea foods spoilage of canned foods.	01 Hour	11-11-2023	Lecture method(Using power point, video and audio visual)
MODULE-II: 12 hours **A) Dairy Microbiology** **B) Probiotics**	➢ Microbiology of raw milk, Milk as a vehicle of pathogens. ➢ Prevention ofcontamination of raw milk. ➢ Microbiology of processed milk.	02 Hours	21-11-2023 To 23-11-2023	Lecture method(Using power point, video and audio visual)
	➢ Spoilage and defects fermented milk and milk products. ➢ Microbiological standards for milk and milk products.	02 Hour	24-11-2023 To 25-11-2023	Lecture method(Using power point, video and audio visual)
MODULE-III: 12 HOURS **A) Food poisoning and intoxication**	➢ Cream and butter bacteriology	02 Hours	27-11-2023	Lecture method(Using power point, video and audio visual)

	➢ Probiotics and microbial group. ➢ Prebiotics synbiotics and neutraceuticals	02 Hours	28-11-2023	Lecture method(Using power point, video and audio visual)
	➢ Taxonomy of Lactobacilli and Bifidobacteria ➢ Exopolysaccharide Production by Intestinal Lactobacilli. ➢ Food safety laws and standards, international – HACCP, ISO 9000 Series, GMP and LP	04 Hours	30-11-2023 To 2-12-2023	Lecture method(Using power point, video and audio visual)
MODULE- IV 12 hours **A) Detection of food-borne microorganisms** **B)Microbial indicators of food safety and quality control**	➢ Detection of food-borne microorganisms ➢ Culture, Microscopic and sampling methods ➢ Chemical thermostable nuclease *Limulus lysate* for endotoxins.	03 Hours	23-1-2024 To 29-1-2024	Lecture method(Using power point, video and audio visual)

	➢ Nucleic Acid (DNA) probe. ➢ DNA Amplification (PCR), Adenosine-Triphosphate Measurement. ➢ Radiometry, Fluoro-and Chromogenic substrates	03 Hours	16-1-2024 To 17-1-2024	Lecture method(Using power point, video and audio visual)
	➢ Fluorescent Antibody, Enrichment Serology, Salmonella 1-2. Test, Radio immunoassay, ELISA.	02 Hours	31-1-2024 To 3-2-2024	Lecture method(Using power point, video and audio visual)
	➢ FSSAI, FPO, MPO ➢ AGMARK Standards ➢ Bureau of Indian Standard (BIS) ➢ SRI, FRAC	04 Hours	6-2-2024 To 8-2-2024	Lecture method(Using power point, video and audio visual)

Department: PG MICROBIOLOGY

Subject: MB Hardcore: GENETICS

Term Period: November to March 2022- 2023

Total Hours: 48 Hrs/week: 3/week

Module- I **14hours**

History and developments of genetics. Principle of Genetic Transmission: Mendel's' Experiments, Symbols and terminology, Principle of dominance and segregation, Principle of independent assortment, Mendelian inheritance and probability (Multiplication and Addition rites). Extensions of Mendelian Principles: co-dominance, incomplete dominance, gene interactions, multiple alleles, lethal alleles, pleiotropy, penetrance and expressivity, polygenic inheritance, linkage and crossing over, sex linked inheritance, sex limited and influenced traits, genome imprinting, extra nuclear inheritance.

Module-II **12Hours**

Viral Genetics: Lytic and Lysogenic cycles, Phage Phenotypes, Phenotypic Mixing, Recombination and Mapping. **Bacterial Genetics:** Bacterial Transformation- Types of transformation mechanisms found in prokaryotes, Bacterial Conjugation- properties of the F plasmid, F^+x F^- mating, F' x F^- conjugation, Hfr conjugation. **Fungal Genetics:** *Neurospora*- Tetrad analysis and linkage detection - 2 point and 3 point crosses, chromatid and chiasma interference, Mitotic recombination in *Neurospora*. **Algal Genetics:** *Chlamydomonas*- unordered tetrad analysis - Recombination and Mapping. Floral meristems and floral development in *Arabidopsis*, ABCmodel.

Module-III **12Hours**

Mutation and mutagenesis: Nature, type and effects of mutations. Mutagenesis – Physical and chemical mutagens, base and nucleoside analog, alkylating

agents, interrelating agents, ionizing radiation. Induction and detection of mutation in microorganisms and *Drosophila* . Site directed mutagenesis and its applications.**Recombination:** Homologous and non-homologous recombination, Holliday model, site-specific recombination.

DNA Repair: Mechanism of genetic repair- direct repair, photoreactivation, excision repair, mismatch repair, post-replicative recombination repair, Repair of double-strand breaks, SOS repair.

Module-IV **10Hours**

Sex Determination-Sex chromosomes, Chromosomal and genetic basis of sex determination. Sex determination in *C.elegans*,*Drosophila*, human and Plant(*Melandrium*). Dosage compensation-Genic balance, Gene dose, Molecular basis of dosage compensation in Drosophila and man.**Transposable elements**- discovery in maize and bacteria, transposal elements in bacteria and bacteriophage, types and functions; Transposable elements in eukaryotes-Plants, *Drosophila* and Humans, mechanisms of transpositions.

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Department: PG MICROBIOLOGY

Subject: HARD CORE: GENETICS
November to March 2022- 2023
Hrs/week: 3/week Total Hours 48

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
MODULE I 14 hours **A) History and developments of genetics. Principle of Genetic Transmission**	➢ History and developments of genetics ➢ Principle of Genetic Transmission. ➢ Principle of dominance and segregation	02 Hours	10-10-2023	Lecture method(Using power point, video and audio visual)
	➢ Principle of independent assortment. ➢ Mendelian inheritance and probability	02 Hours	14-10-2023	Lecture method(Using power point, video and audio visual)
	➢ Extensions of Mendelian Principles.	02 Hour	19-10-2023	Lecture method(Using power point, video and audio visual)
	➢ Co-dominance, incomplete dominance ➢ Gene interactions, multiple alleles, lethal alleles	02 Hour	25-10-2023	Lecture method(Using power point, video and audio visual)
	➢ Pleiotropy, penetrance and expressivity ➢ Polygenic inheritance, linkage and	02 Hours	26-10-2023	Lecture method(Using power point, video and audio visual)

	crossing over			
	➢ Sex linked inheritance, sex limited and influenced traits ➢ Genome imprinting, extra nuclear inheritance	02 Hour	7-11-2023 To 10-11-2023	Lecture method(Using power point, video and audio visual)
MODULE II: 12 hours **A) Viral Genetics** **B) Bacterial Genetics** **C) Fungal Genetics** **D) Algal Genetics**	➢ Lytic and Lysogenic cycles. ➢ Phage Phenotypes, Phenotypic Mixing, Recombination and Mapping. ➢ Bacterial Transformation-Types of transformation mechanisms found in prokaryotes.	02 Hours	9-11-2023 To 14-11-2023	Lecture method(Using power point, video and audio visual)
	➢ Bacterial Conjugation-properties of the F plasmid. ➢ F^+x F^- mating, F' x F^- conjugation, Hfr	02 Hour	17-11-2023 To 18-11-2023	Lecture method(Using power point, video and audio visual)

	conjugation.			
	➢ Hfr conjugation.	02 Hours	29-11-2023	Lecture method(Using power point, video and audio visual)
	➢ *Neurospora*- Tetrad analysis and linkage detection - 2 point and 3 point crosses	02 Hours	8-12-2023 To 12-12-2023	Lecture method(Using power point, video and audio visual)
	➢ *Chlamydomonas*- unordered tetrad analysis ➢ Floral meristems and floral development in *Arabidopsis*, ABCmodel	04 Hours	16-2-2023 To 17-2-2023	Lecture method(Using power point, video and audio visual)
MODULE III :12hours **A) Mutation and mutagenesis Recombination** **B) DNA-Repair**	➢ . Nature, type and effects of mutations ➢ Mutagenesis, Physical and chemical mutagens	02 Hours	19-12-2023 To 22-12-2023	Lecture method(Using power point, video and audio visual)

	➢ Base and nucleoside analog, alkylating agents, interrelating agents	03 Hours	23-12-2023	Lecture method(Using power point, video and audio visual)
	➢ Homologous and non-homologous recombination, Holliday model, site-specific recombination.	03 Hours	29-12-2023	Lecture method(Using power point, video and audio visual)
	➢ Mechanism of genetic repair- direct repair, photoreactivation. ➢ Excision repair, mismatch repair, post-replicative recombination repair. ➢ Repair of double-strand breaks, SOS repair	04 Hours	18-1-2024 to 24-1-2024	Lecture method(Using power point, video and audio visual)
MODULE IV-10 hours **A) Sex-Determination Sex chromosomes** **B) Transposable elements**	➢ Sex-Determination Sex chromosomes ➢ Sex determination in *C.elegans* ➢ Genic balance, Gene dose, Molecular basis	05 Hours	8-1-2024 To 10-1-2024	Lecture method(Using power point, video and audio visual)

	of dosage compensation in Drosophila and man.			
	➢ Discovery in maize and bacteria, transposal elements in bacteria. ➢ *Drosophila* and Humans, mechanisms of transpositions	05 Hours	21-2-2024 to 23-2-2024	Lecture method(Using power point, video and audio visual)

Department: PG MICROBIOLOGY

Subject: PRACTICALS IIIA: (Immunology & Medical Microbiology & Food Microbiology)

November to March 2022- 2023

Hrs/week: 8/week Total Hours: 32

1. Slide agglutination test/ Bloodgrouping.
2. Immunoprecipitation test- Ouchterlony doublediffusion.
3. ELISA for quantification of an antigen.
4. Western blotting and detection.
5. Clinical laboratory visits
6. WIDAL Test,VDRL Test (RPR), HCG test (Agglutination inhibitiontest). CRP test, ASO Test (Anti streptolysin 'O'Test).
7. Detection and enumeration of Microorganisms present in Utensils and cannedfood.
8. Enumeration of bacteria in raw and pasteurized milk by SPCmethod.
9. Determination of quality of a milk sample byMBRT.
10. Litmus milk test.
11. Microbiological examination of Ice-cream and Dairyproducts
12. Pathogenic fungi of the skin(Dermatophytes).
13. Microbial flora of mouth – teeth crevices, Microbial flora ofsaliva.
14. Estimation of bacteria in urine by calibrated loop direct streakmethod.
15. Antimicrobial assay – sensitivity test (MIC) for pathogenicbacteria.

Subject: PRACTICALS IIIA: (Immunology & Medical Microbiology & Food Microbiology)

November to March 2022- 2023

Hrs/Week: 8/weekTotal Hours: 32

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
1. Slide agglutination test/ Blood grouping. 2. Immunoprecipitation test- Ouchterlony double diffusion. 3. ELISA for quantification of an antigen. 4. Western blotting and detection. 5. Clinical laboratory visits 6. WIDAL Test,VDRL Test (RPR), HCG test 7. Detection and enumeration of Microorganisms present in Utensils and canned food. 8. Enumeration of bacteria in raw and pasteurized milk by SPC method. 9. Determination of quality of a milk sample by MBRT.	Slide agglutination test/ Blood grouping	4	28-11-2022	Hands on experience, lecture method
	Immunoprecipitation test- Ouchterlony double diffusion test	4	5-12-2023	Hands on experience, lecture method
	ELISA for quantification of an antigen	4	6-12-2022	Hands on experience, lecture method
	Western blotting and detection	4	12-12-2022	Hands on experience, lecture method
	WIDAL Test,VDRL Test (RPR), HCG test	4	13-12-2022 To 15-12-2022	Hands on experience, lecture method

10. Litmus milk test. 11.Microbiological examination of Ice-cream and Dairy products 12. Pathogenic fungi of the skin (Dermatophytes). 13. Microbial flora of mouth – teeth crevices, Microbial flora ofsaliva. 14.Estimation of bacteria in urine by calibrated loop direct streak method. 15.Antimicrobial assay – sensitivity test (MIC) for pathogenic bacteria.	Detection and enumeration of Microorganisms present in Utensils and canned food.	4	9-1-2023 To 11-1-2023	Hands on experience, lecture method
	Enumeration of bacteria in raw and pasteurized milk by SPC method.	4	16-1-2023	Hands on experience, lecture method
	Determination of quality of a milk sample by MBRT	4	23-1-2023	Hands on experience, lecture method
	Litmus milk test.	4	25-1-2023	Hands on experience, lecture method
	Microbiological examination of Ice-cream and Dairy products	4	13-2-2023	Hands on experience, lecture method
	Pathogenic fungi of the skin (Dermatophytes).	4	6-3-2023	Hands on experience, lecture method

	Microbial flora of mouth – teeth crevices, Microbial flora of saliva.	4	13-3-2023	Hands on experience, lecture method
	Estimation of bacteria in urine by calibrated loop direct streak method	4	20-3-2023	Hands on experience, lecture method
	Antimicrobial assay – sensitivity test (MIC) for pathogenic bacteria.	4	21-3-2023	

Department: PG MICROBIOLOGY

Subject: PRACTICALS IIIB: (Genetics and Mycology)

November to March 2022- 2023

Hrs/week: 8/week Total Hours: 32

1. Replica plating technique for transfer of bacterialcolonies.
2. Ultra-violet killing curve and determination of mutant types in *Saccharomyces cerevisiae.*
3. Induction of mutation
4. Isolation of streptomycin resistant strain of *E .coli* by gradient platemethod.
5. Determination of chiasma frequency inonion.
6. To solve genetic problems on linkage, ordered and unorderedtetrads
7. Isolation of slimemolds.
8. Isolation of aquaticfungi.
9. Isolation of soilfungi.
10. Isolation of fungi fromair.
11. Isolation of fungi from cereals and cereal basedproducts.
12. Study of the following representative genera: *Aspergillus, Penicillium, Fusarium, Neurospora, Saccharomyces, Erysiphae, Polyporus, Agaricus, Puccinia, Ustilago, Alternaria, Drechslera, Saprolegnia, Rhizopus, Trichoderma*and symbiotic fungi-Lichens.
13. Measurement of concentration of fungal conidia byHaemocytometer.
14. Measurement of fungal cells byMicrometer.

Department: PG MICROBIOLOGY
Subject: PRACTICALS IIIB: (Genetics and Mycology)

November to March 2023- 2024

Hrs/Week: 8/weekTotal Hours: 32

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
13. Replica plating technique for transfer of bacterial Colonies. 14. Ultra-violet killing curve and determination of mutant types in*Saccharomyces cerevisiae.* 15. Induction of mutation 16. Isolation of streptomycin resistant strain of *E .coli* by gradient plate method. 17. Determination of chiasma frequency inonion. 18. To solve genetic problems on linkage, ordered and unordered tetrads 19. Isolation of slimemolds. 20. Isolation of aquatic	Replica plating technique for transfer of bacterial Colonies	4	22-11-2022	Hands on experience, lecture method
	Ultra-violet killing curve and determination of mutant types in *Saccharomyces cerevisiae.*	4	29-11-2022	Hands on experience, lecture method
	Induction of mutation	4	30-11-2022	Hands on experience, lecture method
	Isolation of streptomycin resistant strain of *E .coli* by gradient platemethod	4	7-12-2022	Hands on experience, lecture method
	Determination of chiasma frequency in onion.	4	8-12-2022	Hands on experience, lecture method

fungi. 21. Isolation of soil fungi. 22. Isolation of fungi from air. 23. Isolation of fungi from cereals and cereal basedproducts. 24. Study of the following representative genera: *Aspergillus, Penicillium, Fusarium, Neurospora, Saccharomyces, Erysiphae, Polyporus, Agaricus, Puccinia, Ustilago, Alternaria, Drechslera, Saprolegnia, Rhizopus, Trichoderma*and symbiotic fungi-Lichens. 25. Measurement of concentration of fungal conidia by Haemocytometer. 26. Measurement of fungal cells by Micrometer.	To solve genetic problems on linkage, ordered and unorderedtetrads	4	13-12-2023	Hands on experience, lecture method
	Isolation of slime molds.	4	22-12-2023	Hands on experience, lecture method
	Isolation of aquatic fungi and soil fungi	4	26-12-2023	Hands on experience, lecture method
	Isolation of fungi from air.	4	12-1-2023	Hands on experience, lecture method
	Isolation of fungi from cereals and cereal basedproducts	4	23-1-2023	Hands on experience, lecture method
	Study of Fungal Genera	4	31-1-2023	Hands on experience, lecture method
	Measurement of concentration of fungal conidia by Haemocytometer	4	14-2-2023	Hands on experience, lecture method
	Measurement of fungal cells by Micrometer	4	23-2-2023	Hands on experience, lecture method

Education to Excel

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DEPARTMENT OF MICROBIOLOGY

Lesson Plan: 2023-24

IV Semester

Department: PG MICROBIOLOGY

Subject: MB 4.1 HARDCORE: AGRICULTURAL MICROBIOLOGY

Term Period: May to September 2023

Hrs/week: 3/week **Total Hours: 32**

UNIT I **8 hours**

A) Introduction to Agricultural Microbiology:, Introduction to agricultural microbiology, concepts
and scope of agricultural microbiology, Agronomy and production of important crop plants, Green revolution. Plant Pathology: Concept of disease, History of Plant Pathology, Significance of plant diseases, Symptoms and types of plant diseases.

B) **Plant Pathology in Practice**: Plant Clinic and Plant Doctor Concept. Diagnosis of Plant Diseases
–Infectious diseases, Non-infectious diseases, Kochs' rules;

UNIT II **8 hours**

A)Parasitism and Disease Development Parasitism and pathogenecity, Host range of pathogens, Disease triangle, Diseases cycle / Infection cycle, Relationship between disease cycles and epidemics;

Pathogens Attack Plants – Mechanical forces, Microbial enzymes and toxins, Growth regulators. Effect on physiology of Host – Photosynthesis, Translocation and transpiration, Respiration, Permeability, Transcription and translation. Environment and Plant Disease– Effect of Temperature,
Moisture, Wind, Light, Soil, pH and structure, Nutrition and Herbicides.

B) Defense Mechanisms of Plant: Disease Pre-existing structural and chemical defenses, Induced
structural and biochemical defenses.

UNIT III **8 hours**

A)Plant Disease & their management: Tobacco Mosaic Disease, Sandal Spike Disease, Bacterial blight of Paddy, Citrus canker, Angular leaf spot of cotton, Late Blight of Potato, Downy Mildew of Bajra, Blast of paddy, Tikka disease of ground nut, Rust of coffee, Grain and Head smut of Sorghum. Powdery mildew of Cucurbits, Wilt of Tomato, and Root Knot of Mulberry. Bunchy top of Banana.

UNIT IV **8 hours**

A) Microbes and Plant interaction-Mycorrhizae-Biology and their applications, Biofertilizers - microbial inoculants. Production and application of *Rhizobium, Azospirillum, Azotobacter,* phosphor bacteria and Cyanobacteria. PGPR's plant growth promoting *Rhizobacteria* and their uses.

B)Biopesticides: Definition, types-bacterial, viral, fungal and protozoan, mode of action, target pests,

use of transgenic plants. mode of action, Bacteria-endo and ecto-toxins production by *Bacillus thuringiensis, and Pseudomonas.* Fungi- *Beauveria, Cephalosporium,* and *Trichoderma.*

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Department: PG MICROBIOLOGY
Subject: MB 4.1 HARDCORE: AGRICULTURAL MICROBIOLOGY
Term Period: May to September 2023

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
MODULE- I 8 hours **A) Introduction to Agricultural Microbiology** **B) Plant Pathology in Practice**	Introduction to agricultural microbiology	01 Hours	15-6-2024	Lecture method(Using power point, video and audio visual)
	Concepts and scope of agricultural microbiology, Agronomy and production of important crop plants,	01 Hours	18-6-2024 To 20-7-2024	Lecture method(Using power point, video and audio visual)
	Green revolution. Plant Pathology: Concept of disease,	01 Hours	21-6-2024	Lecture method(Using power point, video and audio visual)
	History of Plant Pathology, Significance of plant diseases,	01 Hours	22-6-2024	Lecture method(Using power point, video and audio visual)
	Symptoms and types of plant diseases.	01 Hours	24-6-2024	Lecture method(Using power point, video and audio visual)
	Plant Clinic and Plant Doctor Concept.	01 Hours	25-6-2024	Lecture method(Using power point, video and audio visual)
	Diagnosis of Plant Diseases	01 Hours	26-6-2024	Lecture method(Using power point, video and audio visual)
	Infectious diseases, Non-infectious diseases, Kochs' rules;	01 Hours	28-6-2024 To 29-6-2024	Lecture method(Using power point, video and audio visual)

MODULE- II 8 hours **A) Parasitism and Disease Development** **B) Defense Mechanisms of Plant**	Parasitism and pathogenecity, Host range of pathogens,	01 Hours	1-7-2024	Lecture method (Using power point, video and audio visual)
	Disease triangle, Diseases cycle / Infection cycle, Relationship between disease cycles and epidemics	02 Hours	2-7-2024	Lecture method (Using power point, video and audio visual)
	Pathogens Attack Plants – Mechanical forces, Microbial enzymes and toxins, Growth regulators.	01 Hours	3-7-2024	Lecture method(Using power point, video and audio visual)
	Effect on physiology of Host – Photosynthesis, Translocation and transpiration, Respiration, Permeability	01 Hours	4-7-2024 To 6-7-2024	Lecture method(Using power point, video and audio visual)
	Transcription and translation. and Plant Disease–	01 Hours	8-7-2024	Lecture method(Using power point, video and audio visual)
	Environment Effect of Temperature, Moisture, Wind, Light, Soil, pH and structure, Nutrition and Herbicides.	01 Hours	9-7-2024	Lecture method(Using power point, video and audio visual)
	Disease Pre-existing structural and chemical defenses	01 Hours	10-7-2024	Lecture method(Using power point, video and audio visual)
	➢ Induced and structural ➢ biochemical defenses.	01 Hours	11-7-2024	Lecture method(Using power point, video and audio visual)

MODULE- III 8 hours **A) Plant Disease & their management.**	Tobacco Mosaic Disease, Sandal Spike Disease,	01 Hours	12-7-2024	Lecture method(Using power point, video and audio visual)
	Bacterial blight of Paddy, Citrus canker,	01 Hours	16-7-2024	Lecture method(Using power point, video and audio visual)
	Angular leaf spot of cotton, Late Blight of Potato,	01 Hours	18-7-2024	Lecture method(Using power point, video and audio visual)
	Downy Mildew of Bajra, Blast of paddy,	01 Hours	20-7-2024	Lecture method(Using power point, video and audio visual)
	Tikka disease of ground nut, Rust of coffee	01 Hours	21-7-2024	Lecture method(Using power point, video and audio visual)
	Grain and Head smut of Sorghum. Powdery mildew of Cucurbits,	01 Hours	22-7-2024	Lecture method(Using power point, video and audio visual)
	Wilt of Tomato, and Root Knot of Mulberry. Bunchy top of Banana.	01 Hours	23-7-2024	Lecture method(Using power point, video and audio visual)
MODULE-IV 8 hours **A) Microbes and Plant interaction** **B) Biopesticides**	Mycorrhizae-Biology and their applications,	01 Hours	24-7-2024	Lecture method(Using power point, video and audio visual)
	Production and application of *Rhizobium, Azospirillum, Azotobacter*	01 Hours	26-7-2024	Lecture method(Using power point, video and audio visual)
	phosphor bacteria and Cyanobacteria. PGPR's plant growth promoting *Rhizobacteria* and their uses.	01 Hours	27-7-2024	Lecture method(Using power point, video and audio visual)
	Definition, types- bacterial, viral, fungal and protozoan, mode	01 Hours	28-7-2024	Lecture method(Using power point, video and audio visual)

	of action, target pests,			
	use of transgenic plants. mode of action	01 Hours	29-7-2024	Lecture method(Using power point, video and audio visual)
	Bacteria-endo and ecto-toxins production by *Bacillus thuringiensis, and Pseudomonas.*	01 Hours	30-7-2024	Lecture method(Using power point, video and audio visual)
	Fungi- *Beauveria, Cephalosporium,* and *Trichoderma.*	01 Hours	31-7-2024	Lecture method(Using power point, video and audio visual)
	Biofertilizers - microbial inoculants.	01 Hours	2-8-2024	Lecture method(Using power point, video and audio visual)

Department: PG MICROBIOLOGY
Subject: MB 3.3 Hard Core: Industrial Microbiology
Term Period: May to September 2023

Hrs/week: 3/week **Total Hours: 32**

UNIT I 8 hour

A) Introduction: Concepts and Scope. Modern era of industrial fermentation technology. Fermentation: aerobic and anaerobic fermentation processes and their application. Substrate and oxidative phosphorylation and their energy yield, Types of fermentation processes (Surface, submerged, Batch, Continuous, solid-substrate, Dual, Fed batch fermentation and its applications), Fermentation economics and feasibilities.

B) Industrial Microorganisms: Screening, Isolation. Identification and characterization of industrially important microbes. Strain improvement- mutation, recombination- gene regulation and genetic manipulation. Preservation of industrially important microbes. Culture collection centers.

UNIT II 8 hours

A) Media for Industrial Fermentations: Media formulation, growth factors, carbon, nitrogen, Energy and Mineral sources, buffers, inhibitors, precursors, inducers, Oxygen requirements Antifoam agents and others, Sterilization: Sterilization of bioreactor, media, air and exhaust air and filter sterilization **B)** Downstream processing: Steps in recovery and purification of fermented products.

UNIT III 8 hours

A) Industrial production of energy fuels: Industrial alcohol production: Importance of ethanol, biosynthesis, methods of production- recovery and applications of ethanol, Acetone-butanol production: Importance of acetone-butanol, biosynthesis, production process, recovery and application, production of glycerol through microbial process. **B)** Industrial production of Organic acids and Enzymes: Citric acid: strains for citric acid production, biosynthesis, nutrient media, production process, product recovery and application. Lactic acid:
Nutrient media, production process recovery and purification. Enzymes: Production of Amylases- Fungal and Bacterial Amylase. Production of proteases: Alkaline proteases, Neutral proteases and acid proteases.

UNIT IV 8 hours

A) Industrial production of food additives: strains for amino acid production, methods of production production, process,: product recovery of L-Glutamic acid and L-lycine. Commercial uses of Amino acids Vitamins: Commercial production of Vitamin B_{12}, and Riboflavin. Alcoholic beverages (Beer, Wine, Brandy, Rum)
B) Industrial production of health care product: Industrial production of β-lactum antibiotic (Penicillin): Biosynthesis, production and recovery. Streptomycin. Biosynthesis, production and recovery. Antitumours and anticholesterol agents, SCP and SCO, I P R: Patent Laws: Patent

regulations of processes, products and microorganisms.

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Department: PG MICROBIOLOGY
Subject: MB 3.3 Hard Core: Industrial Microbiology
Term Period: May to September 2023

Hrs/week: 3/week **Total Hours: 32**

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
UNIT I : 8 hour **A) Introduction:**	➢ **Introduction:** Concepts and Scope. Modern era of industrial fermentation technology.	01 Hours	3-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Fermentation: aerobic and anaerobic fermentation processes and their application.	01 Hours	4-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Substrate and oxidative phosphorylation and their energy yield	01 Hours	5-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Types of fermentation processes:Surface, submerged	01 Hours	7-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Types of fermentation processes :Batch, Continuous	01 Hours	8-6-2024	Lecture method(Using power point, video and audio visual)

	➢ Types of fermentation processes solid-substrate, Dual	01 Hours	10-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Types of fermentation processes: Fed batch fermentation and its applications	01 Hours	11-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Fermentation economics and feasibilities.	01 Hours	12-6-2024	Lecture method(Using power point, video and audio visual)
UNIT II: 8 hours **A) Media for Industrial Fermentations** **B) Downstream processing**	➢ **A).**Media for Industrial Fermentations: Media formulation	01 Hours	14-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Growth factors, carbon, nitrogen	01 Hours	15-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Energy and Mineral sources, buffers, inhibitors, precursors, inducers	01 Hours	18-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Oxygen requirements Antifoam agents and others	01 Hours	19-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Sterilization: Sterilization of bioreactor,	01 Hours	20-6-2024	Lecture method(Using power point, video and audio

				visual)
	➢ Media, air and exhaust air and filter sterilization	01 Hours	21-6-2024	Lecture method(Using power point, video and audio visual)
	➢ **B)** Downstream processing: Steps in recovery	01 Hours	22-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Purification of fermented products.	01 Hours	24-6-2024	Lecture method(Using power point, video and audio visual)
UNIT III: 8 hours **A) Industrial production of energy fuels** **B) Industrial production of Organic acids and Enzymes**	➢ Industrial production of energy fuels: Industrial alcohol production: Importance of ethanol, biosynthesis	01 Hours	26-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Methods of production-recovery and applications of ethanol	01 Hours	27-6-2024	Lecture method(Using power point, video and audio visual)
	➢ Acetone-butanol production: Importance of acetone-butanol, biosynthesis, production process, recovery and	01 Hours	28-6-2024	Lecture method(Using power point, video and audio visual)

	application			
	➢ Production of glycerol through microbial process.	01 Hours	2-7-2024	Lecture method(Using power point, video and audio visual)
	➢ Industrial production of Organic acids and Enzymes: Citric acid: strains for citric acid production, biosynthesis, nutrient media, production process, product recovery and application.	01 Hours	3-7-2024	Lecture method(Using power point, video and audio visual)
	➢ Lactic acid: Nutrient media, production process recovery and purification.	01 Hours	4-7-2024	Lecture method(Using power point, video and audio visual)
	➢ Enzymes: Production of Amylases-Fungal and Bacterial Amylase.	01 Hours	5-7-2024	Lecture method(Using power point, video and audio visual)
	➢ Production of proteases: Alkaline proteases, Neutral proteases and acid proteases.	01 Hours	8-7-2024	Lecture method(Using power point, video and audio visual)

UNIT IV 8 hours **A) Industrial production of food additives** **B) Industrial production of health care product**	➢ Industrial production of food additives: ➢ strains for amino acid production, methods of production production, process,: product recovery of L-Glutamic acid and L-lycine.	01 Hours	9-7-2024 To 12-7-2024	Lecture method(Using power point, video and audio visual)
	➢ Commercial uses of Amino acids Vitamins:	01 Hours	15-7-2024	Lecture method(Using power point, video and audio visual)
	➢ Commercial production of Vitamin B12, and Riboflavin.	02 Hours	18-7-2024	Lecture method(Using power point, video and audio visual)
	➢ **B)** Industrial production of health care product: Industrial production of β-lactum antibiotic (Penicillin): Biosynthesis, production and recovery.	01 Hours	19-7-2024	Lecture method(Using power point, video and audio visual)

	➢ Streptomycin. Biosynthesis, production and recovery. Antitumours and anticholesterol agents, SCP and SCO	01 Hours	22-7-2024	Lecture method(Using power point, video and audio visual)
	➢ I P R: Patent Laws: Patent regulations of processes, products and microorganisms.	01 Hours	24-7-2024 To 26-7-2024	Lecture method(Using power point, video and audio visual)

MAHAJANA EDUCATION SOCIETY (R)
POST GRADUATE WING OF SBRR MAHAJANA FIRST GRADE COLLEGE (AUTONOMOUS)
AFFILIATED TO UNIVERSITY OF MYSORE,
RE-ACCREDITED BY NAAC WITH 'A' GRADE, COLLEGE WITH POTENTIAL FOR EXCELLENCE, EDUCATION TO EXCEL
POOJA BHAGAVAT MEMORIAL MAHAJANA EDUCATION CENTRE
K.R.S ROAD, METAGALLI, MYSURU-570016, KARNATAKA, INDIA

DEPARTMENT OF STUDIES IN CHEMISTRY

Lesson Plan - 2023-24 (FIRST SEMESTER)
Department: M.Sc. CHEMISTRY
Subject:CHO HCT: 1.1.CONCEPT AND MODELS OF INORGANIC CHEMISTRY
03Hours/week – 48Hours/Semester

UNIT - I

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Structures and energetics of ionic crystals: Introduction, MX (NaCl, CsCl, ZnS) and MX_2 (fluorite, rutile, β-crystobalite, cadmium chloride and cadmium iodide) types. The perovskite and spinel structures. Thermodynamics of ionic crystal formation. Hydration energy and solubility of ionic compounds, Lattice energy, Born-Haber cycle, Born-Landeequation. The Kapustinskii's equation, Consequences of lattice enthalpies. Applications of lattice energetics. Ionic radii, factors affecting the ionic radii, radius ratio rules. **Structures and energetics of inorganic molecules:** Introduction, Bent's rule, Energetics of hybridization. VSEPR model for explaining structure of molecules including fluxional molecule. M.O. treatment of homo-nuclear and heteronuclear diatomic molecules. M.O.	Introduction,	**1**	**13-11-23**	**Lecture & ICT**
	MX (NaCl, CsCl, ZnS)	**1**	**15-11-23**	**Lecture & ICT**
	MX_2 (fluorite, rutile, β-crystobalite and cadmium iodide) types	**1**	**17-11-23**	**Lecture & ICT**
	The perovskite and spinel structures	**1**	**20-11-23**	**Lecture & ICT**
	Thermodynamics of ionic crystal formation. Lattice energy, Born-Haber cycle	**1**	**22-11-23**	**Lecture & ICT**
	Born-Landeequation.TheKapustinskii's equation	**1**	**24-11-23**	**Lecture & ICT**
	Consequences of lattice enthalpies.Applications of lattice energetics. Ionic radii, factors affecting the ionic radii, radius ratio rules	**1**	**27-11-23**	**Lecture & ICT**
	Introduction, Bent's rule, Energetics of hybridization.	**1**	**29-11-23**	**Lecture & ICT**

treatment involving delocalized π-bonding (CO_3^{2-} , NO_3^- , NO_2^-, CO_2 and N_3^-), M.O. correlation diagrams (Walsh) for triatomic molecules.	VSEPR model .	**1**	**01-12-23**	**Lecture & ICT**
	explaining structure of molecules	**1**	**04-12-23**	**Lecture & ICT**
	fluxional molecule.	**1**	**06-12-23**	**Lecture & ICT**
	M.O. treatment of homonuclear	**1**	**08-12-23**	**Lecture & ICT**
	M.O. treatment of homonuclear and heteronuclear diatomic molecules	**1**	**11-12-23**	**Lecture & ICT**
	M.O. treatment involving delocalized π-bonding	**1**	**13-12-23**	**Lecture & ICT**
	MOT for CO_3^{2-}, NO^{3-}, NO^{2-}, CO_2 and N^{3-}	**1**	**15-12-23**	**Lecture & ICT**
	M.O correlation diagrams (Walsh) for triatomic molecules	**1**	**18-12-23**	**Lecture & ICT**

UNIT – II

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Modern concept of acids and bases: Lux-Flood and Usanovich concepts, solvent system and leveling effect. Hard-Soft Acids and Bases, Classification and Theoretical backgrounds. **Non-aqueous solvents:**Classification of solvents, Properties of solvents (dielectric constant, donor and acceptor properties) protic solvents (anhydrous H_2SO_4, HF and glacial acetic acid)aprotic solvents (liquid SO_2, BrF_3 and N_2O_4). Solutions of metals in liquid ammonia, hydrated electron. Super acids and super bases. Heterogeneous acid-base reactions. **Ionic liquids:** Molten salt solvent systems, Ionic liquids at ambient temperature, Reactions in and applications of molten salt/ionic liquid media. **Supercritical fluids**: Properties of supercritical fluids and their uses as solvents. Supercritical fluids as media for inorganic chemistry	Lux-Flood	**1**	**20-12-23**	**Lecture & ICT**
	Usanovich concepts	**1**	**22-12-23**	**Lecture & ICT**
	solvent system and leveling effect.	**1**	**26-12-23**	**Lecture & ICT**
	Hard-Soft Acids and Bases, Classification and Theoretical backgrounds	**1**	**28-12-23**	**Lecture & ICT**
	Non-aqueous solvents: Classification of solvents,	**1**	**30-12-23**	**Lecture & ICT**
	Properties of solvents (dielectric constant, donor and acceptor properties)	**1**	**02-01-24**	**Lecture & ICT**
	protic solvents (anhydrous H_2SO_4, HF and glacial acetic acid)	**1**	**04-01-24**	**Lecture & ICT**
	aprotic solvents (liquid SO_2, BrF_3 and N_2O_4).	**1**	**06-01-24**	**Lecture & ICT**
	Solutions of metals in liquid ammonia, hydrated electron.	**1**	**09-01-24**	**Lecture & ICT**
	Super acids and super bases.	**1**	**11-01-24**	**Lecture & ICT**

	Heterogeneous acid-base reactions.	**1**	**13-01-24**	**Lecture & ICT**
	Ionic liquids:Molten salt solvent systems	**1**	**18-01-24**	**Lecture & ICT**
	Ionic liquids at ambient temperature	**1**	**19-01-24**	**Lecture & ICT**
	Reactions in and applications of molten salt/ionic liquid media	**1**	**22-01-24**	**Lecture & ICT**
	Supercritical fluids: Properties of supercritical fluids and their uses as solvents	**1**	**24-01-24**	**Lecture & ICT**
	Supercritical fluids as media for inorganic chemistry	**1**	**27-01-24**	**Lecture & ICT**

Unit -III

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Chemical Periodicity: Review of periodic properties **Lanthanoid chemistry:** General trends, Electronic, optical and magnetic properties. Abundance and extraction, General principles: conventional, solvent extraction and ion- exchange methods. Separation from monazite. Chemistry of principal oxidation states (II, III and IV). Stability of tetrahalides, dihalides and aqua ions of simple lanthanide compounds. Redox potentials.Uses: lanthanides as shift reagents, lanthanides as probes in biological systems. High temperature super conductors. **Actinoid chemistry:** General trends and electronic spectra. Occurrence and preparation of elements, Isolation of the elements: thorium and uranium, enrichment of uranium for nuclear fuel, uranium hydrides, oxides and chlorides. Chemical reactivity and trend. Chemistry of trans- uranium elements. **Supramolecular**	Chemical Periodicity: Review of periodic properties	**1**	**30-01-24**	**Lecture & ICT**
	Lanthanoid chemistry: General trends,	**1**	**02-02-24**	**Lecture & ICT**
	optical and magnetic properties. Abundance and extraction,	**1**	**05-02-24**	**Lecture & ICT**
	General principles: conventional, solvent extraction	**1**	**06-02-24**	**Lecture & ICT**
	ion- exchange methods	**1**	**07-02-24**	**Lecture & ICT**
	Separation from monazite	**1**	**09-02-24**	**Lecture & ICT**
	Chemistry of principal oxidation states (II, III and IV)	**1**	**12-02-24**	**Lecture & ICT**
	Stability of tetrahalides, dihalides and aqua ions of simple lanthanide compounds	**1**	**14-02-24**	**Lecture & ICT**
	Redox potentials.Uses: lanthanides as shift reagents	**1**	**16-02-24**	**Lecture & ICT**

Chemistry: Introduction, selectivity and Supramolecular Interactions.	Redox potentials.Uses: lanthanides as shift reagents,	**1**	**20-02-24**	**Lecture & ICT**
	Actinoid chemistry: General trends and electronic spectra. Occurrence and preparation of elements,	**1**	**22-02-24**	**Lecture & ICT**
	Isolation of the elements: thorium and uranium, enrichment of uranium for nuclear fuel	**1**	**27-02-24**	**Lecture & ICT**
	uranium hydrides, oxides and chlorides. Chemical reactivity and trend.	**1**	**28-02-24**	**Lecture & ICT**
	Chemistry of trans- uranium elements	**1**	**29-02-24**	**Lecture & ICT**
	Supramolecular Chemistry: Introduction,	**1**	**02-03-24**	**Lecture & ICT**
	selectivity and Supramolecular Interactions	**1**	**05-03-24**	**Lecture & ICT**

Subject: CHOHCT:1.2.STEREOCHEMISTRY AND REACTION MECHANISM

03 Hours/week – 48 Hours/Semester

UNIT – I

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Stereoisomerism: Projection formulae [fly wedge, Fischer, Newman and sawhorse], enantiomers, diastereoisomers, mesomers, racemic mixture and their resolution, configurational notations of simple molecules, DL and RS configurational notations.	Stereoisomerism: Projection formulae [fly wedge, Fischer, Newman and sawhorse]	**1**	**16-11-23**	**Lecture & ICT**
	enantiomers, diastereoisomers, mesomers, racemic mixture and their resolution	**1**	**18-11-23**	**Lecture & ICT**
	DL and RS configurational notations	**1**	**21-11-23**	**Lecture & ICT**
Optical isomerism: Conditions for optical isomerism: Elements of symmetry-plane of symmetry,centre of symmetry, alternating axis of symmetry (rotation-reflection symmetry). Optical isomerism due to chiral centers and molecular dissymmetry, allenes and biphenyls, criteria for optical purity.	Optical isomerism: Conditions for optical isomerism: Elements of symmetry-plane of symmetry,centre of symmetry, alternating axis of symmetry (rotation-reflection symmetry).	**1**	**23-11-23**	**Lecture & ICT**
Geometrical isomerism: Due to C=C,	Optical isomerism due to chiral centers and molecular	**1**	**25-11-23**	**Lecture & ICT**

C=N and N=N bonds, *E*, *Z* conventions, determination of configuration by physical and chemical methods. Geometrical isomerism in cyclic systems. **Conformational analysis:** Elementary account of conformational equilibria of ethane, butane and cyclohexane. Conformation of cyclic compounds such as cyclopentane, cyclohexane, cyclohexanones and decalins. Conformational analysis of 1,2-, 1,3- and 1,4- disubstitutedcyclohexane derivatives and *D*-Glucose, Effect of conformation on the course and rate of reactions. **Stereoselectivity:** Meaning and examples of stereospecific reactions, stereoselective reactions, diastereoselective reactions, regioselective, regiospecific reactions, enantioselective reactions and enantiospecific reactions.	dissymmetry			
	allenes and biphenyls, criteria for optical purity	**1**	**28-11-23**	**Lecture & ICT**
	Geometrical isomerism: Due to C=C, C=N and N=N bonds	**1**	**29-11-23**	**Lecture & ICT**
	E, *Z* conventions, determination of configuration by physical and chemical methods	**1**	**02-12-23**	**Lecture & ICT**
	Geometrical isomerism in cyclic systems	**1**	**05-12-23**	**Lecture & ICT**
	Conformational analysis: Elementary account of conformational equilibria of ethane	**1**	**07-12-23**	**Lecture & ICT**
	butane and cyclohexane. Conformation of cyclic compounds such as cyclopentane, cyclohexane, cyclohexanones and decalins	**1**	**09-12-23**	**Lecture & ICT**
	Conformational analysis of 1,2-, 1,3- and 1,4-disubstituted cyclohexane derivatives	**1**	**12-12-23**	**Lecture & ICT**
	D-Glucose,	**1**	**14-12-23**	**Lecture & ICT**
	Effect of conformation on the course and rate of reactions.	**1**	**16-12-23**	**Lecture & ICT**
	Stereoselectivity: Meaning and examples of stereospecific reactions, stereoselective reactions, diastereoselective reactions	**1**	**19-12-23**	**Lecture & ICT**
	regioselective, regiospecific reactions, enantioselective reactions and enantiospecific reactions	**1**	**21-12-23**	**Lecture & ICT**

UNIT – II

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Basicsoforganicreactions:Meaningandimportanceofreactionmechanism,classificationand examples for each class. **Bonding in organic systems**: Theories of bonding-molecular orbital approaches. Huckel molecular orbital theory and its application to simple π-systems: ethylene, allyl, cyclopropyl, cyclobutadienyl, cyclopentadienyl, cyclohexatrienylsystems. Calculation of the total π-energy, and M.O. coefficients of the systems. **Aromaticity**: Concept of aromaticity, Huckel's rule, Polygon rule, annulenes, heteroannulenes and polycyclic systems. **Structureandreactivity**:Briefdiscussion oneffectsofhydrogenbonding,resonance,inductive and hyperconjugation on strengths of acids and bases. **Methods of determining organic reaction mechanism**: Thermodynamic and kinetic requirements for reactions, kinetic and thermodynamic control. Identification of products. Determination of reaction intermediates, isotope labeling and effects of cross over experiments. Kinetic and stereochemical evidence, solvent effect. Formation, structure, stability, detectionand reactions of carbocations (classical and non-classical), carbanions, free radicals, carbenes, nitrenes, arynes and ylides (Sulphur, nitrogen and phosphorous).	Basicsoforganicreactions:Meaningandimportanceofreaction mechanism,classificationand examples for each class.	**1**	**23-12-23**	**Lecture & ICT**
	Bonding in organic systems: Theories of bonding-molecular orbital approaches	**1**	**27-12-23**	**Lecture & ICT**
	Huckel molecular orbital theory and its application to simple π-systems: ethylene, allyl	**1**	**29-12-23**	**Lecture & ICT**
	cyclopropyl, cyclobutadienyl,	**1**	**03-01-24**	**Lecture & ICT**
	cyclopentadienyl, cyclohexatrienylsystems. Calculation of the total π-energy, and M.O. coefficients of the systems	**1**	**05-01-24**	**Lecture & ICT**
	Aromaticity: Concept of aromaticity, Huckel's rule, Polygon rule,	**1**	**08-01-24**	**Lecture & ICT**
	annulenes, heteroannulenes and polycyclic systems.	**1**	**10-01-24**	**Lecture & ICT**
	Structure and reactivity: Brief discussion on effects of hydrogen bonding, resonance,	**1**	**12-01-24**	**Lecture & ICT**
	inductive and hyperconjugation on strengths of acids and bases	**1**	**16-01-24**	**Lecture & ICT**
	Methods of determining organic reaction mechanism: Thermodynamic and kinetic requirements for reactions	**1**	**18-01-24**	**Lecture & ICT**
	kinetic and thermodynamic control. Identification of products.	**1**	**20-01-24**	**Lecture & ICT**
	Determination of reaction intermediates, isotope labeling and effects of cross over experiments. Kinetic and	**1**	**23-01-24**	**Lecture & ICT**

	stereochemical evidence solvent effect			
	Formation, structure, stability, detection and reactions of carbocations (classical and non-classical)	**1**	**25-01-24**	**Lecture & ICT**
	carbanions, free radicals, carbenes	**1**	**29-01-24**	**Lecture & ICT**
	nitrenes, arynes	**1**	**01-02-24**	**Lecture & ICT**
	ylides (Sulphur, nitrogen and phosphorous)	**1**	**03-02-24**	**Lecture & ICT**

UNIT – III

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
AliphaticNuleophilicSubstitutionreactions: Kinetics,mechanismandstereochemicalfactor affecting the rate of S_N^1, S_N^2, S_{RN}^i, S_N^i, $S_N^{i'}$, $S_N^{2'}$, S_R^{N1}, S_N^{1i} reactions Neighbouringgroup participation **Electrophilic substitution reactions:** Kinetics, mechanism and stereochemical factor affecting the rate of S_E^1& S_E^2 **Aromatic electrophilic substitution reactions**: Mechanism of nitration, halogenation, sulphonation, Friedel-Crafts alkylation and acylation, Mannich reaction, chloromethylation, Vilsmeier Haack reaction, Diazonium coupling, Gattermann–Koch reaction, Mercurationreaction. **Aromaticnucleophilicsubstitutionreactions**: S_N^1, S_N^2 andbenzynemechanism,Bucherer reaction, von Richter reaction. **Mechanism of Addition reactions**: Addition to C=C multiple bonds involving electrophiles, nucleophiles. Markownikoff's rule and anti-Markownikoff's rule. **Additions to carbonyl compounds**: Addition of water, alcohol, bisulphate, HCN and amino compounds.	Aliphatic Nuleophilic Substitution reactions: Kinetics, mechanism and stereochemical factor affecting the rate of S_N^1, S_N^2	**1**	**06-02-24**	**Lecture & ICT**
	S_{RN}^i, S_N^i, $S_N^{i'}$	**1**	**08-02-24**	**Lecture & ICT**
	$S_N^{2'}$, S_R^{N1}, S_N^{1i}	**1**	**12-02-24**	**Lecture & ICT**
	Neighbouring group participation	**1**	**13-02-24**	**Lecture & ICT**
	Electrophilic substitution reactions:Kinetics, mechanism and stereochemical factor affecting the rate of S_E^1& S_E^2	**1**	**15-02-24**	**Lecture & ICT**
	Aromatic electrophilic substitution reactions: Mechanism of nitration, halogenation, sulphonation	**1**	**17-02-24**	**Lecture & ICT**
	Friedel-Crafts alkylation and acylation, Mannich reaction	**1**	**19-02-24**	**Lecture & ICT**
	chloromethylation, Vilsmeier Haack reaction, Diazonium coupling	**1**	**21-02-24**	**Lecture & ICT**
	Gattermann–Koch reaction, Mercuration reaction	**1**	**23-02-24**	**Lecture & ICT**
	Mechanism of Addition	**1**	**26-02-24**	**Lecture**

Hydrolysis of esters. **Elimination reactions:** Mechanism and stereochemistry of eliminations - E_1, E_2, E_{1cB}. *cis*elimination, Hofmann and Saytzeff eliminations, competition between elimination and substitution reactions, decarboxylation reactions. Chugaev reaction.	reactions: Addition to C=C multiple bonds involving electrophiles			**&ICT**
	nucleophiles. Markownikoff's rule and anti-Markownikoff's rule	**1**	**28-02-24**	**Lecture & ICT**
	Additions to carbonyl compounds: Addition of water, alcohol	**1**	**29-02-24**	**Lecture & ICT**
	bisulphate, HCN and amino compounds. Hydrolysis of esters.	**1**	**02-03-24**	**Lecture & ICT**
	Elimination reactions:Mechanism and stereochemistry of eliminations - E_1, E_2, E_{1cB}. *cis* elimination	**1**	**04-03-24**	**Lecture & ICT**
	Hofmann and Saytzeff eliminations, competition between elimination and substitution reactions	**1**	**07-03-24**	**Lecture & ICT**
	decarboxylation reactions. Chugaev reaction.	**1**	**09-03-24**	**Lecture & ICT**

CHP HCT: 1.3. BASIC PHYSICAL CHEMISTRY

UNIT – I

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Chemical Thermodynamics: Entropy: Physical significance, entropy changes in an ideal gas. Variation of entropy with temperature, pressure and volume. Entropy changes in reversible and irreversible processes. **Free energy**: Helmholtz and Gibbs free energies, Gibbs-Helmholtz equation and its applications, Maxwell's relations and its applications. Nernst heat theorem: its consequences and applications. Third law of thermodynamics: statements, applications and comparison with Nernst heat theorem.	Chemical Thermodynamics: Entropy:Physical significance, entropy changes in an ideal gas.	**1**	**13-11-23**	**Lecture & ICT**
	Variation of entropy with temperature, pressure and volume. Entropy changes in reversible and irreversible processes.	**1**	**15-11-23**	**Lecture & ICT**
	Free energy: Helmholtz and Gibbs free energies, Gibbs-Helmholtz equation and its applications,	**1**	**17-11-23**	**Lecture & ICT**
	Maxwell's relations and its applications. Nernst heat	**1**	**20-11-23**	**Lecture & ICT**

Partial molar properties: Physical significance, determination of partial molar volumes by intercept method and from density measurements. Chemical potential and its significance. Variation of chemical potential with temperature and pressure. Formulation of the Gibbs – Duhem equation. Derivation of Duhem-Margules equation. **Fugacity:** Relation between fugacity and pressure, variation of fugacity with temperature and pressure. Determination of fugacity of gases. **Activity and activity coefficient**: Variation of activity with temperature and pressure. Determination of activity co-efficient by depression in freezing point and solubility measurements by electrical methods. **Thermodynamics of dilute solutions:** Raoult‘s law, Henry‘s law. Ideal and non-ideal solutions.	theorem: its consequences and applications.			
	Third law of thermodynamics: statements, applications and comparison with Nernst heat theorem.	**1**	**22-11-23**	**Lecture & ICT**
	Partial molar properties:Physical significance, determination of partial molar volumes by intercept method and from density measurements.	**1**	**24-11-23**	**Lecture & ICT**
	Chemical potential and its significance	**1**	**27-11-23**	**Lecture & ICT**
	Variation of chemical potential with temperature and pressure	**1**	**29-11-23**	**Lecture & ICT**
	Formulation of the Gibbs – Duhem equation	**1**	**01-12-23**	**Lecture & ICT**
	Derivation of Duhem-Margules equation.	**1**	**04-12-23**	**Lecture & ICT**
	Fugacity:Relation between fugacity and pressure,	**1**	**06-12-23**	**Lecture & ICT**
	variation of fugacity with temperature and pressure. Determination of fugacity of gases.	**1**	**08-12-23**	**Lecture & ICT**
	Activity and activity coefficient: Variation of activity with temperature and pressure.	**1**	**11-12-23**	**Lecture & ICT**
	Determination of activity co-efficient by depression in freezing point and solubility measurements by electrical methods.	**1**	**13-12-23**	**Lecture & ICT**
	Thermodynamics of dilute solutions: Raoult‘s law, Henry‘s law.	**1**	**15-12-23**	**Lecture & ICT**
	Ideal and non-ideal solutions.	**1**	**18-12-23**	**Lecture & ICT**

UNIT – II

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Chemical Kinetics: Complex reactions: Kinetics of parallel, consecutive and reversible reactions. Chain reactions: Branched chain reactions, general rate expression, Auto catalytic reactions (Hydrogen-Oxygen reaction), oscillatory reactions and explosion limits. **Theories of reaction rates**: Collision theory and its limitations, Activated complex theory (postulates -derivation) and its applications to reactions in solution. Energy of activation, other activation parameters - determinations and their significance. Lindemann theory, Hinshelwood's theory of unimolecular reactions. **Reactions in solution**: Ionic reactions - salt effects, effect of dielectric constant (single sphere models). Effect of pressure, volume and entropy change on the rates of reactions. Cage effect with an example. **Fast reactions-** Introduction, study of fast reactions by continuous and stopped flow techniques, relaxation methods (T-jump and P-jump methods), flash photolysis, pulse and shock tube methods.	Chemical Kinetics**:** Complex reactions: Kinetics of parallel, consecutive and reversible reactions.	**1**	**20-12-23**	**Lecture & ICT**
	Chain reactions: Branched chain reactions, general rate expression	**1**	**22-12-23**	**Lecture & ICT**
	Auto catalytic reactions (Hydrogen-Oxygen reaction), oscillatory reactions and explosion limits.	**1**	**26-12-23**	**Lecture & ICT**
	Theories of reaction rates: Collision theory and its limitations	**1**	**28-12-23**	**Lecture & ICT**
	Activated complex theory (postulates -derivation) and its applications to reactions in solution	**1**	**30-12-23**	**Lecture & ICT**
	Energy of activation, other activation parameters - determinations and their significance.	**1**	**02-01-24**	**Lecture & ICT**
	Lindemann theory, Hinshelwood's theory of unimolecular reactions	**1**	**04-01-24**	**Lecture & ICT**
	Reactions in solution: Ionic reactions - salt effects	**1**	**06-01-24**	**Lecture & ICT**
	effect of dielectric constant (single sphere models)	**1**	**09-01-24**	**Lecture & ICT**
	Effect of pressure, volume and entropy change on the rates of reactions	**1**	**11-01-24**	**Lecture & ICT**
	Cage effect with an example.	**1**	**13-01-24**	**Lecture & ICT**
	Fast reactions- Introduction	**1**	**18-01-24**	**Lecture & ICT**
	study of fast reactions by continuous and stopped flow techniques	**1**	**19-01-24**	**Lecture & ICT**
	relaxation methods (T-jump and	**1**	**22-01-24**	**Lecture**

	P-jump methods)			**&ICT**
	flash photolysis	**1**	**24-01-24**	**Lecture & ICT**
	pulse and shock tube methods	**1**	**27-01-24**	**Lecture & ICT**

UNIT – III

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Electrochemistry of solutions: Factor effecting electrolytic conductance. Debye-Huckel theory - Concept of ionic atmosphere. Debye-Huckel-Onsager equation of conductivity and its validity. Debye-Huckel limiting law (DHL), its modification for appreciable concentrations. A brief survey of Helmholtz-Perrin, Guoy-Chapman and Stern electrical double layer (no derivation). Transference number: True and apparent transference numbers, Abnormal transference numbers, effect of temperature on transference numbers. Liquid junction potential-determination and minimization. **Energetics of cell reactions:** Effect of temperature, pressure and concentration on energetics of cell reactions (calculation of ΔG, ΔH and ΔS). **Irreversible electrode process**: Introduction, reversible and irreversible electrodes, reversible and irreversible cells. Polarization, over voltage - concentration over voltage, activation over voltage and ohmic over voltage. Experimental determination of over voltage. Equations for concentration over potential, stationary and non-stationary surface. Butler-Volmer equation, Tafel equation. Hydrogen oxygen over voltage. Effect of	Electrochemistry of solutions: Factor effecting electrolytic conductance.	**1**	**30-01-24**	**Lecture & ICT**
	Debye-Huckel theory - Concept of ionic atmosphere.	**1**	**02-02-24**	**Lecture & ICT**
	Debye-Huckel-Onsager equation of conductivity and its validity	**1**	**05-02-24**	**Lecture & ICT**
	Debye-Huckel limiting law (DHL), its modification for appreciable concentrations.	**1**	**06-02-24**	**Lecture & ICT**
	A brief survey of Helmholtz-Perrin, Guoy-Chapman and Stern electrical double layer	**1**	**07-02-24**	**Lecture & ICT**
	Transference number: True and apparent transference numbers, Abnormal transference numbers, effect of temperature on transference numbers.	**1**	**09-02-24**	**Lecture & ICT**
	Liquid junction potential-determination and minimization	**1**	**12-02-24**	**Lecture & ICT**
	Energetics of cell reactions: Effect of temperature,	**1**	**14-02-24**	**Lecture & ICT**
	pressure and concentration on energetics of cell reactions (calculation of ΔG, ΔH and ΔS)	**1**	**16-02-24**	**Lecture & ICT**
	Irreversible electrode process: Introduction, reversible and irreversible electrodes	**1**	**20-02-24**	**Lecture & ICT**
	reversible and irreversible cells.	**1**	**22-02-24**	**Lecture & ICT**
	Polarization, over voltage - concentration over voltage, activation over voltage and ohmic over voltage	**1**	**27-02-24**	**Lecture & ICT**

temperature, current density and *p*H on over voltage.	Equations for concentration over potential	**1**	**28-02-24**	**Lecture & ICT**
	stationary and non-stationary surface. Butler-Volmer equation	**1**	**29-02-24**	**Lecture & ICT**
	Tafel equation. Hydrogen oxygen over voltage.	**1**	**02-03-24**	**Lecture & ICT**
	Effect of temperature, current density and *p*H on over voltage.	**1**	**05-03-24**	**Lecture & ICT**

CHA HCT: 1.4. ANALYTICAL DATA ASSESSMENT AND SEPARATION TECHNIQUES

UNIT – I

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Analytical chemistry: Its functions and applications; analytical problems and procedures, analytical techniques and methods, method validation. **Calibration and standards:** Calibration, chemical standard and reference material. **Quality in analytical laboratories:** quality control, quality assurance and accreditation system. **Errors in analytical measurements:** measurement errors, absolute and relative errors, determinate and indeterminate errors and accumulated errors-sources, effects on results and control. **Assessment of accuracy and precision:** Accuracy and precision, standard deviation, relative standard deviation, pooled standard deviation, variance, overall precision, and confidence interval. **Significance testing:** Significance tests-Outlier, Q-test, F-test, t-test, and analysis of variance (ANOVA). Significant numbers. **Calibration and linear regression:** Calibration, linear regression, standard addition, internal standardisation, internal normalization, external standardisation. **Figures of merit of Analytical**	Analytical chemistry: Its functions and applications;	**1**	**16-11-23**	**Lecture & ICT**
	analytical problems and procedures, analytical techniques and methods, method validation.	**1**	**18-11-23**	**Lecture & ICT**
	Calibration and standards: Calibration, chemical standard and reference material.	**1**	**21-11-23**	**Lecture & ICT**
	Quality in analytical laboratories: quality control, quality assurance and accreditation system.	**1**	**23-11-23**	**Lecture & ICT**
	Errors in analytical measurements: measurement errors, absolute and relative errors,	**1**	**25-11-23**	**Lecture & ICT**
	determinate and indeterminate errors and accumulated errors-sources, effects on results and control.	**1**	**28-11-23**	**Lecture & ICT**
	Assessment of accuracy and precision: Accuracy and precision, standard deviation, relative standard deviation,	**1**	**29-11-23**	**Lecture & ICT**
	pooled standard deviation, variance, overall precision, and confidence interval.	**1**	**02-12-23**	**Lecture & ICT**

methods:sensitivity and detection limit, linear dynamic range. Quality control and chemometrics: Control charts, collaborative testing and multivariate statistics.	Significance testing: Significance tests- Outlier, Q-test, F-test,	**1**	**05-12-23**	**Lecture & ICT**
	t-test, and analysis of variance (ANOVA). Significant numbers.	**1**	**07-12-23**	**Lecture & ICT**
	reversible and irreversible cells.	**1**	**09-12-23**	**Lecture & ICT**
	Calibration and linear regression: Calibration, linear regression, standard addition,	**1**	**12-12-23**	**Lecture & ICT**
	internalstandardisation, internal normalization, external standardisation.	**1**	**14-12-23**	**Lecture & ICT**
	Figures of merit of Analytical methods: sensitivity and detection limit, linear dynamic range.	**1**	**16-12-23**	**Lecture & ICT**
	Quality control and chemometrics: Control charts,	**1**	**19-12-23**	**Lecture & ICT**
	collaborative testing and multivariate statistics	**1**	**21-12-23**	**Lecture & ICT**

UNIT – II

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Principles of chromatography- Chromatographic separations and classification of principal chromatographic separations. Chromatographic mechanisms-sorption isotherms; adsorption systems-stationary and mobile phases, partition systems-stationary and mobile phases. Characterization of solutes-distribution ratio, retention factor, retention time and retardation factor. **Sorption processes**- adsorption, partition, ion- exchange and size exclusion. **Chromatographic performance**- Efficiency and resolution. Peak asymmetry- kinetic and temperature	Principles of chromatography- Chromatographic separations and classification of principal chromatographic separations.	**1**	**23-12-23**	**Lecture & ICT**
	Chromatographic mechanisms-sorption isotherms; adsorption systems-stationary and mobile phases, partition systems-stationary and mobile phases.	**1**	**27-12-23**	**Lecture & ICT**
	Characterization of solutes-distribution ratio, retention factor, retention time and retardation factor.	**1**	**29-12-23**	**Lecture & ICT**
	Sorption processes- adsorption, partition, ion- exchange and size exclusion.	**1**	**03-01-24**	**Lecture & ICT**
	Chromatographic performance-	**1**	**05-01-24**	**Lecture**

effects. Isolation of separated components. Quantitative and qualitative analyses. **Thin layer chromatography (TLC) -** Principles and procedures, stationary and mobile phases, solute- detection, alternative TLC procedures and applications of TLC. **Gas chromatography (GC) -** Principles and types. Mobile phases, Sample injections, columns and stationary phases. Temperature control and solute detection; thermal conductivity detector (TCD), flame ionization detector (FID), nitrogen-phosphorus detector (NPD) and electron capture detector (ECD). Instrument control and data processing. GC-procedures- temperature programming and special procedures used in GC. Quantitative and qualitative analyses. **High performance liquid Chromatography(HPLC):** Principles, mobile phases, solvent delivery systems, sample injection system, column and stationary phases. Solute detection -UV- visible, fluorescence, refractive index and electrochemical detectors. Instrument control and data processing. Modes of HPLC. Optimisation of separations, qualitative and quantitative analyses.	Efficiency and resolution. Peak asymmetry			**&ICT**
	kinetic and temperature effects. Isolation of separated components	**1**	**08-01-24**	**Lecture & ICT**
	Quantitative and qualitative analyses.	**1**	**10-01-24**	**Lecture & ICT**
	Thin layer chromatography (TLC) - Principles and procedures, stationary and mobile phases, solute- detection	**1**	**12-01-24**	**Lecture & ICT**
	alternative TLC procedures and applications of TLC	**1**	**16-01-24**	**Lecture & ICT**
	Gas chromatography (GC) - Principles and types. Mobile phases, Sample injections, columns and stationary phases	**1**	**18-01-24**	**Lecture & ICT**
	Temperature control and solute detection; thermal conductivity detector (TCD), flame ionization detector (FID), nitrogen-phosphorus detector (NPD) and electron capture detector (ECD). Instrument control and data processing	**1**	**20-01-24**	**Lecture & ICT**
	GC-procedures- temperature programming and special procedures used in GC. Quantitative and qualitative analyses.	**1**	**23-01-24**	**Lecture & ICT**
	High performance liquid Chromatography(HPLC): Principles, mobile phases, solvent delivery systems, sample injection system	**1**	**25-01-24**	**Lecture & ICT**
	column and stationary phases. Solute detection -UV- visible, fluorescence	**1**	**29-01-24**	**Lecture & ICT**
	refractive index and electrochemical detectors. Instrument control and data processing.	**1**	**01-02-24**	**Lecture & ICT**
	Modes of HPLC. Optimisation of separations, qualitative and	**1**	**03-02-24**	**Lecture & ICT**

	quantitative analyses.			

UNIT – III

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Ion-exchange chromatography (IEC): Principles, apparatus and instrumentation, and applications. **Size-exclusion chromatography (SEC):** Principles, apparatus and instrumentation, and applications. **Affinity chromatography (AFC):** Principles, methodology and applications. **Supercritical fluid chromatography (SFC):** Properties of supercritical fluids, instrumentation and operating variables, comparison of SFC with other chromatographic techniques, applications. Supercritical fluid extraction (SFE): Advantages, instrumentation, choice of supercritical fluids, off-line and on-line extraction, applications. **Electrophoresis (EP) and electrochromatography(EC):** Principles- high performance capillary electrophoresis and capillary electrochromatography, running buffers, supporting medium, sample injection, solutes- detection, instrument control and data processing. Modes of EP and EC- capillary zone electrophoresis (CZE), micellar electrokineticchromatography (MEKC), capillary gel electrophoresis (CZE), capillary isoelectric focusing (CIEF). Capillary electrochromatography (CEC), features, basis of separations. Qualitative analysis by CE and CEC and applications. **Solvent and solid phase extraction:** Extraction techniques, extraction efficiency and selectivity. Solvent	Ion-exchange chromatography (IEC): Principles, apparatus	**1**	**06-02-24**	**Lecture & ICT**
	instrumentation, and applications.	**1**	**08-02-24**	**Lecture & ICT**
	Size-exclusion chromatography (SEC): Principles, apparatus	**1**	**12-02-24**	**Lecture & ICT**
	instrumentation, and applications.	**1**	**13-02-24**	**Lecture & ICT**
	Affinity chromatography (AFC): Principles, methodology and applications.	**1**	**15-02-24**	**Lecture & ICT**
	Supercritical fluid chromatography (SFC): Properties of supercritical fluids, instrumentation and operating variables,	**1**	**17-02-24**	**Lecture & ICT**
	comparison of SFC with other chromatographic techniques, applications	**1**	**19-02-24**	**Lecture & ICT**
	Supercritical fluid extraction (SFE): Advantages, instrumentation, choice of supercritical fluids,	**1**	**21-02-24**	**Lecture & ICT**
	off-line and on-line extraction, applications.	**1**	**23-02-24**	**Lecture & ICT**
	Electrophoresis (EP) and electrochromatography(EC): Principles- high performance capillary electrophoresis and capillary electrochromatography, running buffers, supporting medium,	**1**	**26-02-24**	**Lecture & ICT**
	sample injection, solutes- detection, instrument control and data processing.	**1**	**28-02-24**	**Lecture & ICT**

extraction (SE) - Extraction of organic acids and bases, extraction of metals. Methods of extraction and applications. Solvent phase sorbents, solid phase extraction (SPE) formats. Automated solid phase extraction. Solid phase micro extraction (SPME). Applications of SPE and SPME.	Modes of EP and EC-capillary zone electrophoresis (CZE), micellar electrokineticchromatography (MEKC)	**1**	**29-02-24**	**Lecture & ICT**
	Capillary electrochromatography (CEC), features, basis of separations. Qualitative analysis by CE and CEC and applications.	**1**	**02-03-24**	**Lecture & ICT**
	Solvent and solid phase extraction: Extraction techniques, extraction efficiency and selectivity. Solvent extraction (SE) - Extraction of organic acids and bases, extraction of metals.	**1**	**04-03-24**	**Lecture & ICT**
	Methods of extraction and applications. Solvent phase sorbents, solid phase extraction (SPE) formats	**1**	**07-03-24**	**Lecture & ICT**
	Automated solid phase extraction. Solid phase micro extraction (SPME). Applications of SPE and SPME.	**1**	**09-03-24**	**Lecture & ICT**

SOFT CORE PRACTICALS
CHA SCP: 1.1/2.1. ANALYTICAL CHEMISTRY PRACTICALS-I
08 Hours/week – 128 Hours/Semester

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Method of deployment**	**Date**
Part-A 1. Determination of total acidity of vinegar and wines by acid-base titration. 2. Determination of purity of a commercial boric acid sample, and Na_2CO_3 content of washing soda. 3. Analysis of chromate-dichromate mixture by acid-base titration.	Determination of total acidity	**4**	Practical hands on implementation	**20-11-23**
	Continued	**4**	Practical hands on implementation	**21-11-23**
	Determination of purity of a commercial boric acid	**4**	Practical hands on	**22-11-23**

4. Determination of replaceable hydrogen and relative molecular mass of a weak organic acid by titration with NaOH. 5. Determination of ephedrine and aspirin in their tablet preparations by residual acid-basetitrimetry. 6. Determination of purity of aniline and assay of chlorpromazine tablets by non-aqueous acid-base titration. 7. Periodate determination of ethylene glycol and glycerol (Malprade reaction). 8. Determination of carbonate and bicarbonate in a mixture by *p*H-metric titration and comparison with visual acid-base titration. 9. Determination of purity of a commercial sample of mercuric oxide by acid-base titration. 10. Determination of benzoic acid in food products by titration with methanolic KOH in chloroform medium using thymol blue as indicator. 11. Determination of the *p*H of hair shampoos and *p*H determination of an unknown soda ash. 12. Analysis of water/waste water for acidity by visual, *p*H metric and conductometric titrations. 13. Analysis of water/waste water for alkalinity by visual, *p*H metric and conductometric titrations. 14. Determination of carbonate and hydroxide-analysis of a commercial washing soda by visual and *p*H-titrimetry. 15. Determination of ammonia in house-hold cleaners by visual and conductometric titration. 16. Potentiometric determination of the equivalent weight and Ka for a pure unknown weak acid. 17. Spectrophotometric determination of creatinine and phosphorus in urine.	sample		implementation	
	Continued	**4**	Practical hands on implementation	**23-11-23**
	Analysis of chromate-dichromate mixture	**4**	Practical hands on implementation	**04-12-23**
	Continued	**4**	Practical hands on implementation	**05-12-23**
	Determination of replaceable hydrogen	**4**	Practical hands on implementation	**06-12-23**
	Continued	**4**	Practical hands on implementation	**07-12-23**
	Determination of aspirin in their tablet preparations	**4**	Practical hands on implementation	**11-12-23**
	Continued	**4**	Practical hands on implementation	**12-12-23**
	Determination of carbonate and bicarbonate	**4**	Practical hands on implementation	**13-12-23**
	Continued	**4**	Practical hands on implementation	**14-12-23**
	Analysis of water/waste water for acidity by visual, pH metric and conductometric titrations	**4**	Practical hands on implementation	**18-12-23**
	Continued	**4**	Practical hands on implementati	**19-12-23**

18. Flame emission spectrometric determination of sodium and potassium in river/lake water. 19. Spectrophotometric determination of *p*Ka of an acid-base indicator. **Part-B** 1. Determination of percentage of chloride in a sample by precipitation titration-Mohr, Volhard and Fajan‘s methods. 2. Determination of silver in an alloy and Na2CO3 in soda ash by Volhard method. 3. Mercurimetric determination of blood or urinary chloride. 4. Determination of total hardness, calcium and magnesium hardness and carbonate and bicarbonate hardness of water by complexation titration using EDTA. 5. Determination of calcium in calcium gluconate/calcium carbonate tablets/injections and of calcium in milk powder by EDTA titration. 6. Analysis of commercial hypochlorite and peroxide solution by iodometric titration. 7. Determination of copper in an ore/an alloy by iodometry and tin in stibnite by iodimetry. 8. Determination of ascorbic acid in vitamin C tablets by titrations with KBrO3 and of vitamin C in citrus fruit juice by iodimetric titration. 9. Determination of iron in razor blade by visual and potentiometric titration using sodium metavanadate. 10. Determination of iron in pharmaceuticals by visual and potentiometric titration using cerium(IV) sulphate. 11. Determination of nickel in steel by synergic extraction and boron in river			on	
	Determination of percentage of chloride in a sample by precipitation titration-Mohr, Volhard and Fajan‘s methods.	**4**	Practical hands on implementation	**20-12-23**
	Continued	**4**	Practical hands on implementation	**21-12-23**
	Determination of total hardness, calcium and magnesium hardness and carbonate and bicarbonate hardness of water by complexation titration using EDTA.	**4**	Practical hands on implementation	**26-12-23**
	Continued	**4**	Practical hands on implementation	**27-12-23**
	Analysis of commercial hypochlorite and peroxide solution by iodometric titration.	**4**	Practical hands on implementation	**02-01-24**
	Continued	**4**	Practical hands on implementation	**03-01-24**
	Determination of ascorbic acid in vitamin C tablets by titrations with KBrO3 and of vitamin C in citrus fruit juice by iodimetric titration.	**4**	Practical hands on implementation	**08-01-24**
	Continued	**4**	Practical hands on implementation	**09-01-24**
	Determination of iron in pharmaceuticals by visual and potentiometric titration using cerium(IV) sulphate	**4**	Practical hands on implementation	**10-01-24**

water/sewage using ferroin. 12. Determination of total cation concentration of tap water by ion-exchange chromatography. 13. Determination of magnesium in milk of magnesium tablets by ion-exchange chromatography. 14. Cation exchange chromatographic separation of cadmium and zinc and their estimation by EDTA titration. 15. Gas chromatographic determination of ethanol in beverages. 16. Determination of aspirin, phenacetin and caffeine in a mixture by HPLC. 17. Solvent extraction of zinc and its spectrophotometric determination. 18. Anion exchange chromatographic separation of zinc and magnesium followed by EDTA titration of the metals. 19. Separation and determination of chloride and bromide on an anion exchanger. 20. Thin layer chromatographic separation of amino acids	Continued	**4**	Practical hands on implementation	**11-01-24**
	Spectrophotometric determination of creatinine and phosphorus in urine.	**4**	Practical hands on implementation	**22-01-24**
		4	Practical hands on implementation	**23-01-24**
	Determination of calcium in calcium gluconate/calcium carbonate tablets/injections and of calcium in milk powder by EDTA titration.	**4**	Practical hands on implementation	**24-01-24**
	Continued	**4**	Practical hands on implementation	**25-01-24**
	Determination of nickel in steel by synergic extraction and boron in river water/sewage using ferroin	**4**	Practical hands on implementation	**05-02-24**
	Continued	**4**	Practical hands on implementation	**06-02-24**
	Solvent extraction of zinc and its spectrophotometric determination	**4**	Practical hands on implementation	**14-02-24**
	Continued	**4**	Practical hands on implementation	**15-02-24**

Subject: CHI SCP: 1.2/2.2. INORGANIC CHEMISTRY PRACTICALS-I
08 Hours/week – 128 Hours/Semester

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Method of deployment**	**Date**
PART – A 1. Determination of iron in haematite using cerium (IV) solution (0.02M) as the titrant, and gravimetric estimation of insoluble residue. 2. Estimation of calcium and magnesium carbonates in dolomite using EDTA titration, and gravimetric analysis of insoluble residue. 3. Determination of manganese dioxide in pyrolusite using permanganate titration. 4. Quantitative analysis of copper-nickel in alloy/mixture: i. Copper volumetrically using KIO3. ii. Nickel gravimetrically using DMG 5. Determination of lead and tin in a mixture: Analysis of solder using EDTA titration. 6. Quantitative analysis of chloride and iodide in a mixture: i.Iodide volumetrically using KIO3 ii.Total halide gravimetrically 7. Gravimetric analysis of molybdenum with 8- hydroxyquinoline. 8. Quantitative analysis of copper(II) and iron(II) in a mixture: i . Copper gravimetrically as CuSCN and ii. Iron volumetrically using cerium(IV) solution 9. Spectrophotometric determinations of: a. Titanium using hydrogen peroxide b.Chromium using diphenyl carbazide in industrial effluents c. Iron using thiocyanate/1,10-phenanthroline method in commercial samples d. Nickel using dimethylglyoxime in steel solution 10.Micro-titrimetric estimation of :	Semimicro qualitative analysis of inorganic mixtures - 01	**4**	Practical hands on implementation	**20-11-23**
	Continued	**4**	Practical hands on implementation	**21-11-23**
	Semimicro qualitative analysis of inorganic mixtures - 02	**4**	Practical hands on implementation	**22-11-23**
	Continued	**4**	Practical hands on implementation	**23-11-23**
	Semimicro qualitative analysis of inorganic mixtures - 03	**4**	Practical hands on implementation	**04-12-23**
	Continued	**4**	Practical hands on implementation	**05-12-23**
	Semimicro qualitative analysis of inorganic mixtures - 04	**4**	Practical hands on implementation	**06-12-23**
	Continued	**4**	Practical hands on implementation	**07-12-23**
	Semimicro qualitative analysis of inorganic mixtures - 05	**4**	Practical hands on implementation	**11-12-23**
	Continued	**4**	Practical hands on implementation	**12-12-23**
	Semimicro qualitative analysis of inorganic mixtures - 06	**4**	Practical hands on implementation	**13-12-23**
	Continued	**4**	Practical hands on implementation	**14-12-23**
	Semimicro qualitative analysis of inorganic mixtures - 07	**4**	Practical hands on implementation	**18-12-23**

a)Iron using cerium(IV) b)Calcium and magnesium using EDTA 11.Quantitative estimation of copper (II), calcium (II) and chloride in a mixture. 12.Circular paper chromatographic separation of: (Demonstration) a.Iron and nickel b.Copper and nickel **PART – B** Semimicro qualitative analysis of inorganic mixtures containing TWO anions and TWO cations (excluding sodium, potassium and ammonium cations) and ONE of the following less common cations: W, Mo, Ce, Ti, Zr, V and Li.	Continued	**4**	Practical hands on implementation	**19-12-23**
	Semimicro qualitative analysis of inorganic mixtures - 08	**4**	Practical hands on implementation	**20-12-23**
	Continued	**4**	Practical hands on implementation	**21-12-23**
	Determination of iron in haematite using cerium (IV) solution (0.02M) as the titrant, and gravimetric estimation of insoluble residue.	**4**	Practical hands on implementation	**26-12-23**
	Continued	**4**	Practical hands on implementation	**27-12-23**
	Estimation of calcium and magnesium carbonates in dolomite using EDTA titration, and gravimetric analysis of insoluble residue.	**4**	Practical hands on implementation	**02-01-24**
	Continued	**4**	Practical hands on implementation	**03-01-24**
	Determination of manganese dioxide in pyrolusite using permanganate titration.	**4**	Practical hands on implementation	**08-01-24**
	Continued	**4**	Practical hands on implementation	**09-01-24**
	Quantitative analysis of copper-nickel in alloy/mixture: i. Copper volumetrically using KIO3. ii. Nickel gravimetrically using DMG	**4**	Practical hands on implementation	**10-01-24**
	Continued	**4**	Practical hands on implementation	**11-01-24**
	Determination of lead and tin in a mixture: Analysis of solder using EDTA titration.	**4**	Practical hands on implementation	**22-01-24**

	Continued	**4**	Practical hands on implementation	**23-01-24**
	Quantitative analysis of chloride and iodide in a mixture: i.Iodide volumetrically using KIO3 ii.Total halide gravimetrically	**4**	Practical hands on implementation	**24-01-24**
	Continued	**4**	Practical hands on implementation	**25-01-24**
	Spectrophotometric determinations of: Iron using thiocyanate/1,10-phenanthroline method in commercial samples	**4**	Practical hands on implementation	**05-02-24**
	Continued	**4**	Practical hands on implementation	**06-02-24**
	Gravimetric analysis of molybdenum with 8-hydroxyquinoline.	**4**	Practical hands on implementation	**14-02-24**
	Continued	**4**	Practical hands on implementation	**15-02-24**

MAHAJANA EDUCATION SOCIETY (R)
POST GRADUATE WING OF SBRR MAHAJANA FIRST GRADE COLLEGE (AUTONOMOUS)
AFFILIATED TO UNIVERSITY OF MYSORE,
RE-ACCREDITED BY NAAC WITH 'A' GRADE, COLLEGE WITH POTENTIAL FOR EXCELLENCE, EDUCATION TO EXCEL
POOJA BHAGAVAT MEMORIAL MAHAJANA EDUCATION CENTRE
K.R.S ROAD, METAGALLI, MYSURU-570016, KARNATAKA, INDIA

DEPARTMENT OF STUDIES IN CHEMISTRY

Lesson Plan - 2022-23 (SECOND SEMESTER)
Department: M.Sc. CHEMISTRY
Subject:COORDINATION CHEMISTRY
03Hours/week – 48Hours/Semester

UNIT - I

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Preparation of coordination compounds: Introduction, Preparative methods- simple addition reactions, substitution reactions, oxidation-reduction reactions, thermal dissociation reactions. Geometries of metal complexes of higher coordination numbers (2-8). **Stability of coordination compounds:** Introduction, trends in stepwise stability constants, factors influencing the stability of metal complexes with reference to the nature of metal ion and ligands, the Irving-William series, chelate effect. **Determination of stability constants:** Theoretical aspects of determination of stability constants of metal complexes by spectrophotometric methods. **Crystal field theory:** Salient features of CFT, d-orbital splitting in octahedral, tetrahedral, square planar and tetragonal complexes, Jahn-Teller distortions, measurement of 10	**Preparation of coordination compounds:** Introduction, Preparative methods- simple addition reactions	1	08/04/24	Lecture & ICT
	substitution reactions, oxidation-reduction reactions,	1	010/04/24	Lecture & ICT
	thermal dissociation reactions.	1	12/04/24	Lecture & ICT
	Geometries of metal complexes of higher coordination numbers (2-8).	1	15/04/24	Lecture & ICT
	Stability of coordination compounds: Introduction, trends in stepwise stability constants,	1	18/04/24	Lecture & ICT
	factors influencing the stability of metal complexes with reference to the nature of metal ion and ligands	1	13/04/24	Lecture & ICT
	the Irving-William series,	1	19/04/24	Lecture & ICT
	chelate effect.	1		Lecture

Dq and factors affecting it. Evidences for metal-ligand covalency. **Molecular Orbital Theory:** MOT to octahedral, tetrahedral and square planar complexes without and with pi-bonding.				**&ICT**
	Determination of stability constants: Theoretical aspects of determination of stability constants of metal complexes by spectrophotometric methods.	**1**	**22/04/24**	**Lecture & ICT**
	Crystal field theory: Salient features of CFT,	**1**	**24/04/24**	**Lecture & ICT**
	d-orbital splitting in octahedral,	**1**	**25/04/24**	**Lecture & ICT**
	tetrahedral, square planar and tetragonal complexes,	**1**	**27/04/24**	**Lecture & ICT**
	Jahn-Teller distortions	**1**	**29/04/24**	**Lecture & ICT**
	measurement of 10 Dq and factors affecting it.	**1**	**2/05/24**	**Lecture & ICT**
	Molecular Orbital Theory: MOT to octahedral,	**1**	**03/05/24**	**Lecture & ICT**
	tetrahedral and square planar complexes without and with pi-bonding.	**1**	**06/05/24**	**Lecture & ICT**

UNIT – II

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Electronic spectra: Introduction, selection rules and intensities, electronic spectra of octahedral and tetrahedral complexes, Term symbols for d^nions, Orgel and Tanabe-Sugano diagrams, charge-transfer spectra. Ligand-field transition. Charge transfer and energy applications. Optical rotatory dispersion and Circular dichroism. Magnetic circular dichroism. **Magnetic properties**: Introduction, magnetic susceptibility and its measurements, spin and orbital contributions to the magnetic moment, the effects of temperature on μeff, spin-cross over, ferromagnetism, anti-	**Electronic spectra**: Introduction, selection rules and intensities	**1**	**08/05/24**	**Lecture & ICT**
	electronic spectra of octahedral and tetrahedral complexes	**1**	**10/05/24**	**Lecture & ICT**
	Term symbols for $d_n$ions	**1**	**11/05/24**	**Lecture & ICT**
	Orgel and Tanabe-Sugano diagrams	**1**	**13/05/24**	**Lecture & ICT**
	charge-transfer spectra. Ligand-field transition	**1**	**15/05/24**	**Lecture & ICT**
	Charge transfer and energy applications	**1**	**17/05/24**	**Lecture & ICT**
	Optical rotatory dispersion and Circular dichroism. Magnetic circular dichroism.	**1**	**18/05/24**	**Lecture & ICT**

ferromagnetism and ferrimagnetism. **Applications of infrared spectroscopy of coordination compounds:** Metal complexes of ammine, nitro, nitrito, hydroxo, carbonato, sulphato, cyano, cyanato and thiocyanato complexes.	**Magnetic properties**: Introduction, magnetic susceptibility and its measurements	**1**	**21/05/24**	**Lecture & ICT**
	spin and orbital contributions to the magnetic moment	**1**	**24/05/24**	**Lecture & ICT**
	the effects of temperature on μeff, spin-cross over, ferromagnetism	**1**	**25/05/24**	**Lecture & ICT**
	anti-ferromagnetism and ferrimagnetism.	**1**	**27/05/24**	**Lecture & ICT**
	Applications of infrared spectroscopy of coordination compounds: Metal complexes of ammine, nitro,	**1**	**29/05/24**	**Lecture & ICT**
	nitrito, hydroxo	**1**	**31/05/24**	**Lecture & ICT**
	carbonato, sulphato,	**1**	**01/06/24**	**Lecture & ICT**
	cyano, cyanato	**1**	**4/06/24**	**Lecture & ICT**
	thiocyanato complexes.	**1**	**6/06/24**	**Lecture & ICT**

Unit -III

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Reactions and Mechanisms: Introduction. Substitution reactions- Inert and labile compounds, mechanisms of substitution. Kinetic consequences of Reaction pathways- Dissociation, interchange and association. Experimental evidence in octahedral substitution- Dissociation, associative mechanisms, the conjugate base mechanism, the kinetic chelate effect. **Stereochemistry of reactions**- Substitution in *trans* and its complexes, isomerization of chelate rings. Substitution reactions of square-planar complexes-kinetics and stereochemistry of square- planar substitutions, evidence for associative reactions, explanations of the *trans*	**Reactions and Mechanisms**: Introduction. Substitution reactions- Inert and labile compounds,	**1**	**8/06/24**	**Lecture & ICT**
	mechanisms of substitution	**1**	**10/06/24**	**Lecture & ICT**
	Kinetic consequences of Reaction pathways- Dissociation	**1**	**12/06/24**	**Lecture & ICT**
	interchange and association.	**1**	**14/06/24**	**Lecture & ICT**
	Experimental evidence in octahedral substitution- Dissociation	**1**	**17/06/24**	**Lecture & ICT**
	associative mechanisms, the	**1**	**20/06/24**	**Lecture & ICT**

effect. Electron-transfer processes: Inner-sphere mechanism and outer-sphere mechanism, conditions for high and low oxidation numbers. **Photochemistry of coordination compounds**: Photochemistry of chromium(III) ammine compounds, Light-induced excited state spin trapping in iron(II) compounds and MLCT photochemistry in pentammineruthenium(II) compounds.	conjugate base mechanism,			
	the kinetic chelate effect	**1**	**21/06/24**	**Lecture & ICT**
	Stereochemistry of reactions- Substitution in *trans* and its complexes	**1**	**24/06/24**	**Lecture & ICT**
	Stereochemistry of reactions- Substitution in *trans* and its complexes	**1**	**25/06/24**	**Lecture & ICT**
	isomerization of chelate rings. Substitution reactions of square-planar complexes-kinetics	**1**	**27/06/24**	**Lecture & ICT**
	stereochemistry of square-planar substitutions	**1**	**29/06/24**	**Lecture & ICT**
	evidence for associative reactions, explanations of the *trans* effect.	**1**	**1/07/24**	**Lecture & ICT**
	Electron-transfer processes: Inner-sphere mechanism and outer-sphere mechanism, conditions for high and low oxidation numbers	**1**	**03/07/24**	**Lecture & ICT**
	Photochemistry of coordination compounds: Photochemistry of chromium(III) ammine compounds	**1**	**05/07/24**	**Lecture & ICT**
	Light-induced excited state spin trapping in iron(II) compounds	**1**	**08/06/24**	**Lecture & ICT**
	MLCT photochemistry in pentammineruthenium(II) compounds.	**1**	**10/06/24**	**Lecture & ICT**

Subject: CHO HCT: 2.2. SYNTHETIC ORGANIC CHEMISTRY
03 Hours/week – 48 Hours/Semester
UNIT – I

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Oxidation: Oxidation with chromium and manganese reagents (CrO_3, $K_2Cr_2O_7$, PCC, PDC, Sarret reagent, MnO_2, $KMnO_4$), peroxides and peracids, periodic acid, OsO_4, SeO_2, NBS, Oppenauer oxidation, Sharpless epoxidation. **Reduction**: Catalytic hydrogenation (homogeneous and heterogeneous) – catalysts (Pt, Pd, Ra- C, Ni, Ru, Rh), solvents and reduction of functional groups, catalytic hydrogen transfer reactions. Wilkinson catalyst, $LiAlH_4$, $NaBH_4$, DIBAL-H, Sodium cyanoborohydride, Birch reduction, Leukart reaction (reductive amination), diborane as reducing agent, Meerwein-Ponndorf-Verley reduction, Wolff-Kishner reduction, Clemensen reduction, stannous chloride, Organoboron compounds: Introduction and preparations; Hydroboration and its applications; Reactions of organoboranes: isomerization reactions, oxidation, protonolysis, carbonylation, cyanidation. Reactions with aldehydes or ketones (*E* and *Z*-alkenes).	**Oxidation:** Oxidation with chromium and manganese reagents (CrO_3, $K_2Cr_2O_7$, PCC	**1**	**10/04/24**	**Lecture & ICT**
	PDC, Sarret reagent, MnO_2, $KMnO_4$	**1**	**12/04/24**	**Lecture & ICT**
	peroxides and peracids, periodic acid, OsO_4,	**1**	**15/04/24**	**Lecture & ICT**
	SeO_2, NBS, Oppenauer oxidation, Sharpless epoxidation.	**1**	**17/04/24**	**Lecture & ICT**
	Reduction: Catalytic hydrogenation (homogeneous and heterogeneous) – catalysts (Pt, Pd, Ra- C, Ni, Ru, Rh),	**1**	**19/04/24**	**Lecture & ICT**
	solvents and reduction of functional groups,	**1**	**22/04/24**	**Lecture & ICT**
	catalytic hydrogen transfer reactions. Wilkinson catalyst	**1**	**24/04/24**	**Lecture & ICT**
	$LiAlH_4$, $NaBH_4$, DIBAL-H, Sodium cyanoborohydride	**1**	**27/04/24**	**Lecture & ICT**
	Birch reduction, Leukart reaction (reductive amination), diborane as reducing agent,	**1**	**02/05/24**	**Lecture & ICT**
	Meerwein-Ponndorf-Verley reduction, Wolff-Kishner reduction	**1**	**04/05/24**	**Lecture & ICT**
	Clemensen reduction, stannous chloride,	**1**	**07/05/24**	**Lecture & ICT**
	Organoboron compounds: Introduction and preparations	**1**	**09/05/24**	**Lecture & ICT**
	Hydroboration and its applications; Reactions of organoboranes	**1**	**11/05/24**	**Lecture & ICT**
	isomerization reactions, oxidation	**1**	**14/05/24**	**Lecture & ICT**
	protonolysis, carbonylation, cyanidation.	**1**	**16/05/24**	**Lecture & ICT**

	Reactions with aldehydes or ketones (*E* and *Z*-alkenes).	**1**	**18/05/24**	**Lecture & ICT**

UNIT – II

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Reagents and reactions in organic synthesis: Use of following reagents in organic synthesis and functional group transformations: Lithium diisopropylamide (LDA), Gilmann reagent, dicyclohexylcarbodimide (DCC), dichlorodicyanoquinone (DDQ), Silane reagents-trialkylsilyl halides, trimethylsilyl cyanide, trimethylsilane; phase transfer catalyst, crown ethers, cyclodextrins, Ziegler-Natta catalyst, diazomethane, Woodward and Prevost hydroxylation, Stark enamine reaction, phosphorous ylides - Wittig and related reactions, Sulphur ylides – reactions with aldehydes and ketones, 1,3-dithiane anions - Umpolung reaction, Peterson reaction. Palladium reagents: Suzuki coupling, Heck reaction, Negishi reaction. Green Chemistry: Definition and principles.	**Reagents and reactions in organic synthesis:** Use of following reagents in organic synthesis and functional group transformations: Lithium diisopropylamide (LDA)	**1**	**21/05/24**	**Lecture & ICT**
	Gilmann reagent, dicyclohexylcarbodimide (DCC),	**1**	**23/05/24**	**Lecture & ICT**
	dichlorodicyanoquinone(DDQ)	**1**	**27/05/24**	**Lecture & ICT**
	Silane reagents-trialkylsilyl halides	**1**	**28/05/24**	**Lecture & ICT**
	trimethylsilyl cyanide, trimethylsilane;	**1**	**31/05/24**	**Lecture & ICT**
	phase transfer catalyst, crown ethers	**1**	**01/06/24**	**Lecture & ICT**
	cyclodextrins, Ziegler-Natta catalyst	**1**	**04/06/24**	**Lecture & ICT**
	diazomethane, Woodward and Prevost hydroxylation	**1**	**06/06/24**	**Lecture & ICT**
	Stark enamine reaction	**1**	**08/06/24**	**Lecture & ICT**
	phosphorous ylides - Wittig and related reactions	**1**	**11/08/24**	**Lecture & ICT**
	Sulphur ylides – reactions with aldehydes and ketones	**1**	**13/06/24**	**Lecture & ICT**
	1,3-dithiane anions	**1**	**15/06/24**	**Lecture & ICT**
	Umpolung reaction, Peterson reaction	**1**	**18/06/24**	**Lecture & ICT**
	Palladium reagents: Suzuki coupling	**1**	**20/06/24**	**Lecture & ICT**
	Heck reaction, Negishireaction	**1**	**22/06/24**	**Lecture**

				&ICT
	Green Chemistry: Definition and principles.	**1**	**24/06/24**	**Lecture & ICT**

UNIT – III

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Molecular rearrangements: Introduction Carbon to carbon migration: Pinacol-pinacolone, Wagner-Meerwein, Benzidine, benzylic acid, Favorskii, Fries rearrangement, dienophile rearrangement. Carbon to nitrogen migration: Hofmann, Curtius, Lossen, Schmidt and Beckmann rearrangements. Miscellaneous rearrangements: Wittig, Smiles, Bayer-Villeger rearrangement and Barton reaction. **Retrosynthesis**: Introduction to disconnection approach: Basic principles and terminologies used in disconnection approach. One group C-X and two group C-X disconnections. Synthons and synthetic equivalents. Retrosynthesis and synthesis of benzofurans, *p*-methoxyacetophenone, saccharine, α-bisabolene, nuciferal, tetralone, ibuprofen; Functional group transformations in organic synthesis: nitro to keto, nitro to amine, acid to alcohol etc.	**Molecular rearrangements**: Introduction Carbon to carbon migration: Pinacol-pinacolone	**1**	**26/06/24**	**Lecture & ICT**
	Wagner-Meerwein, Benzidine, benzylic acid	**1**	**28/06/24**	**Lecture & ICT**
	Favorskii, Fries rearrangement	**1**	**29/06/24**	**Lecture & ICT**
	dienophile rearrangement	**1**	**01/07/24**	**Lecture & ICT**
	Carbon to nitrogen migration: Hofmann, Curtius, Lossen	**1**	**03/07/24**	**Lecture & ICT**
	Schmidt and Beckmann rearrangements	**1**	**05/07/24**	**Lecture & ICT**
	Miscellaneous rearrangements: Wittig, Smiles	**1**	**06/07/24**	**Lecture & ICT**
	Bayer-Villeger rearrangement and Barton reaction.	**1**	**08/07/24**	**Lecture & ICT**
	Retrosynthesis: Introduction to disconnection approach: Basic principles	**1**	**10/07/24**	**Lecture & ICT**
	terminologies used in disconnection approach	**1**	**11/07/24**	**Lecture & ICT**
	One group C-X and two group C-X disconnections	**1**	**12/07/24**	**Lecture & ICT**
	Synthons and synthetic equivalents	**1**	**13/07/24**	**Lecture & ICT**
	Retrosynthesis and synthesis of benzofurans, *p*-methoxyacetophenone	**1**	**15/07/24**	**Lecture & ICT**
	saccharine, α-bisabolene, nuciferal, tetralone, ibuprofen;	**1**	**16/07/24**	**Lecture & ICT**
	Functional group transformations in organic	**1**	**18/07/24**	**Lecture & ICT**

	synthesis: nitro to keto			
	nitro to amine, acid to alcohol etc.	**1**	**19/07/24**	**Lecture & ICT**

CHP HCT: 2.3. PRINCIPLES OF PHYSICAL CHEMISTRY

UNIT – I

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Quantum Chemistry: Introduction to quantum mechanics: Schrödinger wave equation, time- independent and time dependent Schrödinger wave equation and the relation between their solutions. Eigen functions and Eigen values. Physical interpretation of wave function. Concept of operators – Laplacian, Hamiltonian, Linear and Hermitian operators. Angular momentum operators and their properties. Commutative and non-commutative operators. Normalization, orthogonality and orthonormality of wave functions. Postulates of quantum mechanics. Solutions of Schrödinger wave equation for free particles, particle in a ring, particle in three dimensional box. Quantum mechanical degeneracy, tunnelling (no derivation). Wave equation for H-atom, separation and solution of R, ϕ and θ equations. Application of Schrodinger equation to rigid rotator and harmonic oscillator. Eigen functions and Eigen values of angular momentum. Ladder operator method for angular momentum.	**Quantum Chemistry:** Introduction to quantum mechanics: Schrödinger wave equation	**1**	**08/04/24**	**Lecture & ICT**
	time- independent and time dependent Schrödinger wave equation	**1**	**13/04/24**	**Lecture & ICT**
	the relation between their solutions	**1**	**17/04/24**	**Lecture & ICT**
	Eigen functions and Eigen values	**1**	**20/04/24**	**Lecture & ICT**
	Physical interpretation of wave function	**1**	**24/04/24**	**Lecture & ICT**
	Concept of operators – Laplacian, Hamiltonian	**1**	**29/04/24**	**Lecture & ICT**
	Linear and Hermitian operators. Angular momentumoperators and their properties	**1**	**04/05/24**	**Lecture & ICT**
	Commutative and non-commutative operators. Normalization	**1**	**08/05/24**	**Lecture & ICT**
	orthogonality and orthonormality of wave functions	**1**	**11/05/24**	**Lecture & ICT**
	Postulates of quantum mechanics. Solutions of Schrödinger wave equation for free particles	**1**	**15/05/24**	**Lecture & ICT**
	particle in a ring, particle in three dimensional box.	**1**	**18/05/24**	**Lecture & ICT**

	Quantum mechanical degeneracy, tunnelling (no derivation). Wave equation for H-atom	**1**	**21/05/24**	**Lecture & ICT**
	separation and solution of R, ϕ and θ equations	**1**	**24/05/24**	**Lecture & ICT**
	Application of Schrodinger equation to rigid rotator and harmonic oscillator	**1**	**28/05/24**	**Lecture & ICT**
	Eigen functions and Eigen values of angular momentum	**1**	**31/05/24**	**Lecture & ICT**
	Ladder operator method for angular momentum.	**1**	**05/06/24**	**Lecture & ICT**

UNIT – II

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Statistical thermodynamics: Objectives of statistical thermodynamics, concept of distribution, types of ensembles. Thermodynamic probability and most probable distribution law. Partition functions – definition, evaluation of translational, rotational and vibrational and electronic partition functions for monoatomic, diatomic and polyatomic gaseous molecules. Sackur- Tetrode equation for entropy of translation function. Calculation of thermodynamic functions and equilibrium constants in terms of partition functions. Different distribution laws (Types of statistics): Maxwell-Boltzmann, Bose-Einstein and Fermi-Dirac Statistics (derivation of the three distribution laws). Comparison of Bose-Einstein and Fermi-Dirac Statistics with Maxwell- Boltzmann statistics. Problems and their solutions. **Phase rule studies:** Thermodynamic derivation of phase rule. Application of phase rule to the two component systems - compound formation with	**Statistical thermodynamics:** Objectives of statistical thermodynamics, concept of distribution, types of ensembles	**1**	**10/04/24**	**Lecture & ICT**
	Thermodynamic probability and most probable distribution law	**1**	**15/04/24**	**Lecture & ICT**
	Partition functions – definition, evaluation of translational, rotational and vibrational and electronic partition functions for monoatomic	**1**	**18/04/24**	**Lecture & ICT**
	diatomic and polyatomic gaseous molecules	**1**	**25/04/24**	**Lecture & ICT**
	Sackur- Tetrode equation for entropy of translation function	**1**	**29/04/24**	**Lecture & ICT**
	Calculation of thermodynamic functions and equilibrium constants in terms of partition functions	**1**	**06/05/24**	**Lecture & ICT**
	Different distribution laws (Types of statistics): Maxwell-Boltzmann	**1**	**13/05/24**	**Lecture & ICT**
	Bose-Einstein and Fermi-Dirac	**1**	**16/05/24**	**Lecture &**

congruent melting point and incongruent melting points, Roozeboom's classification. Application of phase rule to three component systems- systems of three liquids and systems of two salts and water.	Statistics (derivation of the three distribution laws)			**ICT**
	Comparison of Bose-Einstein and Fermi-Dirac Statistics with Maxwell- Boltzmann statistics	**1**	**22/05/24**	**Lecture & ICT**
	Problems and their solutions.	**1**	**25/05/24**	**Lecture & ICT**
	Phase rule studies: Thermodynamic derivation of phase rule	**1**	**28/05/24**	**Lecture & ICT**
	Application of phase rule to the two component systems - compound formation with congruent melting point	**1**	**06/06/24**	**Lecture & ICT**
	incongruent melting points	**1**	**13/06/24**	**Lecture & ICT**
	Roozeboom's classification	**1**	**20/06/24**	**Lecture & ICT**
	Application of phase rule to three component systems- systems of three liquids	**1**	**27/06/24**	**Lecture & ICT**
	systems of two salts and water.	**1**	**04/07/24**	**Lecture & ICT**

UNIT – III

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Polymers: Fundamentals of polymers - monomers, repeat units, degree of polymerization. Linear, branched and network polymers. Classification of polymers, Polymerization - condensation, addition, free radical, ionic, co-ordination polymerization and ring opening polymerization. Molecular weight and size, polydispersion. Average molecular weight concepts number, weight and viscosity average molecular weight. Determination of molecular weights - viscosity method, osmotic pressure method, sedimentation and light scattering methods. **Kinetics of**	**Polymers**: Fundamentals of polymers - monomers, repeat units	**1**	**12/04/24**	**Lecture & ICT**
	degree of polymerization	**1**	**19/04/24**	**Lecture & ICT**
	Linear, branched and network polymers	**1**	**27/04/24**	**Lecture & ICT**
	Classification of polymers	**1**	**04/05/24**	**Lecture & ICT**
	Polymerization - condensation, addition	**1**	**11/05/24**	**Lecture & ICT**
	free radical, ionic, co-ordination polymerization	**1**	**16/05/24**	**Lecture & ICT**
	ring opening polymerization	**1**	**24/05/224**	**Lecture & ICT**

Polymerization - Condensation, addition, free radical, ionic, co-ordination polymerization. **Phase transitions in polymers and thermal characterization**: Glass transition, crystallinity and melting- correlation with the polymer structure. **Polymers in solution**: Criteria of polymer solubility, thermodynamics of polymer solutions. **Colloids:** Types and classification, Micelles: Surface active agents, micellization, hydrophobic interaction, critical micellar concentration (CMC), factors affecting the CMC of surfactants, micellar catalysis.	Molecular weight and size, polydispersion	**1**	**28/05/24**	**Lecture & ICT**
	Average molecular weight concepts number, weight and viscosity average molecular weight	**1**	**31/05/24**	**Lecture & ICT**
	Determination of molecular weights - viscosity method, osmotic pressure method, sedimentation and light scattering methods	**1**	**08/06/24**	**Lecture & ICT**
	Kinetics of Polymerization - Condensation, addition, free radical,	**1**	**12/06/24**	**Lecture & ICT**
	ionic, co-ordination polymerization	**1**	**19/06/24**	**Lecture & ICT**
	Phase transitions in polymers and thermal characterization: Glass transition, crystallinity and melting- correlation with the polymer structure.	**1**	**29/06/24**	**Lecture & ICT**
	Polymers in solution: Criteria of polymer solubility, thermodynamics of polymer solutions.	**1**	**06/07/24**	**Lecture & ICT**
	Colloids: Types and classification, Micelles: Surface active agents, micellization, hydrophobic interaction	**1**	**13/07/24**	**Lecture & ICT**
	critical micellar concentration (CMC), factors affecting the CMC of surfactants, micellar catalysis	**1**	**16/07/24**	**Lecture & ICT**

CHG HCT: 2.4. MOLECULAR SYMMETRY AND SPECTROSCOPY

UNIT – I

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Molecular symmetry and group	**Molecular symmetry and**	**1**	**08/04/24**	**Lecture &**

theory: Symmetry elements and symmetry operations. **The Point Groups Used with Molecules:** Concept of a group, definition of a point group. Classification of molecules into point groups. Subgroups. Hermann-Maugin symbols for point groups. Multiplication tables (C_{2v}, C_{2h} and C_{3v}). Matrix notation for the symmetry elements. Classess and similarity transformation. **Representation of groups:** The Great Orthogonality theorem and its consequences. Character tables (C_s, C_i, C_2, C_{2v}, C_{2h} and C_{3v}). Symmetry and dipole moment. **Applications of group theory**: Group theory and hybrid orbitals. **Symmetry in Chemical bonding**: Group theory to Crystal field theory and Molecular orbital theory (octahedral and tetrahedral complexes). **Symmetry in Vibrational Spectroscopy:** Determining the symmetry groups of normal modes for non-linear molecules (H_2O, NH_3, CH_4, trans-N_2F_2) and linear molecules (CO, HCl, HCN and CO_2) (Integration method).	**group theory:** Symmetry elements			**ICT**
	symmetry operations	**1**	**10/04/24**	**Lecture & ICT**
	The Point Groups Used with Molecules: Concept of a group, definition of a point group	**1**	**15/04/24**	**Lecture & ICT**
	Classification of molecules into point groups. Subgroups	**1**	**18/04/24**	**Lecture & ICT**
	Hermann-Maugin symbols for point groups. Multiplication tables (C_{2v}, C_{2h} and C_{3v})	**1**	**22/04/24**	**Lecture & ICT**
	Matrix notation for the symmetry elements. Classess and similarity transformation.	**1**	**02/05/24**	**Lecture & ICT**
	Representation of groups: The Great Orthogonality theorem and its consequences	**1**	**06/05/24**	**Lecture & ICT**
	Character tables (C_s, C_i, C_2, C_{2v}, C_{2h} and C_{3v}).	**1**	**09/05/24**	**Lecture & ICT**
	Symmetry and dipole moment.	**1**	**13/05/24**	**Lecture & ICT**
	Applications of group theory: Group theory and hybrid orbitals.	**1**	**19/05/24**	**Lecture & ICT**
	Symmetry in Chemical bonding: Group theory to Crystal field theory	**1**	**25/05/24**	**Lecture & ICT**
	Molecular orbital theory (octahedral and tetrahedral complexes).	**1**	**06/06/24**	**Lecture & ICT**
	Symmetry in Vibrational Spectroscopy: Determining the symmetry groups of normal modes for non-linear molecules (H_2O, NH_3	**1**	**13/06/24**	**Lecture & ICT**
	CH_4, trans-N_2F_2	**1**	**20/06/24**	**Lecture & ICT**
	linear molecules (CO, HCl,	**1**	**01/07/24**	**Lecture & ICT**
	HCN and CO_2) (Integration method).	**1**	**08/07/24**	**Lecture & ICT**

UNIT – II

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Microwave spectroscopy: Moment of inertia expression for linear di-atomic molecules. Rotation spectra of diatomic Molecules - rigid and non rigid rotator model. Rotational quantum number and the selection rule. Effect of isotopic substitution on rotation spectra. Classification of polyatomic molecules based on moment of inertia. Rotation spectra of polyatomic molecules (OCS CH_3F and BCl_3). Applications - Principles of determination of Bond length and momentof inertia from rotational spectra. Stark effect in rotation spectra and determination of dipole moments. **Vibration spectroscopy*:*** Vibration of diatomic molecules, vibrational energy curves for simple harmonic oscillator. Effects of anharmonic oscillation, expressions for fundamental and overtone frequencies. Vibration - rotation spectra of carbon monoxide. Vibration of polyatomic molecules – The number of degrees of freedom of vibration. Parallel and perpendicular vibrations (CO_2 and H_2O). Combination, difference and hot bands. Fermi resonance. Force constant and its significance. Theory of infrared absorption and theoretical group frequency. Intensity of absorption band and types of absorptions. Applications: Structures of small molecules: XY_2 – linear or bent, XY_3 – planar or pyramidal. **Raman spectroscopy:** Introduction, Raman and Rayleigh scattering, Stokes and anti-Stokes lines, polarization of Raman lines, depolarization factor, polarizability ellipsoid. Theories of Raman spectra - classical and quantum theory.	**Microwave spectroscopy:** Moment of inertia expression for linear di-atomic molecules.	**1**	**10/04/24**	**Lecture & ICT**
	Rotation spectra of diatomic Molecules - rigid and non-rigid rotator model.	**1**	**18/04/24**	**Lecture & ICT**
	Rotational quantum number and the selection rule.	**1**	**25/04/24**	**Lecture & ICT**
	Effect of isotopic substitution on rotation spectra. Classification of polyatomic molecules based on moment of inertia	**1**	**02/05/24**	**Lecture & ICT**
	. Rotation spectra of polyatomic molecules (OCS CH_3F and BCl_3).	**1**	**06/05/24**	**Lecture & ICT**
	Applications - Principles of determination of Bond length and momentof inertia from rotational spectra	**1**	**13/05/24**	**Lecture & ICT**
	Stark effect in rotation spectra and determination of dipole moments.	**1**	**19/05/24**	**Lecture & ICT**
	Vibration spectroscopy*:* Vibration of diatomic molecules, vibrational energy curves for simple harmonic oscillator	**1**	**25/05/24**	**Lecture & ICT**
	Effects of anharmonic oscillation, expressions for fundamental and overtone frequencies. Vibration - rotation spectra of carbon monoxide	**1**	**01/06/24**	**Lecture & ICT**
	Vibration of polyatomic molecules – The number of degrees of freedom of	**1**	**10/06/24**	**Lecture & ICT**

Rotation-Raman and vibration-Raman spectra. Raman activity of vibrations, rule of mutual exclusion principle. Vibration modes of some simple molecules and their activity.	vibration. Parallel and perpendicular vibrations (CO_2 and H_2O).			
	Combination, difference and hot bands. Fermi resonance. Force constant and its significance.	**1**	**17/06/24**	**Lecture & ICT**
	Theory of infrared absorption and theoretical group frequency. Intensity of absorption band and types of absorptions	**1**	**20/06/24**	**Lecture & ICT**
	Applications: Structures of small molecules: XY_2 – linear or bent, XY_3 – planar or pyramidal.	**1**	**24/06/24**	**Lecture & ICT**
	Raman spectroscopy: Introduction, Raman and Rayleigh scattering, Stokes and anti-Stokes lines, polarization of Raman lines, depolarization factor	**1**	**01/07/24**	**Lecture & ICT**
	polarizability ellipsoid. Theories of Raman spectra - classical and quantum theory. Rotation-Raman and vibration-Raman spectra	**1**	**04/07/24**	**Lecture & ICT**
	Raman activity of vibrations, rule of mutual exclusion principle. Vibration modes of some simple molecules and their activity.	**1**	**08/07/24**	**Lecture & ICT**

UNIT – III

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
UV Visible spectroscopy: Quantitative aspects of absorption – Beer's law, Technology associated with absorption measurements. Limitations – real, chemical, instrumental and personal. Theory of molecular absorption. Vibration-	**UV Visible spectroscopy:** Quantitative aspects of absorption – Beer's law, Technology associated with absorption measurements	**1**	**12/04/24**	**Lecture & ICT**
	Limitations – real, chemical,	**1**	**16/04/24**	**Lecture &**

rotation fine structure of electronic spectra. Types of absorption bands: n to π*, π to π*, n to σ* and σ to σ*, C-T and ligand field. Instrumentation. **Applications:** Qualitative and quantitative analysis of binary mixtures, measurements of dissociation constants of acids and bases, determination of molecular weight. Woodwards empirical rules for predicting the wavelength of maximum absorption for olefins, conjugated dienes, cyclic trienes and polyenes, α,ß-unsaturated aldehydes and ketones, benzene and substituted benzene rings. **Resonance Raman Spectroscopy:** Resonance Raman Effect and its applications. Non-linear Raman effects: Hyper, stimulated and inverse Raman effects. Coherent Anti-Stokes Raman Scattering and its applications.	instrumental and personal			**ICT**
	Theory of molecular absorption	**1**	**19/04/24**	**Lecture &ICT**
	Vibration-rotation fine structure of electronic spectra. Types of absorption bands: n to π*, π to π*,	**1**	**23/04/24**	**Lecture & ICT**
	σ to σ*, C-T and ligand field. Instrumentation.	**1**	**03/05/24**	**Lecture & ICT**
	Applications: Qualitative and quantitative analysis of binary mixtures	**1**	**10/05/24**	**Lecture & ICT**
	,measurements of dissociation constants of acids and bases	**1**	**17/05/24**	**Lecture & ICT**
	determination of molecular weight	**1**	**20/05/24**	**Lecture & ICT**
	Woodwards empirical rules for predicting the wavelength of maximum absorption for olefins	**1**	**23/05/24**	**Lecture & ICT**
	conjugated dienes, cyclic trienes and polyenes	**1**	**30/05/24**	**Lecture & ICT**
	α,ß-unsaturated aldehydes and ketones	**1**	**07/06/24**	**Lecture & ICT**
	benzene and substituted benzene rings.	**1**	**14/06/24**	**Lecture & ICT**
	Resonance Raman Spectroscopy: Resonance Raman Effect and its applications	**1**	**21/06/24**	**Lecture & ICT**
	Non-linear Raman effects: Hyper	**1**	**28/06/24**	**Lecture & ICT**
	stimulated and inverse Raman effects.	**1**	**05/07/24**	**Lecture & ICT**
	Coherent Anti-Stokes Raman Scattering and its applications.	**1**	**12/07/24**	**Lecture & ICT**

SOFT CORE PRACTICALS

CHO SCP: 1.3/2.3. ORGANIC CHEMISTRY PRACTICALS-I

08 Hours/week – 128 Hours/Semester

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
PART-A **Multistep synthesis** 1. Preparation *p*-bromoaniline from acetanilide**.** 2. Preparation of *p*-nitroaniline from acetalinide. 3. Oxidation of cyclohexanol to adipic acid. 4. Esterification: Preparation of benzoccaine from *p*-nitrotoluene. 5. Diazotization (Sandmeyer's reaction): Preparation of *p*-chlorobenzoic acid from *p*- toluidine. 6. Preparation benzilic acid from benzoin**.** 7. Preparation of *o*-hydroxy benzophenone from phenyl benzoate *via* Fries rearrangement. 8. Preparation of benzanilide from benzophenone oxime *via* Beckmann rearrangement. 9. Preparation of benzoic acid from benzaldehyde (Cannizzaro Reaction). 10. Preparation of 2,4-dinitrophenylhydrazine from 2,4-dinitrochlorobenzene. 11. Preparation of *m*-nitrobenzoic acid from methylbenzoate. 12. Preparation of chalcone.	Preparation *p*-bromoaniline from acetanilide	**4**	**08/04/24**	Practical hands on implementation
	Preparation of *n*-nitroaniline from acetalinide.	**4**	**15/04/24**	Practical hands on implementation
	Oxidation of cyclohexanol to adipic acid	**4**	**16/04/24**	Practical hands on implementation
	Esterification: Preparation of benzoccaine from *p*-nitrotoluene	**4**	**22/04/24**	Practical hands on implementation
	Diazotization (Sandmeyer's reaction): Preparation of *p*-chlorobenzoic acid from *p*-toluidine.	**4**	**23/04/24**	Practical hands on implementation
	Preparationofbenzilic acid from benzoin	**4**	**29/04/24**	Practical hands on implementation
	Preparation of *o*-hydroxy benzophenone from phenyl benzoate *via* Fries rearrangement	**4**	**06/05/24**	Practical hands on implementation
	Preparation of benzanilide from benzophenone oxime *via* Beckmann rearrangement	**4**	**07/05/24**	Practical hands on implementation
	Preparation of benzoic acid from benzaldehyde (Cannizzaro Reaction).	**4**	**13/05/24**	Practical hands on implementation

	Preparation of 2,4-dinitrophenylhydrazine from 2,4-dinitrochlorobenzene.	**4**	**14/05/24**	Practical hands on implementation
	Preparation of *m*-nitrobenzoic acid from methylbenzoate.	**4**	**20/05/24**	Practical hands on implementation
	Preparation of chalcone.	**4**	**21/05/24**	Practical hands on implementation

PART - B

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Qualitative analysis: Separation of binary mixtures, identification of functional groups and preparation of suitable solid derivatives.	Separation & analysis of binary mixtures - 01	**12**	**27/05/24**	Practical hands on implementation
	Separation & analysis of binary mixtures - 02	**12**	**28/05/24**	Practical hands on implementation
	Separation & analysis of binary mixtures - 03	**12**	**10/06/24**	Practical hands on implementation
	Separation & analysis of binary mixtures - 04	**12**	**11/06/24**	Practical hands on implementation
	Separation & analysis of binary mixtures - 05	**8**	**24/06/24**	Practical hands on implementation
	Separation & analysis of binary mixtures - 06	**8**	**25/06/24**	Practical hands on implementation
	Separation & analysis of binary mixtures - 07	**8**	**08/07/24**	Practical hands on implementation
	Separation & analysis of binary mixtures - 08	**8**	**09/07/24**	Practical hands on implementation

CHP SCP: 1.4/2.4. PHYSICAL CHEMISTRY PRACTICALS-I

08 Hours/week – 128 Hours/Semester

PART - A

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
1. Study of kinetics of hydrolysis of methyl acetate in presence of two different concentrations of HCl/H_2SO_4 and report the relative catalytic strength. 2. Study of kinetics of reaction between $K_2S_2O_8$ and KI, first order, determination of rate constants at two different temperatures and E_a. 3. To study the kinetics of saponification of ethyl acetate by conductivity method at two different concentrations of NaOH and report the relative catalytic strength. 4. Determination of partial molar volume of salt-water system ($NaCl-H_2O/KCl-H_2O/KNO_3-H_2O$) systems. 5. To study the kinetics of reaction between acetone and iodine - determination of order of reaction with respect to iodine and acetone. 6. Study the kinetics of decomposition of diacetone alcohol by NaOH, determine the catalytic coefficient of the reaction and comparison of strength of alkali. 7. Determination of energy of activation for the bromide-bromate reaction. 8. Kinetics of reaction between sodium formate and iodine and determination of energy of activation. 9. Determination of heat of solution of organic acid (benzoic acid/salicylic acid) by variable temperature method (graphical method). 10. Determination of degree of	Study of kinetics of hydrolysis of methyl acetate in presence of two different concentrations of HCl/H_2SO_4 and report the relative catalytic strength.	**4**	**12-04-24**	Practical hands on implementation
	Study of kinetics of reaction between $K_2S_2O_8$ and KI, first order, determination of rate constants at two different temperatures and E_a.	**4**	**18-04-24**	Practical hands on implementation
	To study the kinetics of saponification of ethyl acetate by conductivity method at two different concentrations of NaOH and report the relative catalytic strength.	**4**	**19-04-24**	Practical hands on implementation
	Determination of partial molar volume of salt-water system ($NaCl-H_2O/KCl-H_2O/KNO_3-H_2O$) systems.	**4**	**25-04-24**	Practical hands on implementation
	To study the kinetics of reaction between acetone and iodine - determination of order of reaction with respect to iodine and acetone	**4**	**26-04-24**	Practical hands on implementation
	Study the kinetics of decomposition of diacetone alcohol by NaOH, determine the catalytic coefficient of the reaction and comparison of strength of alkali	**4**	**02-05-24**	Practical hands on implementation
	Determination of energy of activation for the bromide-bromate reaction	**4**	**03-05-24**	Practical hands on implementation
	Kinetics of reaction between	**4**	**16-05-24**	Practical hands

association of benzoic acid in benzene by distribution method. 11. To determine the eutectic point of a two component system (Naphthalene-*m*- dinitrobenzene system). 12. Analysis of a binary mixture (Gylcerol& Water) by measurement of refractive index. 13. Determination of the molecular weight of a polymer material by viscosity measurements (cellulose acetate/methyl acrylate).	sodium formate and iodine and determination of energy of activation			on implementation
	Determination of heat of solution of organic acid (benzoic acid/salicylic acid) by variable temperature method (graphical method)	**4**	**17-05-24**	Practical hands on implementation
	Determination of degree of association of benzoic acid in benzene by distribution method	**4**	**23-05-24**	Practical hands on implementation
	To determine the eutectic point of a two component system (Naphthalene-*m*-dinitrobenzene system).	**4**	**24-05-24**	Practical hands on implementation
	Analysis of a binary mixture (Gylcerol& Water) by measurement of refractive index.	**4**	**30-05-24**	Practical hands on implementation
	. Determination of the molecular weight of a polymer material by viscosity measurements (cellulose acetate/methyl acrylate).	**4**	**31-05-24**	Practical hands on implementation

PART – B

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
1. Conductometric titration of a mixture of HCl and CH_3COOH against NaOH. 2. Conductometric titration of sodium sulphate against barium chloride. 3. P^H titration of (a) HCl against NaOH (b) Copper sulphate against NaOH and (c) CH_3COOH/HCOOH against NaOH - determination of K_a. 4. Determination of equivalent conductance of weak electrolyte (CH_3COOH) at infinite dilution following Kohlrausch law.	1. Conductometric titration of a mixture of HCl and CH_3COOH against NaOH.	**4**	**06-06-24**	Practical hands on implementation
	2. Conductometric titration of sodium sulphate against barium chloride.	**4**	**07-06-24**	Practical hands on implementation
	3. pH titration of (a) HCl against NaOH (b) Copper sulphate against NaOH and (c) CH_3COOH/HCOOH against NaOH - determination of K_a	**4**	**13-06-24**	Practical hands on implementation
	4. Determination of equivalent	**4**	**14-06-24**	Practical hands

5. Determination of dissociation constant and mean ionic activity coefficient of weak acids (CH_3COOH/HCOOH/$ClCH_2COOH$) by conductivity method. 6. Potentiometric titration of KI *vs* $KMnO_4$ solution. 7. Determination of dissociation constant of a weak acid (CH_3COOH/HCOOH/$ClCH_2COOH$) by potentiometric method. 8. Potentiometric titration of a mixture of halides (KCl+KI/KCl+KBr/KBr+KI) against $AgNO_3$. 9. To obtain the absorption spectra of coloured complexes, verification of Beer's law and estimation of metal ions in solution using a spectrophotometer. 10. Potentiometric titration of $K_2Cr_2O_7$ against FAS determination of redox potential and concentration of Fe^{2+} ions. 11. Conductometric titration of oxalic acid against NaOH and NH4OH. 12. Coulometric titration I_2 vs Na2S2O3. 13. Determination of acidic and basic dissociation constant and isoelectric point of an amino acid by pH metric method. 14. Kinetics of photodegradation of indigocarmine (IC) using ZnO/TiO_2 as photocatalyst and study the effect of [ZnO/TiO_2] and [IC] on the rate of photodegradation.	conductance of weak electrolyte (CH_3COOH) at infinite dilution following Kohlrausch law			on implementation
	5. Determination of dissociation constant and mean ionic activity coefficient of weak acids (CH_3COOH/HCOOH/$ClCH_2COOH$) by conductivity method.	**4**	**20-06-24**	Practical hands on implementation
	6. Potentiometric titration of KI *vs* $KMnO_4$ solution.	**8**	**21-06-24**	Practical hands on implementation
	7. Determination of dissociation constant of a weak acid (CH_3COOH/HCOOH/$ClCH_2COOH$) by potentiometric method.	**8**	**27-06-24**	Practical hands on implementation
	8. Potentiometric titration of a mixture of halides (KCl+KI/KCl+KBr/KBr+KI) against $AgNO_3$	**4**	**28-06-24**	Practical hands on implementation
	9. To obtain the absorption spectra of coloured complexes, verification of Beer's law and estimation of metal ions in solution using a spectrophotometer.	**4**	**04-07-24**	Practical hands on implementation
	10. Potentiometric titration of $K_2Cr_2O_7$ against FAS determination of redox potential and concentration of Fe^{2+} ions	**8**	**05-07-24**	Practical hands on implementation
	11. Conductometric titration of oxalic acid against NaOH and NH4OH	**8**	**11-07-24**	Practical hands on implementation
	12. Coulometric titration I2 vs Na2S2O3	**8**	**12-07-24**	Practical hands on implementation
	13. Determination of acidic and basic dissociation constant and isoelectric point of an amino acid by pH metric method.	**4**	**18-07-24**	Practical hands on implementation
	14. Kinetics of photodegradation of indigocarmine (IC) using	**4**	**19-07-24**	Practical hands on implementation

	ZnO/TiO_2 as photocatalyst and study the effect of [ZnO/TiO_2] and [IC] on the rate of photodegradation.			

MAHAJANA EDUCATION SOCIETY (R)
POST GRADUATE WING OF SBRR MAHAJANA FIRST GRADE COLLEGE (AUTONOMOUS)
AFFILIATED TO UNIVERSITY OF MYSORE,
RE-ACCREDITED BY NAAC WITH 'A' GRADE, COLLEGE WITH POTENTIAL FOR EXCELLENCE, EDUCATION TO EXCEL
POOJA BHAGAVAT MEMORIAL MAHAJANA EDUCATION CENTRE
K.R.S ROAD, METAGALLI, MYSURU-570016, KARNATAKA, INDIA

DEPARTMENT OF STUDIES IN CHEMISTRY

Lesson Plan - 2022-23 (THIRD SEMESTER)
Department: M.Sc. CHEMISTRY
Subject: Advanced Inorganic Chemistry
03 Hours/week – 48 Hours/Semester
UNIT - I

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Fundamental concepts: Introduction, Classification of organometallic compounds by bond type, nomenclature, the effective atomic number rule, complexes that disobey the EAN rule, common reactions used in complex formation. Organometallics of transition metals: Preparation, bonding and structures of nickel, cobalt, iron and manganese carbonyls. Preparation and structures of metal nitrosyls. Ferrocene: Preparation, structure and bonding. Metal-carbene andmetal-carbyne complexes. Complexes containing alkene, alkyne, arene and allyl ligands: Preparation, structure and bonding.	Introduction to organometallic chemistry. Classification of organometallic compounds by bond type and hapticity.	**1**	**27-11-23**	**Lecture & ICT**
	Introduction to EAN rule Correlation between EAN rule and molecular orbital theory.	**1**	**29-11-23**	**Lecture & ICT**
	Complexes which obey and which disobey EAN rule.	**1**	**01-12-23**	**Lecture & ICT**
	Common reactions used in complex formation.	**1**	**04-12-23**	**Lecture & ICT**
	Structure and synergism in bonding of metal carbonyls.	**1**	**06-12-23**	**Lecture & ICT**

	Preparation, bonding and structures of nickel and cobalt carbonyls.	**1**	**08-12-23**	**Lecture & ICT**
	Preparation, bonding and structures of iron and manganese carbonyls.	**1**	**11-12-23**	**Lecture & ICT**
	Preparation and structures of metal nitrosyls Reactions of metal nitrosyls.	**1**	**13-12-23**	**Lecture & ICT**
	Preparation, structure and bonding in Ferrocene	**1**	**15-12-23**	**Lecture & ICT**
	Preparation, structure and bonding in Ruthenocene	**1**	**18-12-23**	**Lecture & ICT**
	Molecular orbital picture of metallocenes	**1**	**20-12-23**	**Lecture & ICT**
	Structure, bonding and reactions in alkene ligands.	**1**	**22-12-23**	**Lecture & ICT**
	Structure, bonding and reactions in alkyne ligands.	**1**	**26-12-23**	**Lecture & ICT**
	Structure, bonding and reactions in arene ligands.	**1**	**28-12-23**	**Lecture & ICT**
	Structure, bonding and reactions in allyl ligands.	**1**	**30-12-23**	**Lecture & ICT**
	Similarity between organic and organometallic species. Calculation of number of electrons in valence shell using examples. Common properties reactions exhibited by both.	**1**	**02-01-24**	**Lecture & ICT**

UNIT – II

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
General principles of Catalysis: Language of catalysis. Homogeneous and heterogeneous catalysts. Homogeneous catalysis - Industrial Applications: Alkene hydrogenation and hydroformylation, The Wacker's process, Monsanto acetic acid process and L-DOPA synthesis, alkene oligomerizations, water-gas shift reactions. The Reppe reaction. Heterogeneous catalysis –The nature of heterogeneous catalysts. Alkene polymerization: Ziegler-Natta catalysis, Fischer-Tropsch carbon chain growth. Zeolites as catalysts for organic transformation: Uses of ZSM – 5. Alkene metathesis, hydroboration, arylation or vinylation of olefins (Heck reaction). Biological and Medicinal Applications: Organomercury, organoboron, organosilicon and organoarsenic compounds..	Introduction of homogeneous catalysis.	**1**	**04-01-24**	**Lecture & ICT**
	Catalytic cycle for Alkene hydrogenation and applications. Catalytic cycle for hydroformylation and applications	**1**	**06-01-24**	**Lecture & ICT**
	Catalytic cycle for the Wacker's process, Monsanto acetic acid process and applications.	**1**	**09-01-24**	**Lecture & ICT**
	Synthesis of L-DOPA	**1**	**11-01-24**	**Lecture & ICT**
	Explanation of alkene oligomerizations and applications.	**1**	**13-01-24**	**Lecture & ICT**
	Catalytic cycle for the water-gas shift reaction, and applications.	**1**	**18-01-24**	**Lecture & ICT**
	Introduction of Heterogeneous catalysis	**1**	**19-01-24**	**Lecture & ICT**
	Catalytic cycle for the Alkene polymerization by using ziegler-natta catalyst and applications	**1**	**22-01-24**	**Lecture & ICT**
	Explanation of Fischer-Tropsch carbon chain growth.	**1**	**24-01-24**	**Lecture & ICT**
	Introduction of Alkene metathesis process.	**1**	**27-01-24**	**Lecture & ICT**
	Catalytic cycle for the hydroboration, arylation or vinylation of olefins (Heck reaction) and applications.	**1**	**30-01-24**	**Lecture & ICT**
	Study the Biological and Medicinal application of Organomercury	**1**	**02-02-24**	**Lecture & ICT**
	Study the Biological and Medicinal application of	**1**	**05-02-24**	**Lecture & ICT**

	Organoboron compounds. Study the Biological and Medicinal application of Organosilicon compounds.			
	Study the Biological and Medicinal application of Organoaresenic compounds.	**1**	**06-02-24**	**Lecture & ICT**
	Introduction of Zeolites.	**1**	**07-02-24**	**Lecture & ICT**
	Explanation of : Zeolites as catalysts for organic transformation. Uses of ZSM – 5.	**1**	**09-02-24**	**Lecture & ICT**

UNIT -III

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Chemistry of main group elements: Diborane and its reactions, polyhedral boranes(preparation, properties, structure and bonding). Wade‘s rules, carboranes and metallocarboranes. Borazines. Phosphazenes, S-N compounds. Metal clusters: Evidences and factors favoring of M-M bonding, Wade‘s-Mingo‘s-Lauher rules, bi, tri, tetra, penta and hexa nuclear metal carbonyl clusters. Low and high nuclearity carbonylclusters. Electron counting schemes in carbonyl clusters. The isolobal analogy. Silicates: Structure, classification - silicates with discrete anions, silicates containing chain anion, silicates with layer structure, silicones with three dimensional net-work and applications. Silicones: General methods of preparation, properties. Silicone polymers - silicone fluids,	Introduction to chemistry of main group elements.	**1**	**12-02-24**	**Lecture & ICT**
	Preparation, properties, structure and bonding of Diborane and its reactions,	**1**	**14-02-24**	**Lecture & ICT**
	Preparation, properties, structure and bonding of polyhedral boranes.	**1**	**16-02-24**	**Lecture & ICT**
	Wade’s rules,	**1**	**20-02-24**	**Lecture & ICT**
	carboranes	**1**	**22-02-24**	**Lecture & ICT**
	borazines	**1**	**27-02-24**	**Lecture & ICT**
	Inorganic chains, rings and cages of boron.	**1**	**28-02-24**	**Lecture & ICT**
	Inorganic chains, rings and cages of carbon.	**1**	**29-02-24**	**Lecture & ICT**
	Inorganic chains, rings and cages of phosphorous.	**1**	**02-03-24**	**Lecture & ICT**
	Structure, classification - silicates with discrete anions, silicates containing chain anion	**1**	**05-03-24**	**Lecture & ICT**
	Silicates with layer structure, silicones with three dimensional net work and applications.	**1**	**07-03-24**	**Lecture & ICT**

silicone greases, silicone resins, silicone rubbers and their applications	General methods of preparation, properties.	**1**	**11-03-24**	**Lecture & ICT**
	Silicone polymers - silicone fluids,	**1**	**13-03-24**	**Lecture & ICT**
	silicone greases	**1**	**15-03-24**	**Lecture & ICT**
	silicone resins,	**1**	**18-03-24**	**Lecture & ICT**
	silicone rubbers and their applications.	**1**	**20-03-24**	**Lecture & ICT**

Subject: ORGANOMETALLIC AND PHOTOCHEMISTRY
03 Hours/week – 48 Hours/Semester
UNIT - I

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Photochemistry: Light absorption and electronic transitions, Jablonski diagram, intersystem crossing, energy transfer, sensitizers, quenchers. Photochemistry of olefins, conjugated dienes, aromatic compounds, ketones- Norrish type-I and Norrish type-II reactions, enones, Paterno-Buchi reaction, di-pi-rearrangements, photooxidations, photoreductions. **Pericyclic reactions**: Electrocyclic reactions: Stereochemistry, symmetry and Woodward-Hofmann rules for electrocyclic reactions, FMO theory of electrocyclic reactions, correlation diagram for butadiene to cyclobutene and hexatriene to cyclohexadiene systems. Cycloaddition reactions: Classification, analysis by FMO and correlation diagram method.	**Photochemistry:** Light absorption and electronic transitions, Jablonski diagram, intersystem crossing, energy transfer, sensitizers, quenchers.	**4**	**28-11-23** **29-11-23** **2-12-23** **5-12-23**	**Lecture & ICT**
	Photochemistry of olefins, conjugated dienes, aromatic compounds, ketones- Norrish type-I and Norrish type-II reactions, enones, Paterno-Buchi reaction, di-pi- rearrangements, photooxidations, photoreductions.	**4**	**7-12-23** **9-12-23** **12-12-23** **14-12-23**	**Lecture & ICT**
	Pericyclic reactions: Electrocyclic reactions: Stereochemistry, symmetry and Woodward-Hofmann rules for electrocyclic reactions, FMO theory of electrocyclic reactions, correlation diagram for butadiene to cyclobutene and hexatriene to cyclohexadiene systems.	**4**	**16-12-23** **19-12-23** **21-12-23** **23-12-23**	**Lecture & ICT**
	Cycloaddition reactions: Classification, analysis by FMO and correlation diagram method. Cycloaddition reactions: [2+2] and [4+2] cycloadditions- FMO and correlation diagram method	**4**	**27-12-23** **29-12-23** **3-1-24**	**Lecture & ICT**

Cycloaddition reactions: [2+2] and [4+2] cycloadditions- FMO and correlation diagram method Deils-Alder reaction, hetero Diels-Alder reaction and their applications. Intra and intermolecular 1,3-dipolar cycloadditions: involving nitrile oxide, nitrile imine, nitrile ylide and their application in organic synthesis. Sigmatropic reactions: Classification, stereochemistry and mechanisms. suprafacial and antarafacial shifts of H and carbon moieties. [3,3] and [5,5]- sigmatropic rearrangement, Claisen, Cope and aza-Cope rearrangement.	Deils-Alder reaction, hetero Diels-Alder reaction and their applications. Intra and intermolecular 1,3-dipolar cycloadditions: involving nitrile oxide, nitrile imine, nitrile ylide and their application in organic synthesis. Sigmatropic reactions: Classification, stereochemistry and mechanisms. suprafacial and antarafacial shifts of H and carbon moieties. [3,3] and [5,5]- sigmatropic rearrangement, Claisen, Cope and aza-Cope rearrangement.		**5-1-24**	

UNIT - II

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Chemistry of organometallic compounds: Synthesis and reactions of organolithium (n-BuLi, PhLi), organocadmium, organomagnesium (Grignard reagent), organomanganese, organoselenium and organotellurium. Organoaluminium reagents: Preparation, site selective and stereoselctive additions of nucleophiles mediated by organoaluminum reagents, reaction with acid chlorides, allyl vinyl ethers, 1,2-addition to imines and application in the synthesis of natural products.	Chemistry of organometallic compounds: Synthesis and reactions of organolithium (n-BuLi, PhLi), organocadmium, organomagnesium (Grignard reagent), organomanganese, organoselenium and organotellurium. Organoaluminium reagents: Preparation, site selective and stereoselctive additions of nucleophiles mediated by organoaluminum reagents, reaction with acid chlorides, allyl vinyl ethers, 1,2-addition to imines and application in the synthesis of natural products.	**4**	**08-01-24** **10-01-24** **12-01-24** **16-12-24**	**Lecture & ICT**

Organocopper reagents: Gilmann reagent, preparation, reactions with aldehydes, ketones and imines. Application in the synthesis of brevicomin, Organozinc reagents: Preparation - oxidative addition and transmetallation, addition reactions of alkyl, aryl, allylic and propargylic zinc reagents, diastereoselective and enantioselective addition reaction with aldehydes, Reformatsky reaction. Organosamarium reagents: Reactions promoted by samarium diiodide and dicyclopentadienyl samarium – Barbier type reaction, Reformatsky type reactions, ketyl- alkene coupling reactions, pinacolic coupling reactions, acyl anion reactions. Organotin reagents: tributyltin hydride, Barton decarboxylation reaction, Barton deoxygenation reaction, Stille coupling, Stille-Kelley coupling reactions, Barton McCombie reaction, Keck stereoselectiveallylation and other applications.	Organocopper reagents: Gilmann reagent, preparation, reactions with aldehydes, ketones and imines. Application in the synthesis of brevicomin, Organozinc reagents: Preparation - oxidative addition and transmetallation, addition reactions of alkyl, aryl, allylic and propargylic zinc reagents, diastereoselective and enantioselective addition reaction with aldehydes, Reformatsky reaction.	**4**	**18-01-24** **20-01-24** **23-01-24** **25-01-24**	**Lecture & ICT**
	Organosamarium reagents: Reactions promoted by samarium diiodide and dicyclopentadienyl samarium – Barbier type reaction, Reformatsky type reactions, ketyl- alkene coupling reactions, pinacolic coupling reactions, acyl anion reactions.	**4**	**29-01-24** **01-02-24** **03-02-24** **06-02-24**	**Lecture & ICT**
	Organotin reagents: tributyltin hydride, Barton decarboxylation reaction, Barton deoxygenation reaction, Stille coupling, Stille-Kelley coupling reactions, Barton McCombie reaction, Keck stereoselectiveallylation and other applications.	**4**	**08-02-24** **12-02-24** **13-02-24** **15-02-24**	**Lecture & ICT**

UNIT – III

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Asymmetric synthesis: Definition, importance, mechanism, energy consideration, advantages and limitations, methods of determination of enantiomeric excess.	**Asymmetric synthesis**: Definition, importance, mechanism, energy consideration, advantages and limitations, methods of determination of enantiomeric excess. Methods of asymmetric induction.	**4**	**17-02-24** **19-02-24** **21-02-24** **23-02-24**	**Lecture & ICT**

Methods of asymmetric induction. Topocity - Prochirality- Substrate selectivity - Diastereoselectivity and enantio-selectivity-Substrate controlled methods-use of chiral substrates - examples Auxiliary controlled methods- Use of chiral auxiliaries - Chiral enolates- alkylation of chiral imines - Asymmetric Diels - Alder reaction Reagent controlled methods- Use of chiral reagents - Asymmetric oxidation – Sharpless epoxidation - Asymmetric reduction - Use of lithium aluminium hydride and borate reagents. Synthesis and applications of oxazaborolidines, IPC-BBN, IPC_2BH, (S)-BINAP-DIAMINE and (R)-BINAL-H. Use of (R,R)-DIPAMP, (S,S)-CHIRAPHOS, (R,R)-DIOP, SAMP, RAMP, S-Proline, S-PBMgCl, (-)-$BOAlCl_2$, (+) and (-)-DET.	Topocity - Prochirality- Substrate selectivity - Diastereoselectivity and enantio-selectivity-Substrate controlled methods-use of chiral substrates - examples Auxiliary controlled methods- Use of chiral auxiliaries - Chiral enolates- alkylation of chiral imines - Asymmetric Diels - Alder reaction.	**4**	**26-02-24** **28-02-24** **29-02-24** **02-03-24**	**Lecture & ICT**
	Reagent controlled methods- Use of chiral reagents - Asymmetric oxidation –Sharpless epoxidation - Asymmetric reduction - Use of lithium aluminium hydride and borate reagents.	**4**	**04-03-24** **07-03-24** **09-03-24** **12-03-24**	**Lecture & ICT**
	Synthesis and applications of oxazaborolidines, IPC-BBN, IPC_2BH, (S)-BINAP-DIAMINE and (R)-BINAL-H. Use of (R,R)-DIPAMP, (S,S)-CHIRAPHOS, (R,R)-DIOP, SAMP, RAMP, S-Proline, S-PBMgCl, (-)-$BOAlCl_2$, (+) and (-)-DET.	**4**	**14-03-24** **16-03-24** **19-03-24** **21-03-24**	**Lecture & ICT**

Subject: ADVANCED PHYSICAL CHEMISTRY
03 Hours/week – 48 Hours/Semester

UNIT - I

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Homogenous Catalysis: Acid-Base catalysis, specific acid and base catalysis. General acid and base catalysis. Oxidation of amino acids and carbohydrates in presence of acid and base catalysis. Acidity functions - Bronstead, Hückel, Hammett and Bunnett hypothesis. Enzyme kinetics: Effect of substrate concentration (Michaelis - Menton equation), Effect of pH, effect of catalysts and inhibitors (substrate, zeolite, Cr^{3+}, Fe^{2+}ZnO, U.V light), effect of temperature. A brief kinetic and mechanistic applications of glucose oxidase in the oxidation of glucose. Linear Free Energy Relationship: Hammett equation, Taft equation, Okemoto Brown equation and its application to oxidation of amino acids and aromatic amines. Swain-Scott and Edward equation. Winstein - Grunwald relationship. Isokinetic relationship and significance of isokinetic temperature, Exner criterion. Surface reactions: Langmuir unimolecular and bimolecular reactions. Kinetic Isotope Effect: Theory of kinetic isotope effect - normal and inverse	**Homogenous Catalysis**: Acid-Base catalysis, specific acid and base catalysis. General acid and base catalysis. Oxidation of amino acids and carbohydrates in presence of acid and base catalysis. Acidity functions - Bronstead, Hückel, Hammett and Bunnett hypothesis.	**3**	**27-11-23** **29-11-23** **01-12-23**	**Lecture & ICT**
	Enzyme kinetics: Effect of substrate concentration (Michaelis - Menton equation), Effect of pH, effect of catalysts and inhibitors (substrate, zeolite, Cr^{3+}, Fe^{2+}ZnO, U.V light), effect of temperature. A brief kinetic and mechanistic applications of glucose oxidase in the oxidation of glucose.	**4**	**04-12-23** **06-12-23** **08-12-23** **11-12-23**	**Lecture & ICT**
	Linear Free Energy Relationship: Hammett equation, Taft equation, Okemoto Brown equation and its application to oxidation of amino acids and aromatic amines. Swain-Scott and Edward equation. Winstein - Grunwald relationship. Isokinetic relationship and significance of isokinetic temperature, Exner criterion.	**5**	**13-12-23** **15-12-23** **18-12-23** **20-12-23** **22-12-23**	**Lecture & ICT**
	Kinetic Isotope Effect: Theory of kinetic isotope effect - normal and inverse isotope effect, primary isotope effect, secondary isotope effect, solvent isotope effect.	**4**	**26-12-23** **28-12-23** **30-12-23** **02-01-24**	**Lecture & ICT**

isotope effect, primary isotope effect, secondary isotope effect, solvent isotope effect.				

Unit II

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Electrochemical cells and batteries: Introduction, galvanic and electrolytic cells, schematic representation of cells. Faradays's law, mass transfer in cells. Batteries: Classification, characteristics, primary, secondary and lithium batteries, fuel cells. Electroplating: Definition, theory and mechanism of electroplating, effect of plating variables on the properties of electro deposits, comparative account of complexing and non-complexing baths (general treatment), additives on plating baths and their significance. Metallic coating: Preparationof substrate surface, electroplating of Cu and Cr. Application of Au and Ag plating. Corrosion: Types of corrosion, basis of electrochemical corrosion, theories and mechanism of wet corrosion. Thermodynamic aspects of corrosion. Current – potential relations (Evan diagram) in corrosion cells. Factors influencing the rate of	Electrochemical cells and batteries: Introduction, galvanic and electrolytic cells, schematic representation of cells. Faradays's law, mass transfer in cells. Batteries: Classification, characteristics, primary, secondary and lithium batteries, fuel cells.	**4**	**04-01-24 06-01-24 09-01-24 11-01-24**	**Lecture & ICT**
	Electroplating: Definition, theory and mechanism of electroplating, effect of plating variables on the properties of electro deposits, comparative account of complexing and non-complexing baths (general treatment), additives on plating baths and their significance.	**4**	**13-01-24 18-01-24 19-01-24 22-01-24**	**Lecture & ICT**
	Metallic coating: Preparationof substrate surface, electroplating of Cu and Cr. Application of Au and Ag plating.	**3**	**24-01-24 27-01-24 30-01-24**	**Lecture & ICT**
	Corrosion: Types of corrosion, basis of electrochemical corrosion, theories and mechanism of wet corrosion. Thermodynamic aspects of corrosion. Current – potential relations (Evan diagram) in corrosion cells. Factors influencing the rate of corrosion: Metal and environmental factors.	**5**	**02-02-24 05-02-24 06-02-24 07-02-24 09-02-24**	**Lecture & ICT**

corrosion: Metal and environmental factors. Kinetic aspects corrosion: Corrosion rate measurement by different methods – chemical and electrochemical methods. General aspects of corrosion prevention and control – designing aspects, effect of allying and surface modification. Corrosion prevention by painting, phosphating and anodic (passivation) and cathodic protection. Corrosion inhibitors: Introduction, classification, Characteristics and requirements of efficient corrosion inhibitors, Green inhibitors and their significance, Corrosion inhibition mechanism.	General aspects of corrosion prevention and control – designing aspects, effect of allying and surface modification. Corrosion prevention by painting, phosphating and anodic (passivation) and cathodic protection. Corrosion inhibitors: Introduction, classification, Characteristics and requirements of efficient corrosion inhibitors, Green inhibitors and their significance, Corrosion inhibition mechanism.			

Unit III

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Fundamentals of X-ray crystallography: Law of interfacial angles, laws of symmetry, Miller indices, Bragg equation (No derivation), Experimental methods – powder and rotating crystal methods, indexing of powder and rotating crystal photographs. Atomic scattering factor, structure factor, Fourier synthesis and electron density diagrams. Electron diffraction of gases, experimental technique, Scattering-Intensity curves, Wierl equation (no derivation), Radial distribution method determination of bond lengths	Fundamentals of X-ray crystallography: Law of interfacial angles, laws of symmetry, Miller indices, Bragg equation (No derivation), Experimental methods – powder and rotating crystal methods, indexing of powder and rotating crystal photographs.	**5**	**12-02-24 14-02-24 16-02-24 20-02-24 22-02-24**	**Lecture & ICT**
	Atomic scattering factor, structure factor, Fourier synthesis and electron density diagrams. Electron diffraction of gases, experimental technique, Scattering-Intensity curves, Wierl equation (no derivation), Radial distribution method determination of bond lengths and bond angles.	**5**	**27-02-24 28-02-24 29-02-24 02-03-24 05-03-24**	**Lecture & ICT**

and bond angles. Imperfections in atomic packing: Types of imperfections, classification of imperfections, point defects, Schottky defects, Frenkel defects, disordered crystals, line defects, dislocation types, plane defects, small-angle and large-angle boundaries, stacking faults, crystal growth and twinning, non-stoichiometry. Imperfections and physical properties: electrical, optical, magnetic, thermal and mechanical properties.	Imperfections in atomic packing: Types of imperfections, classification of imperfections, point defects, Schottky defects, Frenkel defects, disordered crystals, line defects, dislocation types, plane defects, small-angle and large-angle boundaries, stacking faults, crystal growth and twinning, non-stoichiometry.	**4**	**07-03-24 11-03-24 13-03-24 15-03-24**	**Lecture & ICT**
	Imperfections and physical properties: electrical, optical, magnetic, thermal and mechanical properties.	**2**	**18-03-24 20-03-24**	**Lecture & ICT**

Subject: CHEMICAL SPECTROSCOPY

Unit I

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
NMR Spectroscopy: Magnetic properties of nuclei (magnetic moment, g factor, nuclear spin), effect of external magnetic field on spinning nuclei, Larmor precession frequency, resonance conditions, population of nuclear magnetic energy levels, relaxation processes, relaxation time, line width and other factors affecting line width. Chemical Shift: Standards employed in NMR, factors influencing chemical shift: electronegativity, shielding and deshielding, van der Walls deshielding magnetic anisotropy, H-	NMR Spectroscopy: Magnetic properties of nuclei (magnetic moment, g factor, nuclear spin), effect of external magnetic field on spinning nuclei, Larmor precession frequency, resonance conditions, population of nuclear magnetic energy levels, relaxation processes, relaxation time, line width and other factors affecting line width.	**4**	**28-11-23 29-11-23 2-12-23 5-12-23**	**Lecture & ICT**
	Chemical Shift: Standards employed in NMR, factors influencing chemical shift: electronegativity, shielding and deshielding, van der Walls deshielding magnetic anisotropy, H-bonding, diamagnetic and paramagnetic anisotropies, spin- spin coupling, chemical shift values and correlation for protons bonded to carbon and other nuclei, Instrumentation.	**4**	**7-12-23 9-12-23 12-12-23 14-12-23**	**Lecture & ICT**

bonding, diamagnetic and paramagnetic anisotropies, spin- spin coupling, chemical shift values and correlation for protons bonded to carbon and other nuclei, Instrumentation. Chemical shift equivalence and magnetic equivalence, effects of chiral centre, Karplus curve-variation of coupling constants with dihedral angle. Complex NMR Spectra: Simplification of complex spectra-isotopic substitution, increased magnetic field strength, double resonance and lanthanide shift reagents, Nuclear Overhauser Effect (NOE), FT- NMR Spectroscopy and advantages. 13C-NMR Spectroscopy: multiplicity-Proton decoupling- Off resonance decoupling; Chemical shift, application of 13C, 19F, 31P, 11B and 15N. Applications of NMR: Structural diagnosis, conformational analysis, keto-enol tautomerism, H-bonding. Solid state NMR and its applications. Multiple resonance spectroscopy: Introduction to 2D-techniques: DEPT, COSY and NOESY	Chemical shift equivalence and magnetic equivalence, effects of chiral centre, Karplus curve-variation of coupling constants with dihedral angle. Complex NMR Spectra: Simplification of complex spectra-isotopic substitution, increased magnetic field strength, double resonance and lanthanide shift reagents, Nuclear Overhauser Effect (NOE), FT- NMR Spectroscopy and advantages. 13C-NMR Spectroscopy: multiplicity-Proton decoupling- Off resonance decoupling;	**4**	**16-12-23 19-12-23 21-12-23 23-12-23**	**Lecture & ICT**
	Chemical shift, application of 13C, 19F, 31P, 11B and 15N. Applications of NMR: Structural diagnosis, conformational analysis, keto-enol tautomerism, H-bonding. Solid state NMR and its applications. Multiple resonance spectroscopy: Introduction to 2D-techniques: DEPT, COSY and NOESY	**6**	**27-12-23 29-12-23 3-1-24 5-1-24 08-01-24 10-01-24**	**Lecture & ICT**

Unit II

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**

Electron Spin Resonance Spectroscopy: Basic principles, hyperfine couplings, the ‘g’ values, factors affecting g values, isotropic and anisotropic hyperfine coupling constants, Zero Field splitting and Kramer‘s degeneracy. Measurement techniques and applications to simple inorganic and organic free radicals and to inorganic complexes. NQR Spectroscopy: Introduction, Principles, Quadrupolar nuclei, electric field gradient, nuclear quadrupole coupling constants, energies of quadrupolar transitions, effect of magnetic field. Applications. Mössbauer spectroscopy: The Mössbauer effect, chemical isomer shifts, quadrupole interactions, magnetic splitting, measurement techniques and spectrum display, application to the study of Fe2+and Fe 3+compounds; iron in very high oxidation states-Fe(V) and Fe(VI) nitride complexes; Sn2+and Sn4+compounds, nature of M-L bond, coordination number and structure, detection of oxidation states and an inter halogen compound I2Br2Cl4. Photoelectron Spectroscopy: Introduction, principles, chemical shifts, photoelectron spectra of simple molecules. X-ray photoelectron and Auger electron spectroscopy-Principles and applications.	Electron Spin Resonance Spectroscopy: Basic principles, hyperfine couplings, the ‘g’ values, factors affecting g values, isotropic and anisotropic hyperfine coupling constants, Zero Field splitting and Kramer‘s degeneracy. Measurement techniques and applications to simple inorganic and organic free radicals and to inorganic complexes.	**6**	**12-01-24** **16-12-24** **18-01-24** **20-01-24** **23-01-24** **25-01-24**	**Lecture & ICT**
	NQR Spectroscopy: Introduction, Principles, Quadrupolar nuclei, electric field gradient, nuclear quadrupole coupling constants, energies of quadrupolar transitions, effect of magnetic field. Applications.	**5**	**29-01-24** **01-02-24** **03-02-24** **06-02-24** **08-02-24**	**Lecture & ICT**
	Mössbauer spectroscopy: The Mössbauer effect, chemical isomer shifts, quadrupole interactions, magnetic splitting, measurement techniques and spectrum display, application to the study of Fe2+and Fe 3+compounds; iron in very high oxidation states-Fe(V) and Fe(VI) nitride complexes; Sn2+and Sn4+compounds, nature of M-L bond, coordination number and structure, detection of oxidation states and an inter halogen compound I2Br2Cl4.	**4**	**12-02-24** **13-02-24** **15-02-24** **17-02-24**	**Lecture & ICT**
	Photoelectron Spectroscopy: Introduction, principles, chemical shifts, photoelectron spectra of simple molecules. X-ray photoelectron and Auger electron spectroscopy-Principles and applications.	**3**	**19-02-24** **21-02-24** **23-02-24**	**Lecture & ICT**

Unit III

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
IR spectroscopy: Introduction, instrumentation, sample handling, Characteristic group frequencies and skeletal frequencies. Finger print region, Correlation chart. Identification of functional groups-alkanes, alkenes, alkynes, aromatics, carbonyl compounds (aldehydes, ketones, esters and lactones), halogen compounds, sulphur and phosphorous compounds, alcohols, amides, lactums, amino acids and amines, Factors affecting group frequencies and band shapes: conjugation, resonance and inductance, hydrogen bonding and ring strain. tautomerism, Cis-trans isomerism. Applications of IR spectroscopy. Mass Spectrometry: Basic principles, Instrumentation-Mass spectrometer, interpretation of mass spectra, resolution, molecular ions, meta-stable ions, Nitrogen rule and isotope ions. Different methods of ionization (chemical ionization, electron impact, field ionization-FAB and MALDI). Fragmentation processes-representation of fragmentation, basic fragmentation types and rules. Factors influencing fragmentations and reaction pathways. McLafferty rearrangement.	IR spectroscopy: Introduction, instrumentation, sample handling, Characteristic group frequencies and skeletal frequencies. Finger print region, Correlation chart. Identification of functional groups-alkanes, alkenes,	**3**	**26-02-24 28-02-24 29-02-24**	**Lecture & ICT**
	alkynes, aromatics, carbonyl compounds (aldehydes, ketones, esters and lactones), halogen compounds, sulphur and phosphorous compounds, alcohols, amides, lactums, amino acids and amines, Factors affecting group frequencies and band shapes: conjugation, resonance and inductance, hydrogen bonding and ring strain. tautomerism, Cis-trans isomerism. Applications of IR spectroscopy.	**3**	**02-03-24 04-03-24 07-03-24**	**Lecture & ICT**
	Mass Spectrometry: Basic principles, Instrumentation-Mass spectrometer, interpretation of mass spectra, resolution, molecular ions, meta-stable ions, Nitrogen rule and isotope ions. Different methods of ionization (chemical ionization, electron impact, field ionization-FAB and MALDI). Fragmentation processes-representation of fragmentation, basic fragmentation types and rules. Factors influencing fragmentations and reaction pathways.	**3**	**09-03-24 12-03-24 14-03-24**	**Lecture & ICT**
	McLafferty rearrangement. Fragmentations (fragmentation of organic compounds with respect to their structure determination) associated with functional groups-alkanes, alkenes, cycloalkanes, aromatic hydrocarbons, halides, alcohols, phenols, ethers, acetals, ketals, aldehydes, ketones, quinines,	**03**	**16-03-24 19-03-24 21-03-24**	**Lecture & ICT**

Fragmentations (fragmentation of organic compounds with respect to their structure determination) associated with functional groups-alkanes, alkenes, cycloalkanes, aromatic hydrocarbons, halides, alcohols, phenols, ethers, acetals, ketals, aldehydes, ketones, quinines, carboxylic acids, esters, amides, acid chlorides, nitro compounds, amines & nitrogen heterocycles. Fragmentation patterns of glucose, myrcene, nicotine, retro Diels-Alder fragmentation. Composite problems involving the applications of UV, IR, 1H and 13C-NMR and mass spectroscopic techniques for the structural elucidation of organic compounds.	carboxylic acids, esters, amides, acid chlorides, nitro compounds, amines & nitrogen heterocycles. Fragmentation patterns of glucose, myrcene, nicotine, retro Diels-Alder fragmentation. Composite problems involving the applications of UV, IR, 1H and 13C-NMR and mass spectroscopic techniques for the structural elucidation of organic compounds.			

Subject: Organic Chemistry Practicals-III
04 Hours/week – 128 Hours/Semester

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
ORGANIC CHEMISTRY PRACTICALS – III Part A	Fractional crystallization: separation of mixture of naphthalene and biphenyl	**8**	**04-12-23 05-12-23**	Practical hands on implementation
	Thin layer chromatography: Separation of plant pigments	**8**	**06-12-23 07-12-23**	Practical hands on implementation
	Isolation of piperine from pepper	**8**	**11-12-23 12-12-23**	Practical hands on implementation
	Isolation of caffeine from tea	**8**	**13-12-23 14-12-23**	Practical hands on implementation
	Isolation of azeleic acid from castor oil	**8**	**18-12-23 19-12-23**	Practical hands on

				implementation
	Estimation of ketones by haloform reaction	**8**	**20-12-23** **21-12-23**	Practical hands on implementation
	Estimation of sugars by Bertrand's method	**8**	**26-12-23** **27-12-23**	Practical hands on implementation
	Determination of iodine value of an oil or fat	**8**	**02-01-24** **03-01-24**	Practical hands on implementation
	Determination of saponification value of an oil	**8**	**08-01-24** **09-01-24**	Practical hands on implementation
	Spectral analysis: Structural elucidation of some simple organic compounds by UV, IR, NMR and mass. Spectra have to be provided by the teachers.	**12**	**10-01-24** **11-01-24** **22-01-24**	Practical hands on implementation
ORGANIC CHEMISTRY PRACTICALS – III Part B	Estimation of ketones by haloform reaction.	**8**	**23-01-24** **24-01-24**	Practical hands on implementation
	Estimation of sugars by Bertrand's method.	**8**	**25-01-24** **05-02-24**	Practical hands on implementation
	Estimation of nitro groups.	**8**	**06-02-24** **14-02-24**	Practical hands on implementation
	Estimation of amino group.	**4**	**15-02-24**	Practical hands on implementation
	Determination of enol content by Meyer's method.	**4**	**27-02-24**	Practical hands on implementation
	Determination of iodine value of an oil or fat.	**4**	**28-02-24**	Practical hands on implementation

	Determination of saponification value of oil.	**4**	**29-02-24**	Practical hands on implementation
	Determination of equivalent weight of carboxylic acid by silver salt method	**4**	**02-03-24**	Practical hands on implementation

Subject: PHYSICAL CHEMISTRY PRACTICALS – III
04 Hours/week – 128 Hours/Semester

Curriculum as prescribed by the university	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
Physical chemistry practical – IV PART-A	Determination of order of reaction for the acid hydrolysis of methyl acetate and evaluation of activation parameters.	**8**	**04-12-23 05-12-23**	**Practical method**
	Evaluation of Arrhenius parameters for the reaction between K2S2O8 and KI (First order reaction).	**8**	**06-12-23 07-12-23**	**Practical method**
	Study of kinetics of autocatalytic reaction between oxalic acid and KMnO4 and determine the order of reaction with respect to KMnO4.	**8**	**11-12-23 12-12-23**	**Practical method**
	Kinetics of saponification of ethyl acetate by conductivity method and study the effect of dielectric constant of the medium (using CH3OH).	**8**	**13-12-23 14-12-23**	**Practical method**
	Study of effect of salt (ionic strength) on the kinetics of reaction between potassium persulphate and potassium iodide (second order reaction).	**8**	**18-12-23 19-12-23**	**Practical method**
	Spectrophotometric kinetics of oxidation of indigocarmine (IC) by chloramine-T (CAT) – Determination of order of reaction with respect to [CAT] and [IC].	**8**	**20-12-23 21-12-23**	**Practical method**

	To study the acid catalysed kinetics of oxidation of glycine by chloramine-T (CAT) - determination of order of reaction with respect to [CAT] and [glycine].	**8**	**26-12-23** **27-12-23**	**Practical method**
	Study the phase diagram of three component system (Glacial acetic acid-Chloroform-water system / Glacial acetic acid-Acetone-Water system).	**8**	**02-01-24** **03-01-24**	**Practical method**
	Study the rate of corrosion and inhibition efficiency of an inhibitor (thiourea) on mild steel/Al/Cu by weight loss method.	**8**	**08-01-24** **09-01-24**	**Practical method**
	PART-B Introduction and Conductometric titration of orthophosphoric acid against NaOH.	**12**	**10-01-24** **11-01-24** **22-01-24**	**Practical method**
	Conductometric titration of a mixture of HCl, CH3COOH and CuSO4 against NaOH.	**8**	**23-01-24** **24-01-24**	**Practical method**
	Conductometric titration of thorium nitrate with potassium tartarate.	**4**	**25-01-24**	**Practical method**
	Potentiometric titration of mixture of weak acids (acetic acid and monochloroacetic acid) against NaOH.	**4**	**05-02-24**	**Practical method**
	Determination of pKa values of phosphoric acid by potentiometric / pH metric method.	**4**	**06-02-24**	**Practical method**
	Potentiometric titration of mixture of KCl+KBr+KI against AgNO3.	**4**	**14-02-24**	**Practical method**
	Potentiometric titration of FAS against ceric sulphate and sodium metavenadate, determine the concentration of FAS and redox potential.	**4**	**15-02-24**	**Practical method**

	Potentiometric titration of lead nitrate against EDTA and determine the concentration of lead nitrate solution.	**4**	**27-02-24**	
	Determination of pK value of an indicator (methyl orange/methyl red).	**4**	**28-02-24**	
	Spectrophotometric analysis of a mixture of (a) KMnO4 and K2Cr2O7.	**4**	**29-02-24**	
	Study of complex formation between ferric salt and salicylic acid.	**4**	**02-03-24**	

MAHAJANA EDUCATION SOCIETY (R)
POST GRADUATE WING OF SBRR MAHAJANA FIRST GRADE COLLEGE (AUTONOMOUS)
AFFILIATED TO UNIVERSITY OF MYSORE,
RE-ACCREDITED BY NAAC WITH 'A' GRADE, COLLEGE WITH POTENTIAL FOR EXCELLENCE, EDUCATION TO EXCEL
POOJA BHAGAVAT MEMORIAL MAHAJANA EDUCATION CENTRE
K.R.S ROAD, METAGALLI, MYSURU-570016, KARNATAKA, INDIA

DEPARTMENT OF STUDIES IN CHEMISTRY

Lesson Plan - 2022-23(FOURTH SEMESTER)
Department: M.Sc. CHEMISTRY
Subject: BIOINORGANIC CHEMISTRY
03 Hours/week – 48 Hours/Semester
UNIT - I

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment

Structural and molecular biology: Introduction, The structural building blocks of proteins, the structural building block of nucleic acids. Metal ion interactions with nucleosides and nucleotides. General features of DNA - metal complex interaction. **Bioenergetics**: Introduction, Redox reactions in metabolism, the central role of ATP in metabolism. Kinetic stability of ATP, Mitochondrial flow of electrons from NADH to O_2. Oxidative phosphorylation and respiratory chain. **Sodium and potassium-channels and pumps**: Introduction, transport across membranes. Potassium and sodium channels, The sodium-potassium ATPase, Macro cyclic crown ether compounds, cryptands and ionophores. **Biochemistry of calcium**: Introduction - comparison of Ca^{2+} and Mg^{2+}. Biological roles of calcium, binding sites of calcium and proteins, storage of calcium, calcium in muscle contraction, calcium in blood clotting process. **Vitamin B_{12} and Coenzymes**: Structural feature, names of different forms, chemistry of cobalamin, biochemical functions of cobalamins, model compounds. Special characteristics of B_{12} co-enzyme. Photosystems.	**Structural and molecular biology**: Introduction, The structural building blocks of proteins, the structural building block of nucleic acids. Metal ion interactions with nucleosides and nucleotides. General features of DNA - metal complex interaction.	**4**	**08/4/2024 13/4/2024 17/4/2024 20/4/2024**	**Lecture & ICT**
	Bioenergetics: Introduction, Redox reactions in metabolism, the central role of ATP in metabolism. Kinetic stability of ATP, Mitochondrial flow of electrons from NADH to O_2. Oxidative phosphorylation and respiratory chain.	**4**	**22/4/2024 24/4/2024 25/4/2024 29/4/2024**	**Lecture & ICT**
	Sodium and potassium-channels and pumps: Introduction, transport across membranes. Potassium and sodium channels, The sodium-potassium ATPase, Macro cyclic crown ether compounds, cryptands and ionophores.	**4**	**02/5/2024 04/5/2024 06/5/2024 8/5/2024**	**Lecture & ICT**
	Biochemistry of calcium: Introduction - comparison of Ca^{2+} and Mg^{2+}. Biological roles of calcium, binding sites of calcium and proteins, storage of calcium, calcium in muscle contraction, calcium in blood clotting process. Vitamin B_{12} and Coenzymes: Structural feature, names of different forms, chemistry of cobalamin, biochemical functions of cobalamins, model compounds. Special characteristics of B_{12} co-enzyme. Photosystems.	**4**	**11/5/2024 15/5/2024 16/5/2024 18/5/2024**	**Lecture & ICT**

UNIT - II

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment

Metal ion transport and storage: Iron storage and transport: Transferrin, ferratin, phosvitin and gastroferrin. Iron transport in microbes: siderophores, in vivo microbial transport of iron **Oxygen transport and oxygen uptake proteins**: Properties of dioxygen (O_2): Thermodynamic and kinetic aspects of dioxygen as an oxidant, activation of dioxygen through complexation with metal ions. Haemoglobin (Hb) and Myoglobin (Mb) in oxygen transport mechanism: Introduction to porphyrin system, substituent effects on porphyrin rings, functions of Hb and Mb. Characteristics of O^{2-} binding interaction with Hb and Mb. Model compounds for oxygen carriers (Vaska's complex and cobalt(III) – Schiff base complexes). Hemerythrin and hemocyanin. Electron transport proteins and redox enzymes: Iron – sulfur proteins (rubredoxins and ferredoxins) and cytochromes including cytochrome P_{450}. Catalase and peroxidase: Structure and reactivity. Superoxide dismutase: Structure and reactivity. Molybdenum containing enzymes: Aspects of molybdenum chemistry, Xanthine oxidase, aldehyde oxidase, sulfite oxidase, nitrogenase and nitrite reductase. Non-redox metalloenzymes - Structure and reactivity: Carboxypeptidase-A, alcohol dehydrogenase, leucine	Metal ion transport and storage: Iron storage and transport: Transferrin, ferratin, phosvitin and gastroferrin. Iron transport in microbes: siderophores, in vivo microbial transport of iron Oxygen transport and oxygen uptake proteins: Properties of dioxygen (O_2): Thermodynamic and kinetic aspects of dioxygen as an oxidant, activation of dioxygen through complexation with metal ions.	**4**	**19/5/2024** **21/5/2024** **22/5/2024** **24/5/2024**	**Lecture & ICT**
	Haemoglobin (Hb) and Myoglobin (Mb) in oxygen transport mechanism: Introduction to porphyrin system, substituent effects on porphyrin rings, functions of Hb and Mb.	**4**	**25/5/2024** **28/5/2024** **29/5/2024** **31/5/2024**	**Lecture & ICT**
	Characteristics of O^{2-} binding interaction with Hb and Mb. Model compounds for oxygen carriers (Vaska's complex and cobalt(III) – Schiff base complexes). Hemerythrin and hemocyanin.	**4**	**1/6/2024** **5/6/2024** **8/6/2024** **10/6/2024**	**Lecture & ICT**
	Electron transport proteins and redox enzymes: Iron – sulfur proteins (rubredoxins and ferredoxins) and cytochromes including cytochrome P_{450}. Catalase and peroxidase: Structure and reactivity. Superoxide dismutase: Structure and reactivity. Molybdenum containing enzymes: Aspects of molybdenum chemistry, Xanthine oxidase, aldehyde oxidase, sulfite oxidase, nitrogenase and nitrite reductase. Non-redox metalloenzymes - Structure and reactivity: Carboxypeptidase-A, alcohol dehydrogenase, leucine aminopeptidase and carbonic anhydrase.	**4**	**12/6/2024** **13/6/2024** **15/6/2024** **17/6/2024**	**Lecture & ICT**

aminopeptidase and carbonic anhydrase.				

UNIT - III

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Medicinal Inorganic Chemistry: State of the Art, New Trends, and a Vision of the Future: Introduction, metals and human biochemistry, general requirements: Iron, zinc, copper, sodium, potassium, magnesium, calcium and selenium. Metal complexes as drugs and therapeutic agents: Introduction, antibacterial agents, antiviral agents, metal complexes in cancer therapy, Current Status and Mechanism of Action of Platinum-Based Anticancer Drugs. Non-platinum anticancer agents. Gold-Based Therapeutic Agents: A New Perspective: Uses for the treatment of rheumatoid arthritis, Diabetes: Vanadium and diabetes, Metal-Based Radiopharmaceuticals: Metal complexes as radio diagnostic agents. Treatment of toxicity due to inorganics: General aspects of mechanism of metal ion toxicity, (i) Mechanism of antidote complex with poison, rendering it inert: arsenic, lead, mercury, iron, copper (ii) Antidote accelerated metabolic conversion of	Medicinal Inorganic Chemistry: State of the Art, New Trends, and a Vision of the Future: Introduction, metals and human biochemistry, general requirements: Iron, zinc, copper, sodium, potassium, magnesium, calcium and selenium. Metal complexes as drugs and therapeutic agents: Introduction, antibacterial agents, antiviral agents, metal complexes in cancer therapy	**4**	**19/6/2024 20/6/2024 22/6/2024 24/6/2024**	**Lecture & ICT**
	Current Status and Mechanism of Action of Platinum-Based Anticancer Drugs. Non-platinum anticancer agents. Gold-Based Therapeutic Agents: A New Perspective: Uses for the treatment of rheumatoid arthritis, Diabetes: Vanadium and diabetes, Metal-Based Radiopharmaceuticals: Metal complexes as radio diagnostic agents.	**4**	**26/6/2024 27/6/2024 29/6/2024 01/7/2024**	**Lecture & ICT**
	Treatment of toxicity due to inorganics: General aspects of mechanism of metal ion toxicity, (i) Mechanism of antidote complex with poison, rendering it inert: arsenic, lead, mercury, iron, copper.	**4**	**03/7/2024 04/7/2024 06/7/2024 08/7/2024**	**Lecture & ICT**
	Treatment of toxicity due to inorganics: General aspects of mechanism of metal ion toxicity, (ii) Antidote accelerated metabolic conversion of poison to	**4**	**11/7/2024 13/7/2024 15/7/2024 18/7/2024**	**Lecture & ICT**

poison to non-toxic product: cyanide and carbon monoxide	non-toxic product: cyanide and carbon monoxide.			

Subject: HETEROCYCLIC AND BIOORGANIC CHEMISTRY
03 Hours/week – 48 Hours/Semester
UNIT - I

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Heterocyclic compounds: Nomenclature; Structure, reactivity, synthesis and reactions of furan, pyrrole, thiophene, indole, pyridine, quinoline, isoquinoline, pyrazole, imidazole, pyrone, coumarin, chromones, pyrimidines, purines. Synthesis and synthetic applications of azirines & aziridines, oxazolines, , isoxazole, triazole and azepines.	Heterocyclic compounds: Nomenclature; Structure, reactivity, synthesis and reactions of furan, pyrrole, thiophene	**4**	**10/4/2024 12/4/2024 15/4/2024 16/4/2024**	**Lecture & ICT**
	Structure, reactivity, synthesis and reactions of indole, pyridine, quinoline, isoquinoline, pyrazole, imidazole,	**4**	**18/4/2024 19/4/2024 22/4/2024 23/4/2024**	**Lecture & ICT**
	Structure, reactivity, synthesis and reactions of pyrone, coumarin, chromones, pyrimidines, purines.	**4**	**25/4/2024 27/4/2024 02/5/2024 03/5/2024**	**Lecture & ICT**
	Synthesis and synthetic applications of azirines & aziridines, oxazolines, , isoxazole, triazole and azepines.	**4**	**06/5/2024 07/5/2024 09/5/2024 10/5/2024**	**Lecture & ICT**

Unit II

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment

Carbohydrates: Introduction, Ring size determination of monosaccharides, configuration and conformations of monosaccharides, anomeric effect, Hudson‘s rules, epimerization and mutarotation. Synthesis, industrial and biological importance of glycosides, amino sugars, sucrose, maltose and lactose. Polysaccharides: General methods of structure elucidation. Industrial importance and biological importance of cellulose, starch, glycogen, dextran, hemicellulose, pectin, agar- agar. Photosynthesis and biosynthesis of carbohydrates..	**Carbohydrates**: Introduction, Ring size determination of monosaccharides, configuration and conformations of monosaccharides,	**4**	**13/5/2024 14/5/2024 16/5/2024 17/5/2024**	**Lecture & ICT**
	anomeric effect, Hudson‘s rules, epimerization and mutarotation. Synthesis, industrial and biological importance of glycosides,	**4**	**19/5/2024 20/5/2024 22/5/2024 23/5/2024**	**Lecture & ICT**
	Biological importance of amino sugars, sucrose, maltose and lactose. Polysaccharides: General methods of structure elucidation.	**4**	**25/5/2024 27/5/2024 29/5/2024 30/5/2024**	**Lecture & ICT**
	Industrial importance and biological importance of cellulose, starch, glycogen, dextran, hemicellulose, pectin, agar- agar. Photosynthesis and biosynthesis of carbohydrates.	**4**	**01/6/2024 04/6/2024 06/6/2024 07/6/2024**	**Lecture & ICT**

Unit III

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Amino Acids: General structure, physiological properties, protection of functional groups. Peptides: Structure and conformation of peptide bond, peptide synthesis: Solution phase and Merrifield’s solid phase synthesis, Racemization and use of HOBt,	Amino Acids: General structure, physiological properties, protection of functional groups. Peptides: Structure and conformation of peptide bond,	**4**	**10/6/2024 13/6/2024 17/6/2024 20/6/2024**	**Lecture & ICT**

Synthesis of oxytocin and vasopressin, biological importance of insulin, selective cleavage of polypeptide bonds (chemical and enzymatic). Proteins: Structure determination: C and N terminal residue determination, primary, secondary, tertiary and quaternary structure determination, denaturing and renaturing of proteins. **Nucleic acids:** Introduction, structure and synthesis of nucleosides and nucleotides, protecting groups for hydroxy group in sugar, amino group in the base and phosphate functions. Methods of formation of internucleotide bonds: DCC, phosphodiester approach and phosphoramide methods. Solid phase synthesis of oligonucleotides. Structure of RNA and DNA, Crick-Watson model, role of nucleic acids in the biosynthesis of proteins. **Protecting groups:** Protection of hydroxyl, carboxyl, carbonyl, thiol and amino groups. Illustration of protection and deprotection in synthesis.	Peptide synthesis: Solution phase and Merrifield's solid phase synthesis, Racemization and use of HOBt, Synthesis of oxytocin and vasopressin, biological importance of insulin, selective cleavage of polypeptide bonds (chemical and enzymatic). Proteins: Structure determination: C and N terminal residue determination, primary, secondary, tertiary and quaternary structure determination, denaturing and renaturing of proteins.	**4**	**21/6/2024** **24/6/2024** **25/6/2024** **27/6/2024**	**Lecture & ICT**
	Nucleic acids: Introduction, structure and synthesis of nucleosides and nucleotides, protecting groups for hydroxy group in sugar, amino group in the base and phosphate functions. Methods of formation of internucleotide bonds: DCC, phosphodiester approach and phosphoramide methods. Solid phase synthesis of oligonucleotides. Structure of RNA and DNA, Crick-Watson model, role of nucleic acids in the biosynthesis of proteins.	**4**	**1/7/2024** **2/7/2024** **4/7/2024** **5/7/2024**	**Lecture & ICT**
	Protecting groups: Protection of hydroxyl, carboxyl, carbonyl, thiol and amino groups. Illustration of protection and deprotection in synthesis.	**4**	**8/7/2024** **11/7/2024** **15/7/2024** **19/7/2024**	**Lecture & ICT**

Subject: NUCLEAR, RADIATION AND PHOTOCHEMISTRY
03 Hours/week – 48 Hours/Semester
UNIT - I

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment

Nuclear chemistry: Nuclear stability – nuclear forces, packing fraction, binding energy, liquid drop, shell and collective models. Radioactive decay – General characteristics, decay kinetics, parent –daughter decay growth relationships, determination of half-lives. Brief survey of alpha, beta and gamma decays. Nuclear reactions – Bethe‘s notation, types of nuclear reactions – specific nuclear reactions, photonuclear reactions, Oppenheimer – Phillips process, spallation reactions, Szilard-Chalmers process. Definition of Curie and related calculations. Production of radioisotopes and labelled compounds by bombardment. Radiochemical separation techniques: carriers, solvent extraction and ion ion-exchange methods. Nuclear power reactors: Types of nuclear power reactors, basic features and components of nuclear power reactors. An introduction to breeder reactors.	Nuclear chemistry: Nuclear stability – nuclear forces, packing fraction, binding energy, liquid drop, shell and collective models. Radioactive decay – General characteristics, decay kinetics, parent –daughter decay growth relationships, determination of half-lives.	**4**	**12/4/2024 16/4/2024 19/4/2024 22/4/2024**	**Lecture & ICT**
	Brief survey of alpha, beta and gamma decays. Nuclear reactions – Bethe‘s notation, types of nuclear reactions – specific nuclear reactions, photonuclear reactions,	**4**	**23/4/2024 25/4/2024 27/4/2024 02/5/2024**	**Lecture & ICT**
	Oppenheimer – Phillips process, spallation reactions, Szilard-Chalmers process. Definition of Curie and related calculations. Production of radioisotopes and labelled compounds by bombardment.	**4**	**03/5/2024 06/5/2024 07/5/2024 09/5/2024**	**Lecture & ICT**
	Radiochemical separation techniques: carriers, solvent extraction and ion ion-exchange methods. Nuclear power reactors: Types of nuclear power reactors, basic features and components of nuclear power reactors. An introduction to breeder reactors.	**4**	**10/5/2024 13/5/2024 14/5/2024 16/5/2024**	**Lecture & ICT**

Unit II

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Radiation chemistry: Introduction, units, interaction of electromagnetic radiation with matter, G-value, LET of radiation. Chemical dosimetry - Fricke and ceric sulphate dosimeters. Radiolysis - cysteine, water and biphenyl.	Radiation chemistry: Introduction, units, interaction of electromagnetic radiation with matter, G-value, LET of radiation. Chemical dosimetry - Fricke and ceric sulphate dosimeters. Radiolysis - cysteine, water and biphenyl	**4**	**17/5/2024 19/5/2024 20/5/2024 22/5/2024**	**Lecture & ICT**

Radioisotopes as tracers, use of isotopic tracers in the elucidation of reaction mechanism, structure determination and solubility of sparingly soluble substances. 14C dating, medical applications of isotopic tracers. Physico-chemical applications – isotope dilution method, activation analysis and radiometric titrations. Hazards in radiochemical work and radiation protection. Radiation detection and measurement: Experimental techniques in the assay of radioisotopes. Radiation detectors – ionization chambers, proportional and Geiger-Muller counters – G.M. Plateau, dead time, coincidence loss, determination of dead time. Scintillation and semiconductor radiation detectors.	Radioisotopes as tracers, use of isotopic tracers in the elucidation of reaction mechanism, structure determination and solubility of sparingly soluble substances. 14C dating, medical applications of isotopic tracers.	**4**	**23/5/2024 27/5/2024 28/5/2024 04/6/2024**	**Lecture & ICT**
	Physico-chemical applications – isotope dilution method, activation analysis and radiometric titrations. Hazards in radiochemical work and radiation protection.	**4**	**07/6/2024 08/6/2024 11/6/2024 12/6/2024**	**Lecture & ICT**
	Radiation detection and measurement: Experimental techniques in the assay of radioisotopes. Radiation detectors – ionization chambers, proportional and Geiger-Muller counters – G.M. Plateau, dead time, coincidence loss, determination of dead time. Scintillation and semiconductor radiation detectors.	**4**	**14/6/2024 18/6/2024 19/6/2024 21/6/2024**	**Lecture & ICT**

Unit III

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
Photochemistry: Introduction to photochemistry, laws of photochemistry, laws of light absorption, quantum yield and its determination, factors affecting quantum yield, Actinometry - Uranyloxalate and potassium ferrioxalate actinometers, acetone and diethylketone actinometers. Photochemical properties of electronically excited molecules, nature of changes on electronic excitation, shapes of absorption band and Frank Condon principle. Experimental techniques to determine the	Photochemistry: Introduction to photochemistry, laws of photochemistry, laws of light absorption, quantum yield and its determination, factors affecting quantum yield, Actinometry - Uranyloxalate and potassium ferrioxalate actinometers, acetone and diethylketone actinometers.	**4**	**22/6/2024 24/6/2024 25/6/2024 26/6/2024**	**Lecture & ICT**
	Photochemical properties of electronically excited molecules, nature of changes on electronic excitation, shapes of absorption band and Frank Condon principle. Experimental techniques to determine the intermediates in photochemical reactions.	**4**	**28/6/2024 02/7/2024 03/7/2024 05/7/2024**	**Lecture & ICT**

intermediates in photochemical reactions. Photosensitization: by mercury, dissociation of H2. Photochemical kinetics of: Decomposition of CH_3CHO, dissociation of HI and formation of HCl. Fluorescence and phosphorescence – theory and applications. Resonance fluorescence and quenching of fluorescence, Kinetics of colliosional quenching (Stern-Volmer equation). Photocatalyst – Principle, application of ZnO/TiO2 photocatalysts in the photo cleavage of dyes, environmentally hazardous waste and industrial effluents. Effect of photo degradation on COD value.	Photosensitization: by mercury, dissociation of H2. Photochemical kinetics of: Decomposition of CH_3CHO, dissociation of HI and formation of HCl. Fluorescence and phosphorescence – theory and applications. Resonance fluorescence and quenching of fluorescence,	**4**	**06/7/2024 09/7/2024 10/7/2024 12/7/2024**	**Lecture & ICT**
	Kinetics of colliosional quenching (Stern-Volmer equation). Photocatalyst – Principle, application of ZnO/TiO2 photocatalysts in the photo cleavage of dyes, environmentally hazardous waste and industrial effluents. Effect of photo degradation on COD value.	**4**	**13/7/2024 16/7/2024 18/7/2024 19/7/2024**	**Lecture & ICT**

Subject: Inorganic Chemistry Practicals-II
04 Hours/week – 64 Hours/Semester

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
PART-A 1. Determination of bismuth, cadmium and lead in a mixture: Analysis of a low melting alloy (Wood's alloy). 2. Simultaneousspectrophotometric determination of chromium and manganese in a steel solution. 3. Determination of chromium(III) and iron(III) in a mixture: Kinetic masking method. 4. Electrogravimetricdeterminatio n of: a) Copper in copper sulphate b) Nickel in nickel suphate c) Copper and nickel in alloy solution c) Lead in lead nitrate. 5. Flame photometric	Determination of bismuth, cadmium and lead in a mixture: Analysis of a low melting alloy (Wood's alloy).	**4**	10/04/2024	Practical hands on implementation
	Simultaneousspectrophotometric determination of chromium and manganese in a steel solution.	**4**	18/04/2024	Practical hands on implementation
	Determination of chromium(III) and iron(III) in a mixture: Kinetic masking method.	**4**	25/04/2024	Practical hands on implementation
	Electrogravimetricdetermination of: a) Copper in copper sulphate	**4**	01/05/2024	Practical hands on implementation

determination of the following metal ions from different samples: a) Sodium b) potassium and c) sodium and potassium in a mixture. 6. Polarographic estimation of cadmium and zinc. 7. Determination of iron as the 8-hydroxyquinolate by solvent extraction method. 8. Quantitative determination of nickel using dithizone and 1,10-phenanthroline by synergistic extraction. 9. Spectrophotometric determination of the *p*Ka value of methyl red. 10. Semimicro gravimetric determination of aluminium.	b) Nickel in nickel suphate c) Copper and nickel in alloy solution			
	1. Flame photometric determination of the following metal ions from different samples: a) Sodium b) potassium and c) sodium and potassium in a mixture.	**4**	08/05/2024	Practical hands on implementation
	Polarographic estimation of cadmium and zinc.	**4**	09/05/2023	Practical hands on implementation
	Determination of iron as the 8-hydroxyquinolate by solvent extraction method. Quantitative determination of nickel using dithizone and 1,10-phenanthroline by synergistic extraction.	**4**	16/05/2024	Practical hands on implementation
	Spectrophotometric determination of the pKa value of methyl red. Semimicro gravimetric determination of aluminium.	**4**	23/05/2024	Practical hands on implementation

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
PART-B 1. Preparation and characterization of: a) Chloropentammine cobalt(III) chloride b) Estimation of chloride in a complex by potentiometric or ion-exchange method c) Record the electronic absorption 2. Preparation of *cis*- and *trans*-dichlorobis(ethylenediammine) cobalt(III)chloride. Record the UV-	Preparation and characterization of: a) Chloropentammine cobalt(III) chloride b) Estimation of chloride in a complex by potentiometric or ion-exchange method.	**4**	30/05/2024	Practical hands on implementation
	Preparation of cis- and trans- dichlorobis (ethylenediammine) cobalt(III)chloride.	**4**	06/06/2024	Practical hands on implementation

Vis spectra and compare it with *cis*-form. Measure the molar conductance. 3. Preparation of hexammine cobalt(III) chloride and estimate cobalt ion. 4. Determination of magnetic susceptibility of any two compounds/complexes by Gouy method. 5. Determination of the composition of iron-phenanthroline complex by: a) Job‘s method mole-ratio method and Slope-ratio method. 6. Determine the stability constant of iron-tiron/iron-phenanthroline by Turner-Anderson method. 7. Preparation of potassium tris(oxalato)ferrate(III) and estimate the metal ion. 8. Preparation of acetyl aceto natomanganese(III) complex. 9. Preparation of tris(en)nickel(II) chloride and hexamine nickel(II) chloride complexes. Record electronic spectra and evaluate spectrochemical series. 10. Using chloropentammine cobalt(III) chloride, prepare nitro and nitritopentammine cobalt(III) chloride. Record the IR spectra of the isomers and interpret. 11. Estimate the chloride ion in a given complex by silver nitrate titration after ion-exchange	Record the UV-Vis spectra and compare it with cis-form. Measure the molar conductance. Preparation of hexammine cobalt(III) chloride and estimate cobalt ion..			
	Determination of magnetic susceptibility of any two compounds/complexes by Gouy method. Determination of the composition of iron-phenanthroline complex by: a) Job‘s method mole-ratio method and Slope-ratio method.	**4**	13/06/2024	Practical hands on implementation
	Determine the stability constant of iron-tiron/iron-phenanthroline by Turner-Anderson method	**4**	20/06/2024	Practical hands on implementation
	Preparation of potassium tris(oxalato)ferrate(III) and estimate the metal ion. Preparation of acetyl aceto natomanganese(III) complex.	**4**	27/06/2024	Practical hands on implementation
	Using chloropentammine cobalt(III) chloride, prepare nitro and nitritopentammine cobalt(III) chloride. Record the IR spectra of the isomers and interpret.	**4**	04/07/2024	Practical hands on implementation
	Estimate the chloride ion in a given complex by silver nitrate titration after ion-exchange separation.	**4**	11/07/2024	Practical hands on implementation
	Demonstration Experiments: a) Recording and interpretation of IR and NMR spectra of complexes.	**4**	18/07/2024	Practical hands on implementation

separation. 12. **Demonstration Experiments:** a) Recording and interpretation of IR and NMR spectra of complexes. b) Spectrochemical series-Evaluation of Dq value. c) DNA interaction with metal complexes by UV-visible absorption and viscosity methods.	b) Spectrochemical series-Evaluation of Dq value. c) DNA interaction with metal complexes by UV-visible absorption and viscosity methods.			

Subject: Analytical Chemistry Practicals-II
04 Hours/week – 64 Hours/Semester

Curriculum as prescribed by the Institution	Topics	No of Hours Req.	Date	Method of deployment
PART – A 1.Determination of calcium in limestone by redox, acid-base and complexation titrations. 2.Determination of vitamin C in orange juice by titration with cerium(IV) and with 2,6-dichlorophenol indophenol. 3.Determination of aluminium and magnesium in antacids by EDTA titration. 4.Analysis of a copper-nickel alloy sample for copper and nickel by EDTA titration using masking and selective demasking reactions. 5.Determination of saccharin in tablets by precipitation titration. 6.Determination of ascorbic acid in goose berry/bitter gourd by titrimetry and spectrophotometry using N-bromosuccinimide (NBS). 7.Analysis of a mixture of iron(II) and iron(III) by EDTA titration using pH control. 8.Determination of sulpha drugs by potentiometry using NaNO2 and iodometric assay of penicillin. 9.Polarographic determination of	Determination of calcium in limestone by redox, acid-base and complexation titrations.	**4**	12/04/2024	Practical hands on implementation
	Determination of vitamin C in orange juice by titration with cerium(IV) and with 2,6 dichloro phenol indophenol. Determination of aluminium and magnesium in antacids by EDTA titration.	**4**	19/04/2024	Practical hands on implementation
	Analysis of a copper-nickel alloy sample for copper and nickel by EDTA titration using masking and selective demasking reactions.	**4**	26/04/2024	Practical hands on implementation
	Determination of saccharin in tablets by precipitation titration. Determination of ascorbic acid in goose berry/bitter gourd by titrimetry and spectrophotometry using N-bromosuccinimide (NBS)	**4**	03/05/2024	Practical hands on implementation
	Analysis of a mixture of	**4**	17/05/2024	Practical

copper and zinc in brass. 10.Determination of sodium, potassium and calcium in mineral waters by atomic emission spectrometry. 11.Determination of iron in mustard seeds and phosphorus in peas by spectrophotometry. 12.Determination of ethanol in wine by titrimetric and spectrophotometric dichromate methods.	iron(II) and iron(III) by EDTA titration using pH control.			hands on implementation
	Determination of sulpha drugs by potentiometry using NaNO2 and iodometric assay of penicillin.	**4**	24/05/2024	Practical hands on implementation
	Determination of sodium, potassium and calcium in mineral waters by atomic emission spectrometry.	**4**	31/05/2024	Practical hands on implementation
	Determination of iron in mustard seeds and phosphorus in peas by spectrophotometry. Determination of ethanol in wine by titrimetric and spectrophotometric dichromate methods.	**4**	07/06/2024	Practical hands on implementation

Curriculum as prescribed by the Institution	**Topics**	**No of Hours Req.**	**Date**	**Method of deployment**
PART –B 1. Analysis of waste waters for DO and COD by titrimetry. 2. Analysis of a ground water sample for sulphate by titrimetry (EDTA) and turbidimetry. 3. Potentiometric determination of formula and stability constant of a silver-ammonia complex ion. 4. Determination of aspirin, phenacetin and caffeine in mixture and APC tablets by solvent extraction and UV spectrophotometry. 5. Kinetic determination of urinary creatinine and purity of a commercial H2O2 sample. 6. Determination of chromium(III) and iron(III) in a	Analysis of waste waters for DO and COD by titrimetry. Analysis of a ground water sample for sulphate by titrimetry (EDTA) and turbidimetry.	**4**	14/06/2024	Practical hands on implementation
	Potentiometric determination of formula and stability constant of a silver-ammonia complex ion. Determination of aspirin, phenacetin and caffeine in mixture and APC tablets by solvent extraction and UV spectrophotometry.	**4**	21/06/2024	Practical hands on implementation
	Kinetic determination of urinary creatinine and purity of a commercial H_2O_2 sample.	**4**	28/06/2024	Practical hands on implementation

mixture by kinetic masking methods. 7. Photometric and potentiometric titration of iron(III) with EDTA. 8. Photometric and potentiometric titration of copper with EDTA. 9. Analysis of brackish water for chloride content by a) spectrophotometry (mercuric thiocyanate method), b) conductometry (silver nitrate) and c) potentiometry (silver nitrate). 10. Conductometric titration of sodium acetate with HCl and NH4Cl with NaOH. 11. Ascorbic acid determination in natural orange juice by coulometry. 12. Analysis of waste water for a) Phosphate by molybdenum blue method b) ammonia-nitrogen by Nessler's method c) nitrite-nitrogen by NEDA method 13. Analysis of a soil sample for a) Calcium carbonate and organic carbon by titrimetry. b) Calcium and magnesium by EDTA titration. 14. Analysis of a soil sample for a) Nitrogen content by Kjeldahl method b) Available phosphorus by spectrophotometry. c) Nitrate-nitrogen/nitrite nitrogen/ammonia nitrogen by spectrophotometry. d) Sodium and potassium by flame photometry. 15. Analysis of urine for a) Urea and uric acid by titrimetrysnd spectrophotometry.	Determination of chromium(III) and iron(III) in a mixture by kinetic masking methods.			
	Photometric and potentiometric titration of iron(III) with EDTA. Photometric and potentiometric titration of copper with EDTA. Analysis of brackish water for chloride content by a) spectrophotometry (mercuric thiocyanate method), b) conductometry (silver nitrate) and c) potentiometry (silver nitrate).	**4**	04/07/2024	Practical hands on implementation
	Conductometric titration of sodium acetate with HCl and NH4Cl with NaOH. Ascorbic acid determination in natural orange juice by coulometry. Analysis of waste water for a) Phosphate by molybdenum blue method b) ammonia-nitrogen by Nessler's method c) nitrite-nitrogen by NEDA method	**4**	05/07/2024	Practical hands on implementation
	Analysis of a soil sample for a) Calcium carbonate and organic carbon by titrimetry. b) Calcium and magnesium by EDTA titration. c) Nitrate-nitrogen/nitrite nitrogen/ammonia nitrogen by spectrophotometry.	**4**	11/07/2024	Practical hands on implementation

b) Sulphate by precipitation titration after ion-exchange separation. c) Sugar by Benedict's reagent. 16. Analysis of blood for a) Cholesterol by spectrophotometry b) Bicarbonate by acid-base titration.	d) Sodium and potassium by flame photometry			
	Analysis of urine for a) Urea and uric acid by titrimetrysnd spectrophotometry. b) Sulphate by precipitation titration after ion-exchange separation.	**4**	12/07/2024	Practical hands on implementation
	Analysis of blood for a) Cholesterol by spectrophotometry b) Bicarbonate by acid-base titration.	**4**	19/07/2024	Practical hands on implementation

Subject: Dissertation
06 Hours/week – 64 Hours/Semester

Curriculum as prescribed by the university	Topics	No of Hours Req.	Date	Method of deployment
Dissertation	Theory class and practical	**6**	**10/04/2024 13/04/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**17/04/2024 20/04/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**24/04/2024 27/04/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**30/04/2024 04/05/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**08/05/2024 11/05/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**15/05/2024 11/05/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**22/05/2024 25/05/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**29/05/2024 1/06/2024**	**Practical hands on implementation**

	Theory class and practical	**6**	**05/06/2024 08/06/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**12/06/2024 15/06/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**19/06/2023 22/06/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**26/06/2024 29/06/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**10/07/2024 13/07/2024**	**Practical hands on implementation**
	Theory class and practical	**6**	**15/07/2024 16/07/2024**	**Practical hands on implementation**

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DEPARTMENT OF STUDIES IN BIOTECHNOLOGY

[**Choice Based Credit System (CBCS)**]

Lesson Plan For I & III Semester M.Sc., Biotechnology 2022-23

I Semester

Sl No	Code	Title of the Paper	Course Type	Credit Pattern L	T	P	Total Credits
1	**23D101**	Molecular Cell Biology	FCHC	3	1	0	4
2	**23D102**	Fundamentals of Biochemistry	FCHC	3	1	0	4
3	**23D103**	Techniques in Biology	FCHC	3	1	0	4
4	**23D104**	**Practical I** (Techniques in biology& Fundamentals of Biochemistry, Molecular Cell Biology/Genetics /Microbiology)	FCHC	0	0	5	5
Soft Core (Any TWO)							
1	**23D106**	Genetics	FCSC	3	0	0	3
2	**23D107**	Microbiology	FCSC	3	0	0	3
3	**23D108**	Food & Environmental Biotechnology	SC	3	0	0	3
TOTAL CREDITS **4 Hard Core (3 theory + 1 practical): 17 credits, 2 Softcore: 06 credits**							**23 CREDITS**

NOTE ADD ON COURSE: Interested students can opt for more than

"ONE SOFT CORE (THEORY)"

Department: DoS in Biotechnology

Subject: Molecular Cell Biology (FCHC) [Course code: **23D101**]

Term Period: November 2023 to March 2024

Hrs/week:03 **Total Hrs:48**

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module-I **Organization of the cell**	Universal features of cells,	2	22-11-2023	Lecture
	Ultra structure of prokaryotic and eukaryotic cells (Plants and animals),	2	23-11-2023 To 28-11-2023	Lecture
	Structure of plant cell wall, Structure of cell membrane and models,	2	29-11-2023	Lecture
	functions of cell membrane, Intracellular organelles:	2	30-11-2023	Lecture
	Structure and functions of Ribosomes, Golgi apparatus; Mitochondria,	1	04-12-2023	Lecture
	Chloroplast, Lysosomes, Centrosome, Endoplasmic reticulum, Nucleus-Internal organization,	1	05-12-2023	Lecture
	Chromatin- structure and function, cellular cytoskeleton.	2	06-12-2023	Lecture
Module-II **Cellular processes**	Cell cycle and its regulation	1	11-12-2023	Lecture
	Cell cycle check points, Molecular dynamics of cell division, interphase,	1	12-12-2023	Lecture
	Mitosis and meiosis	2	13-12-2023	Lecture
	Cyclins and CDKs, Cell differentiation: Stem cells	2	18-12-2023	Lecture
	Differentiation of stem cells into different cell types and organization into specialized tissues, apoptosis, necrosis & autophagy	2	19-12-2023	Lecture

	Molecular mechanisms of membrane transport active, passive and facilitated, Receptor mediated endocytosis.	2	20-12-2023 To 26-12-2023	Lecture
Module-III **Cancer Biology**	Introduction, Historical account, classification	2	27-12-2023	Lecture
	Characteristics of cancer cells, hallmark features of cancer cells, Carcinogenesis,	2	31-12-2023	Lecture
	Exogenous and endogenous carcinogens, cancer initiation	2	01-01-2024	Lecture
	promotion and progression, Cancer cell cycle, Viruses and cancer, Oncogenes	2	02-01-2024	Lecture
	Tumor suppressor genes with examples, cancer therapy present and future,	2	03-01-2024 To 08-01-2024	Lecture
	Role of p53 in cancer. Role of phytochemicals in cancer treatment, cancer stem cells.	2	09-01-2024	Lecture
Module–IV **Basics of Signal Transduction**	Extra-cellular matrix components, Cell junctions, Cell adhesion molecules,	2	10-01-2024 To 17-01-2024	Lecture
	Hormones and their receptors, Cell surface receptors as reception of extra- cellular signals,	2	18-01-2024	Lecture
	Types of cell, signalling, Growth factors- EGFR, VEGF, PDGF and their Signalling,	2	22-01-2024 To 24-01-2024	Lecture
	signaling through G-protein coupled receptors	2	05-02-2024 To 07-02-2024	Lecture
	Second messengers in signal transduction pathways:	2	12-02-2024	Lecture
	cAMP and calcium ions (Ca2+), signalling through Receptor tyrosine kinases	1	19-02-2024 To 21-02-2024	Lecture
	MAP kinase pathway, P13K -Akt pathway.	1	26-02-2024	Lecture

Department: DoS in Biotechnology

Subject: Fundamentals of Biochemistry (FCHC) [Course code: **23D102**]

Term Period: November 2023 to March 2024

Hrs/week:03 **Total Hrs:48**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Module 1: Basics of Chemical Bonding and Carbohydrates	**Bonding:** Covalent bond; coordinate bond; coordinate bond formation in transition metals.	03	22-11-2023 To 28-11-2023	Lecture
	Bonding of iron in hemoglobin and cytochromes, cobalt in Vit B_{12}, magnesium in chlorophyll. Special properties of water;	03	29-11-2023 To 04-12-2023	Lecture
	Structure and bonding, non-covalent interactions, reactions of carbohydrates.	03	05-12-2023 To 11-12-2023	Lecture
	Carbohydrates: Structure and classification of carbohydrates, monosaccharides (pentoses, hexoses), and polysaccharides) explanations.	03	12-12-2023 To 18-12-2023	Lecture
	Disaccharides (lactose, sucrose, maltose)	03	19-12-2023 To 26-12-2023	Lecture
	Polysaccharides (starch, cellulose, glycogen and bacterial cell wall	03	27-12-2023 To 31-12-2023	Lecture
Module II: Basics of Amino Acids and Proteins	Amino acids: Nomenclature, classification and buffering properties,	02	02-01-2024 To 03-01-2024	Lecture
	Zwitterionic structure, reactions of Amino acids.	02	03-01-2024 To 08-01-2024	Lecture
	Proteins: Primary, secondary, tertiary and quaternary structures, protein sequencing.	02	10-01-2024 To 17-01-2024	Lecture
	Factors responsible for protein folding: Anfinsen's experiment. Non-covalent interactions and S-S bridges in stabilizing the proteins,	02	18-01-2024 To 22-01-2024	Lecture
	Denaturation and renaturation of proteins, molten globule, chaperones.	02	22-01-2024 To 23-01-2024	Lecture

Module III: Basics of Lipids& Enzymology	**Lipids:** Classification & reaction of lipids; oils, fats, and waxes. Occurrence and properties of fatty acids, esters of fatty acids,	02	24-01-2024 To 29-01-2024	Lecture
	Cholesterol, phospholipids, glycolipids, sphingolipids, cerebrosides and gangliosides. Role in cell membrane.	02	05-02-2024 To 06-02-2024	Lecture
	Enzymology: Classification, enzyme activity, Michaelis-Menten kinetics, LB plot, inhibition - competitive, uncompetitive, non-competitive, determination of Ki,	02	07-02-2024 To 12-02-2024	Lecture
	Active site, allosterism - ATCase, isoenzymes- LDH, catalytic strategies, co-enzymes and cofactors, multienzyme complexes-PDC.	02	13-02-2024 To 14-02-2024	Lecture
Module IV: Basics of Nucleic Acids	**Nucleic Acids**: DNA as genetic material, Griffith, Avery & Macleod experiments,	03	19-02-2024 To 20-02-2024	Lecture
	Isolation of DNA & RNA from biological sources, secondary structure of DNA,	03	21-02-2024 To 26-02-2024	Lecture
	Watson and Crick model, Chargaff's rule; B and Z DNA. Features of mitochondrial, chloroplast DNA and plasmids.	03	27-02-2024 To 29-02-2024	Lecture
	Secondary structure of tRNA and clover leaf model. Physiochemical properties of nucleic acids, melting of DNA, T_m; factors affecting T_m, C_{ot} curve, classification of DNA basedon C_{ot} curve.	03	04-03-2024 To 06-02-2024	Lecture

Department: DoS in Biotechnology

Subject: Techniques in Biology (FCHC) [Course code: **23D103**]

Term Period: November 2023 to March 2024

Hrs/week:03 **Total Hrs:48**

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module-I Biological samples:	Tissue homogenization, Cell lysis techniques, extraction of cell cellular contents.	2	23-11-2023	Lecture
	Protein purification techniques: salting in, salting out,	2	24-11-2023	Lecture
	Dialysis and ultrafiltration.	2	25-11-2023	Lecture
	Centrifugation: Svedberg's constant, sedimentation velocity and sedimentation equilibrium	2	30-11-2023	Lecture
	Differential and density gradient centrifugation	2	1-12-2023	Lecture
	centrifugal elutriation, isolation of cell organelles (e.g. Mitochondria) from biological tissue samples	2	02-12-2023	Lecture
Module-II Spectroscopic analysis:	Principles and applications of colorimeter, IR, ESR, NMR& Raman's spectroscopy	3	04-12-2023 To 06-12-2023	Lecture
	spectrophotometer, fluorimeter	2	08-12-2023 To 09-12-2023	Lecture
	multiwell plate reader. Beer-Lambert's Law and its limitations	2	12-12-2023	Lecture

	Extinction coefficient, chromogenic and fluorescent probes their applications	3	14-12-2023	Lecture
	Principle of flame photometry, and X-ray crystallography	2	15-12-2023	Lecture
Module-III Chromatographic and electrophoretic techniques:	Principles, working and applications of paper chromatography (radial, ascending, descending and 2-D),	2	16-12-2023	Lecture
	Brief introduction, application of Adsorption, Ion exchange,Gel filtration	1	21-12-2023 To 23-12-2023	Lecture
	Affinity, Gas chromatography. Chromatofocusing	2	28-12-2023 To 30-12-2023	Lecture
	HPLC, UPLC and FPLC.	1	04-01-2024	Lecture
	Polyacrylamide gel electrophoresis, SDS-PAGE, IEF & 2DEF. Visualizing proteins using CBB, silver stain; glycoproteins and lipoproteins staining	2	05-01-2024 To 06-01-2024	Lecture
	Brief introduction to Zymogram and reverse zymogram	1	10-01-2024	Lecture
	Agarose gel electrophoresis, Visualizing nucleic acids in using Ethidium bromide	2	11-01-2024 To 13-01-2024	Lecture
	Fluorescence probes: SYBR green and Eeva green, Taq	1	18-01-2024 To 27-01-2024	Lecture
Module-IV Radiochemistry and Mass spectroscopy Isotopes:	Heavy isotopes and radio isotopes, half-life, decay constant, detection and quantitation	3	02-02-2-24 To 10-02-2024	Lecture
	Principle and working of GM counter and scintillation counter (solid/liquid).	3	15-02-2024 To 17-02-2024	Lecture

	Spectroscopy Principle and construction of mass spectrometer. m/e, tof, MALDI and ESI. LC-MS, LC-MS-MS	3	22-02-2024 To 24-02-2024	Lecture
	Radio isotopes in biology 3H, 14C, 32P, 131I,35S; Labeling of proteins and nucleic acids, autoradiography, pulse chase method, carbon dating	3	29-02-2024 To 07-03-2024	Lecture

Department: DoS in Biotechnology
Subject: Microbiology (FCSC) [Course code: **23D107**]

Term Period: November 2023 to March 2024

Hrs/week:03 **Total Hrs:48**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Module I: The beginning of microbiology and Microbial Characteristics	Introduction to Microbiology and Microbes;	2	23-11-2023	Lecture
	Hook, Antony van Leeuwenhoek and Cohn; Contribution of Pasteur and Koch.	2	24-11-2023	Lecture
	Morphology, structure, bacterial culture methods;	2	25-11-2023	Lecture
	Mutation and recombination in bacteria, plasmids,	2	30-11-2023	Lecture
	Transformation, transduction and conjugation; antimicrobial resistance.	2	1-12-2023	Lecture
	Culture collection and Maintenance of cultures.	2	02-12-2023	Lecture
Module II: Microbial Taxonomy and Microbial diversity	General Introduction Classification of microorganisms, criteria for classification;	2	04-12-2023 To 06-12-2023	Lecture
	classification of bacteria; Cyanobacteria, acetic acid bacteria, Pseudomonads, lactic and propionic acid bacteria,	2	08-12-2023 To 09-12-2023	Lecture
	Bacterial endospores, Mycobacteria and Mycoplasma.	2	12-12-2023	Lecture
	Archaea: Halophiles, Methanogens, Hyperthermophilic archae	2	14-12-2023	Lecture
	General properties of viruses, viral structure, sub-viral particles – viroids and prions.	2	15-12-2023	Lecture
	Eukarya: algae, fungi, slime moulds and protozoa; extremophiles and unculturable microbe	2	16-12-2023	Lecture
Module III: Microbial Growth and Control	Microbial growth: Growth curve, measurement of growth, synchronous growth, continuous culture,	2	19-12-2023 To 20-12-2023	Lecture

	Factors affecting growth like temperature, acidity, alkalinity, water availability and oxygen.	2	21-12-2023 To 23-12-2023	Lecture
	Sterilization, disinfection and antisepsis: physical and chemical methods for control of microorganisms,	2	28-12-2023 To 30-12-2023	Lecture
	Biological control of microorganisms. Microbes and environment: Nutrient cycles;	2	04-01-2024	Lecture
	Antibiotics,	2	05-01-2024 To 06-01-2024	Lecture
	Microbial communication system; quorum sensing, microbial fuel cells Prebiotics and probiotic	2	11-01-2024 To 13-01-2024	Lecture
Module IV: Beneficial and Harmful effects of Microorganism	Beneficial aspects of microbes and their metabolites in dairy and food industry,	2	18-01-2024 To 27-01-2024	Lecture
	Role of microbes in Environmental safety.	2	02-02-2-24 To 10-02-2024	Lecture
	Important microbial diseases of Plants caused by fungi, bacteria and viruses.	2	15-02-2024 To 17-02-2024	Lecture
	Important infectious diseases of humans, caused by bacteria, protozoa and viruses - tuberculosis, malaria, AIDS, rabies. Pathogenic fungi,	2	22-02-2024 To 24-02-2024	Lecture
	Emerging and resurgent infectious diseases.	2	29-02-2024 To 07-03-2024	Lecture

Department: DoS in Biotechnology

Subject: Food and Environmental Biotechnology (SC) [Course code: **23D108**]

Term Period: November 2023 to March 2024

Hrs/week:03 **Total Hrs:48**

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Introduction to Food biotechnology .	Fermented foods, Milk-based products	2	23-11-2023	Lecture
	Fermented vegetables, Fermented meats, fish , Beverages, vinegar,	2	24-11-2023	Lecture
	Mould fermentation - tempeh, soy sauce, rice wine.	2	25-11-2023	Lecture
	Enzymatic processing of fruit juices DNA-based methods for food authentication,	2	30-11-2023	Lecture
	comparative methods of toxicity testing in (novel) foods,	2	1-12-2023	Lecture
	Application of generic technologies in food and nutritional sciences; anti-cancer components in foods	2	02-12-2023	Lecture
Functional foods and Biotechnology	Biochemical processing in the improvement of functional foods with targeted health benefits and increased nutrient value	3	04-12-2023 To 06-12-2023	Lecture
	Pre- and Probiotics, single cell protein, single cell lipids.	2	08-12-2023 To	Lecture

			09-12-2023	
	Manipulation of fruit ripening process. Food processing, principles and practices, food ingredients and processing aids from biotechnological processes,	2	12-12-2023	Lecture
	Corn sweeteners, bacterial starter cultures, cold-adapted enzymes.	3	14-12-2023	Lecture
	Food spoilage, preservation, mycotoxins in food commodities.	4	15-12-2023 To 21-12-2023	Lecture
	Genetically modified foods, designer foods, detection of GM foods, Nutraceuticals, Concept of food parks.	2	23-12-2023	Lecture
Introduction to Environment	Renewable and non-renewable resources	1	28-12-2023	Lecture
	Current status of biotechnology in environment protection.	2	30-12-2023 To 04-01-2024	Lecture
	Waste water management: Bioreactors for wastewater treatment,	1	05-01-2024	Lecture
	Treatment of industrial effluents-dairy, distillery, paper and sugar industries.	1	06-01-2024	Lecture
	Membrane-based waste water treatment.	2	11-01-2024 To 13-01-2024	Lecture
	Biotechnology and Environment. Biodiversity and its	2	18-01-2024	Lecture

	conservation, Microbial ecology.			
Bioremediation	Concepts and principles, bioremediation using microbes in situ and ex situ bioremediation	1	27-01-2024	Lecture
	Biosorption and bioaccumulation of heavy metals.	3	15-02-2024 To 17-02-2024	Lecture
	Phytoremediation & Xenobiotics:	3	22-02-2024 To 24-02-2024	Lecture
	Degradation capabilities of microorganisms with reference to toxicology pesticides, herbicides, polyaromatic hydrocarbon,	3	29-02-2024 To 07-03-2024	Lecture

Department: DoS in Biotechnology

Subject: Practical I (Techniques in biology& Fundamentals of Biochemistry, Molecular Cell Biology/Genetics/Microbiology) [Course code: **23D104**]

Term Period: November 2023 to March 2024

Hrs/week:12 **Total Hrs: 160**

Prescribed Curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Practical I	Preparation buffers and solutions & Measurement of pH. .	3	23-11-2023	Lecture & Performance of experiment
	Estimation of reducing sugar by DNS method.	3	28-11-2023	Lecture & Performance of experiment
	Estimation of proteins by Lowry's method.	3	29-11-2023	Lecture & Performance of experiment
	Estimation of amino acids by Ninhydrin method.	3	30-11-2023	Lecture & Performance of experiment
	Estimation of saponification and iodine value of lipids.	6	04-12-2023 To 05-01-2023	Lecture & Performance of experiment
	Ascending, descending and circular paper chromatography for separationof amino acids.	12	06-12-2023 To 11-12-2023	Lecture & Performance of experiment
	TLC of amino acids	3	12-12-2023	Lecture & Performance of experiment
	Column chromatography- gel filtration.	6	13-12-2023 To 14-12-2023	Lecture & Performance of experiment
	Gel electrophoresis- native and SDS-PAGE and estimation of molecularweight of proteins.	6	18-12-2023 To 19-12-2023	Lecture & Performance of experiment
	Wavelength scans of proteins and nucleic acids.	6	20-12-2023 To 21-12-2023	Lecture & Performance of experiment
	Isolation of mitochondria by differential centrifugation.	6	26-12-2023 To 27-12-2023	Lecture & Performance of experiment

	Measurement of cell dimension by micrometry.	6	28-12-2023 To 01-01-2024	Lecture & Performance of experiment
	Cell Counting and viability by tryphan blue exclusion method.	3	02-01-2024	Lecture & Performance of experiment
	Study of mitosis in onion root tips.	3	03-01-2024	Lecture & Performance of experiment
	Study of meiosis in onion flower buds.	3	04-01-2024	Lecture & Performance of experiment
	Preparation of liquid and solid media for growth of microorganisms	6	08-01-2024 To 09-01-2024	Lecture & Performance of experiment
	Isolation of pure cultures from soil and water	6	11-01-2024 To 16-01-2024	Lecture & Performance of experiment
	Effect of temperature, pH, carbon and nitrogen sources on growth.	6	17-01-2024 To 18-01-2024	Lecture & Performance of experiment
	Microscopic examination of bacteria, yeast and molds& study of organisms by gram stain,acid fast stain and staining for spores.	6	22-01-2024 To 23-01-2024	Lecture & Performance of experiment
	Biochemical characterization of selected microbes.	12	24-01-2024 To 05-02-2024	Lecture & Performance of experiment
	Assay of antibiotics and demonstration of antibiotic resistance.	12	06-02-2024 To 15-02-2024	Lecture & Performance of experiment

III Semester

SlNo	Code	Title of the Paper	Course Type	Credit Pattern L	T	P	Total Credits
1	**23D301**	Plant Biotechnology	HC	3	1	0	4
2	**23D302**	Animal Biotechnology	HC	3	1	0	4
3	**23D303**	Immunology	FCHC	3	1	0	4
4	**23D304**	**Practical-III:** Plant Biotechnology. Animal Biotechnology& Immunology	HC	0	0	4	4
Soft Core (Any TWO)							
1	**23D305**	Natural products & Drug discovery	SC	3	0	0	3
2	**23D306**	Biostatistics & Bioinformatics	SC	3	0	0	3
3	**23D307**	Genomics& Proteomics	SC	3	0	0	3
TOTAL CREDITS **4 Hard Core (3 theory + 1 practical's): 16 credits, 2 Softcore: 06 credits**							**22** **CREDITS**

Department: DoS in Biotechnology

Subject: Plant Biotechnology (HC) [Course code: **23D301**]

Term Period: November 2023 to March 2024.

Hrs/week:03 **Total Hrs: 48**

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module I: Techniques in plant tissue culture	Concept of cellular Totipotency, Role of phytohormones in tissue culture techniques.	02	22-11-2023	Lecture
	Establishment of cultures- Nutritional requirements for in vitro cultures, Media preparation and sterilization.	02	23-11-2023 To 28-11-2023	Lecture
	Micropropagation: Propagation from shoot apical meristem, node cultures, stages of micropropagation and applications.	02	29-11-2023	Lecture
	Germplasm preservation: Plant germplasm storage using different methods.	02	30-11-2023	Lecture
	Haploid Production: Methods of androgenic haploid cultures.	02	04-12-2023	Lecture
	Protoplast Culture and Somatic Hybridization: Protoplast isolation, purification and culture, protoplast fusion, somatic	02	05-12-2023	Lecture

	hybridization, applications of somatic hybrids.			
Module II: Genetic manipulation of plants	**Plant transformation techniques**: Agrobacterium-plant interaction	02	06-12-2023	Lecture
	Ti plasmids-DNA transfer, disarmed Ti plasmid.	02	11-12-2023	Lecture
	Agrobacterium-mediated gene delivery- binary and co-integrated vectors.	02	12-12-2023	Lecture
	Direct gene transfer methods- Particle bombardment, PEG-mediated, electroporation.	02	13-12-2023	Lecture
	Transgenic plants: Herbicide resistance, pest resistance, plant disease resistance, improvement of nutritional quality.	02	18-12-2023	Lecture
	Biosafety regulations of transgenics.	02	19-12-2023	Lecture
Module III: Applications of Plant Tissue culture	**Secondary metabolite production**: Major secondary metabolic pathways- Phenyl propanoid pathways, Shikimate pathway;	02	20-12-2023 To 26-12-2023	Lecture
	Induction of bioactive secondary metabolites by plant tissue culture;	02	27-12-2023	Lecture
	Value addition via biotransformation	02	31-12-2023	Lecture
	hairy root cultures for production of	02	01-01-2024	Lecture

	pharmaceuticals.			
	Bioreactor systems for mass cultivation of plant cells.	02	02-01-2024	Lecture
	Molecular pharming: edible vaccines	02	10-01-2024 To 17-01-2024	Lecture
Module IV: Commercial product development	**Micro algal biotechnology: Cyanobacteria**, culture media, cultivation methods, Medicinal compound from cyanobacteria.	02	18-01-2024	Lecture
	Single-Cell Proteins (SCP Spirulina, Chlorella, Yeast & SCP;Production and proces Health benefits of SCP.	02	22-01-2024 To 24-01-2024	Lecture
	Agricultural products: biofertilizers and Vermiculture	02	05-02-2024 To 07-02-2024	Lecture
	.**Biofuels:** production of Ethanol, Methane, and their applications.	02	12-02-2024	Lecture
	Intellectual Property Rights (IPR): IPRs and agricultural technology- implications for India. Plant Breeder's Rights.	02	19-02-2024 To 21-02-2024	Lecture
	Labeling of GM crops and foods. Biodiversity, traditional knowledge, access and benefit sharing.	02	26-02-2024	Lecture

Department: DoS in Biotechnology

Subject: Animal Biotechnology (SC)[Course code: **23D302**]

Term Period November 2023 to March 2024.

Hrs/week:03 **Total Hrs:48**

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module I:	**Culture of animal cells:** Advantages and limitations of tissue culture, aseptic handling, facilities required, media and cell lines,	02	22-11-2023 To 28-11-2023	Lecture
	Different types of media, preparation& Storage etc., Primary culture: Isolation of mouse and chick embryos	02	29-11-2023 To 04-12-2023	Lecture
	Human biopsies, methods for primary culture, nomenclature of cell lines, sub culture and propagation,	02	05-12-2023 To 11-12-2023	Lecture
	Iimmortalization of cell lines, cell line designation, selection of cell line and routine maintenance. Secondary cell culture,	02	12-12-2023 To 18-12-2023	Lecture
	Cloning and Selection: Cloning protocol, stimulation of plating efficiency, suspension cloning, isolation of clones,	02	19-12-2023 To 26-12-2023	Lecture
	Isolation of genetic variants, interaction with substrate, selective inhibitors.	02	27-12-2023 To 31-12-2023	Lecture

Module II:	**Cell separation and characterization**: Density based, antibody based, magnetic and fluorescence based cell sorting. Characterization of cells based in morphology, chromosome analysis, DNA content	02	02-01-2024 To 03-01-2024	Lecture
	RNA and protein, enzyme activity, antigenic markers, cytotoxicity assays, cell quantitation, cell culture contamination: monitoring and eradication, cryopreservation.	02	03-01-2024 To 08-01-2024	Lecture
	Culturing of specialized cells: Epithelial, mesenchymal, neuro ectodermal, hematopoietic gonad and tumor cells,	02	10-01-2024 To 17-01-2024	Lecture
	Lympocyte preparation, culture of amniocytes, fish cells, confocal microscopy. Stem cell culture and its applications	02	18-01-2024 To 22-01-2024	Lecture
	Organic and embryo culture: Choice of models, organ culture, histotypic culture,	02	22-01-2024 To 23-01-2024	Lecture
	Filter-well inserts, neuronal aggregates whole embryo culture eggs, chick and mammalian embryos.	02	24-01-2024 To 29-01-2024	Lecture
Module III:	**Cell and Tissue engineering**: Growth factors for *in situ*	02	05-02-2024 To 06-02-2024	Lecture

	tissue regeneration, biomaterials in tissue engineering, approaches for tissue engineering of skin, bone grafts,			
	Nerve grafts. Haemoglobin-based blood substitutes, bio artificial or biohybrid organs. Limitations and possibilities of tissue engineering, 3D bioprinting.	02	07-02-2024 To 12-02-2024	Lecture
	***In vitro* fertilization and Embryo transfer:** *In vitro* fertilization in Humans, Embryo transfer in Humans, Super ovulation and embryo transfer in farm animals e.g.: Cow	02	13-02-2024 To 14-02-2024	Lecture
	Cloning of Animals: Methods and uses. Introduction, nuclear transfer for cloning, cloning from- embryonic cells, adult and fetal cells.	02	19-02-2024 To 20-02-2024	Lecture
	Cloning from short-term cultured cells: cloning of sheep, monkeys, mice, pets, goats and pigs. Cloning from long-term cultured cells: Cloning of cows from aged animals.	02	21-02-2024 To 26-02-2024	Lecture
	Cloning efficiency, cloning for production of transgenic animals, gene targeting for cloned transgenic animals, cloning for conservation,	02	27-02-2024 To 29-02-2024	Lecture

	human cloning: ethical issues and risks.			
Module IV :	**Transfection methods and transgenic animals**: Gene transfer, transfection of fertilized eggs or embryos.	02	04-03-2024 To 06-02-2024	Lecture
	Unfertilized eggs, culture mammalian cells, targeted gen transfer.	02	07-03-2024 To 09-02-2024	Lecture
	Transgenic animals and applications: mice and other animals, sheep, pigs, goats, cows and fish.	02	12-03-2024 To 14-02-2024	Lecture
	The legal and socio-economic impact of biotechnology at national and international levels, public awareness	02	15-02-2024 To 17-02-2024	Lecture
	Biosafety regulations-guidelines for research in transgenic animals.	02	22-02-2024 To 24-02-2024	Lecture
	Public awareness of the processes of producing transgenic organism	02	29-02-2024 To 07-03-2024	Lecture

Department: DoS in Biotechnology

Subject: Immunology (FCHC)[Course code: **23D303**]

Term Period: November 2023 to March 2024

Hrs/week:03 **Total Hrs:48**

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module I: Over view and Types of immunity:	**Innate immunity:** anatomic barriers, physiologic barriers, phagocytic barriers,	02	23-11-2023	Lecture
	microbial antagonism, acute phase reactants, anti-microbial peptides, interferons, inflammation,	02	24-11-2023	Lecture
	Pattern Recognition Receptors (PRRs), Pathogen Associated Molecular Patterns (PAMPs) and Damage Associated Molecular Patterns (PAMPs).	02	25-11-2023	Lecture
	Complement system: components, pathways of activation and biological consequences.	02	30-11-2023	Lecture
	Acquired immunity: Active **(**Naturally acquired and artificially acquired), Passive (Naturally acquired and	02	1-12-2023	Lecture

	artificially acquired),			
	Adaptive immunity, Humoral and Cell mediated immune response	02	02-12-2023	Lecture
	Tissues of immune system: Structural organization and functions of Lymphatic system, Primary lymphoid organs (Bone marrow, Thymus)	02	04-12-2023 To 06-12-2023	Lecture
	Secondary lymphoid organs and tissues (Spleen, Lymph node, Tonsils, Adenoids, Peyer's patches, Lamina propria, Mucosa- associated lymphoid tissue, Gut-associated lymphoid tissue).	02	08-12-2023 To 09-12-2023	Lecture
	Cells of the immune system: Hematopoiesis, Biology, Development and Functions of PMNLs, NK cells, Macrophages,T-Lymphocytes, B-Lymphocytes, Dendritic cells	02	12-12-2023	Lecture
Module II: Antigens, and Antibodies	**:** Antigens, Immunogens and Haptens, Factors influencing immunogenicity,	01	14-12-2023	Lecture

	adjuvants, epitopes,			
	Structure and functions of immunoglobulins,	01	15-12-2023	Lecture
	Synthesis of immunoglobulins,	02	16-12-2023	Lecture
	Genetic basis of immunoglobulin diversity.	02	19-12-2023 To 20-12-2023	Lecture
	MHC molecules: Types, structure, diversity and functions	02	21-12-2023 To 23-12-2023	Lecture
	Antigen recognition: Thymus dependent and independent Antigens, Clonal selection and immunological memory of B and T cells,	02	28-12-2023 To 30-12-2023	Lecture
	Antigen processing and presentation (Endogenous pathway, Exogenous pathway, Cross presentation), Superantigens.	02	04-01-2024	Lecture
	Monoclonal Antibodies: Hybridoma technology and production of mAbs, types, andapplications. Advantages and disadvantages of mAbs in therapy.	02	05-01-2024 To 06-01-2024	Lecture
Module III: Immune System in Health and	Immunological Tolerance and Autoimmunity,	02	11-01-2024 To 13-01-2024	Lecture

Disease:	Autoimmune Diseases (Organ specific autoimmune diseases-Graves' disease, Myasthenia Gravis, Systemic autoimmune diseases-Multiple Sclerosis, Rheumatoid Arthritis, Systemic Lupus Erythematosus),			
	Immunosuppression, Hypersensitivity (Type I, II, III & IV).	02	18-01-2024 To 27-01-2024	Lecture
	Vaccines and Vaccination: Principles of vaccination, Immune response to vaccines (Primary and Secondary response), Whole-Organism vaccines, Purified macromolecules as vaccines,	02	02-02-2-24	Lecture
	Recombinant vaccines, DNA vaccines, Multivalent subunit vaccines and Edible vaccines, Vaccine safety, Reverse vaccinology. Overview of COVID-19 vaccines.	02	10-02-2024	Lecture
	Primary & Secondary Immuno-Deficiency Disorders: **Primary:** Wiscott-Aldrich syndrome, Severe combined	02	15-02-2024	Lecture

	immunodeficiency disease (SCID), DiGeorge syndrome, Ataxia-telangectasia, Complement deficiencies. Gammopathies			
	Leucocyte adhesion defects, Chronic granulomatous disease,, X-linked agammaglobulinemia,	02	17-02-2024	Lecture
	Multiple myeloma	02	22-02-2024	Lecture
	Secondary: AIDS, Malnutrition, Drug regimen, Diabetes, Chronic infection.		24-02-2024	Lecture
Module IV Clinical Immunology :	**Transplantation of tissues and organs:** Nomenclature of transplantations, Transplantation reactions, HvG and GvH. Exception from rejections, Major and minor blood groups, Blood transfusion, tissue typing, Kidney and bone marrow transplantations. Immunosuppressive drugs.	02	29-02-2024	Lecture
	Immunological Techniques:.*In vitro* antigen-antibody reactions, serotyping,	02	07-03-2024	Lecture

	agglutination,			
	complement fixation, immunoprecipitation, Immunodiffusion, ELISA, RIA, IHC, Immunoelectrophoresis.	02	09-03-2024	Lecture
	Tumor immunology: Neoplasms, tumor-associated antigens, immune response to tumor antigens, immunologic factors favoring tumor growth, immune surveillance, Tumor necrosis factor α and β.Metastatic processes,	02	11-03-2024	Lecture
	Immuno diagnosis, Anti tumour drugs, Immunotherapy.	02	12-03-2024	Lecture

Department: DoS in Biotechnology

Subject: Natural products and Drug discovery (SC) [Course code: **22D305]**

Term Period: November 2023 to March 2024

Hrs/week: 3/week **Total Hours: 48**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Module I **Prospects of Natural Products research in the 21st Century**	Introduction, use of natural products in traditional medicines	01	23-11-2023	Lecture
	Marine natural products, Use of herbal remedies and the potential of drug development from natural products and novel drug templates: paclitaxel, podophyllotoxin, artimisinin etc.	02	24-11-2023	Lecture
	Recent development in the research on naturally occurring polyphenolic compounds: Introduction	02	25-11-2023	Lecture
	Biosynthetic pathway, isolation and characterization	02	30-11-2023	Lecture
	Biological and pharmacological activities of different class of phytoconstituents	02	1-12-2023	Lecture
	Alkaloids, flavonoids, terpenoids, glycosides, steroids, saponins, (Antioxidant activity, cyto-toxic activity, anticancer and anti-microbial activity etc).	02	02-12-2023	Lecture
	Aid design of clinical studies.	01	04-12-2023 To 06-12-2023	Lecture
Module II	Introduction, recent developments, applications.	02	08-12-2023 To	Lecture

Natural product drug discovery from different sources (marine, microbial, mineral etc):			09-12-2023	
	Extraction and isolation techniques: Introduction, Principle	02	12-12-2023	Lecture
	Applications of different extraction & isolation methods	02	14-12-2023	Lecture
	Soxhlet extraction, microwave extraction,	02	15-12-2023 To 21-12-2023	Lecture
	Supercritical fluid extraction, solid phase extraction,	02	23-12-2023	Lecture
	Column chromatography, Flash chromatography.	02	28-12-2023	Lecture
Module III Target identification and molecular modelling	Identification of target or drug leads associated with a particular disease by different techniques including combinations of molecular modeling	02	30-12-2023 To 04-01-2024	Lecture
	Combinatorial libraries and high-throughput screening (HTS); Use of bioinformatics and data processing in identification of lead compounds	02	05-01-2024	Lecture
	Rational drug design, Modelling drug/receptor interactions with the emphasis on molecular mechanisms	02	06-01-2024	Lecture
	Molecular dynamics simulations and homology modelling; Conformational sampling, macromolecular folding	02	11-01-2024 To 13-01-2024	Lecture

	Structural bioinformatics, receptor-based and ligand-based design and docking methods, in silico screening of libraries, semi-empirical and ab-initio methods	02	18-01-2024	Lecture
	QSAR methods, molecular diversity, design of combinatorial libraries of drug-like molecules, macromolecular and chemical databases	02	27-01-2024	Lecture
Module IV **Lead optimization**	Identification of relevant groups on a molecule that interact with a receptor and are responsible for biological activity	02	15-02-2024 To 17-02-2024	Lecture
	Understanding structure activity relationship; Structure modification to increase potency and therapeutic index	02	22-02-2024 To 24-02-2024	Lecture
	Concept of quantitative drug design using Quantitative structure–activity relationship models (QSAR models)	02	29-02-2024 To 07-03-2024	Lecture
	Bioanalytical assay development in support of in vitro and in vivo studies (LC/MS/MS, GC/MS and ELISA)	02	09-03-2024	Lecture
	Preclinical development: Principles of drug absorption, drug metabolism and distribution - intestinal absorption, metabolic stability, drug-drug interactions, plasma protein binding assays, metabolite profile studies, Principles of toxicology	02	11-03-2024	Lecture
	Experimental design for	02	12-03-2024	Lecture

	preclinical and clinical PK/PD/TK studies, Selection of animal model; Regulatory guidelines for preclinical PK/PD/TK studies; Scope of GLP, SOP for conduct of clinical & non clinical testing, control on animal house, report preparation and documentation. Integration of nonclinical and preclinical data tool			

Department: DoS in Biotechnology

Subject: Biostatistics & Bioinformatics (SC)[Course code: **23D306**]

Term Period: November 2023 to March 2024

Hrs/week:03 **Total Hrs:48**

Prescribed Curriculum	Topics	No. of Hours required to completed	Date	Method of Deployment
Module I:	**Biostatistics** Statistical concepts: Data structure, sampling methods,	02	23-11-2023	Lecture
	Descriptive statistics - data collection, tabulation	02	24-11-2023	Lecture
	Measures of central tendency: mean, median, mode	02	25-11-2023	Lecture
	Measures of dispersion: Range, interquartile range, mean deviation,	02	30-11-2023	Lecture
	Standard deviation, standard error, .	02	1-12-2023	Lecture
	Coefficient of variation, confidence limits	02	02-12-2023	Lecture
Module II:	Types of distribution of data: Normal, Binomial, Poisson	02	04-12-2023 To 06-12-2023	Lecture
	Hypothesis testing: Z-test, t-test, ANOVA,	02	08-12-2023 To 09-12-2023	Lecture
	Multiple comparisons – LSD and DMRT,	02	12-12-2023	Lecture
	Chi- square test; Regression and correlation;	02	14-12-2023	Lecture
	Non-parametric significance tests.	02	15-12-2023	Lecture
	Experimental designs- CRBD, RCBD, LSD,	02	16-12-2023	Lecture

	factorial; data transformation- arcsine, log, square-root. Probability.			
Module III:	**Bioinformatics-** an overview, Definition and History, Applications of Bioinformatics.	01	19-12-2023 To 20-12-2023	Lecture
	Introduction to Genomics: Genome mapping, Genome sequencing, human Genome project.	02	21-12-2023 To 23-12-2023	Lecture
	Introduction to Proteomics: Tools and techniques in proteomics, Sequence formats, Homology and similarity.	02	28-12-2023 To 30-12-2023	Lecture
	Introduction to Data mining, NCBI, EBI, DDBJ, Database search software: ENTREZ, SRS, Expasy. Protein Sequence Databases, UNIPROT, Structure Database: PDB	02	04-01-2024	Lecture
	Sequence Analysis: definition of sequence analysis,	02	05-01-2024 To 06-01-2024	Lecture
	Introduction to Sequences, alignments and Dynamic Programming; Local alignment and Global alignment (algorithm and example), Pair wise Alignment, and significance of alignment,	02	11-01-2024 To 13-01-2024	Lecture
	Tools of sequence alignment, Homology sequence search, Nucleotide Sequence Analysis,	02	18-01-2024 To 27-01-2024	Lecture
	Protein Sequence Analysis, Parameters of Blast, BlastN, BlastP, Interpreting Blast Results.	02	02-02-2-24 To 10-02-2024	Lecture
Module IV:	Multiple sequence analysis, scoring pattern, exhaustive and heuristic algorithms;	02	15-02-2024 To 17-02-2024	Lecture
	Parameters of CLUSTAL-W and CLUSTALX for multiple sequence alignment, interpretation.	02	22-02-2024 To 24-02-2024	Lecture
	Phylogenetic analysis: methods and tools.RASMOL Display Styles- Wire Frame, Ball and Stick, Space Fill, Ribbons, Cartoons	02	29-02-2024 To 07-03-2024	Lecture

	Drug discovery: Introduction, drug discovery technologies, virtual high-throughput *in silico* screening, Target validation EMBOSS.	02	09-03-2024	Lecture
	Introduction to emboss Software package and its key features, other latest commercial softwares.	02	12-03-2024	Lecture

Department: DoS in Biotechnology

Subject: Practical-III: Plant Biotechnology. Animal Biotechnology& Immunology (HC)[Course code: **23D304**

Term Period: November 2023 to March 2024

Hrs/week:12 **Total Hrs:64**

Prescribed Curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Practical III	Preparation of plant tissue culture media, Callus induction	2	04-12-2023 To 05-01-2023	Lecture & Performance of experiment
	Establishment of cell suspension cultures for plant secondary metabolite production	3	06-12-2023 To 11-12-2023	Lecture & Performance of experiment
	Encapsulation of somatic embryos and production of synthetic seeds	3	12-12-2023	Lecture & Performance of experiment
	Organ cultures: Shoot tip, nodal, anther and leaf cultures	3	13-12-2023 To 14-12-2023	Lecture & Performance of experiment
	Secondary metabolite estimations: Colorimetry	3	18-12-2023 To 19-12-2023	Lecture & Performance of experiment
	Secondary metabolite estimations: TLC methods	3	20-12-2023 To 21-12-2023	Lecture & Performance of experiment
	Preparation of media, culture and	3	26-12-2023 To 27-12-2023	Lecture & Performance of experiment
	Maintenance of cell lines, trypsinization	3	28-12-2023 To 01-01-2024	Lecture & Performance of experiment
	MTT assay for cytotoxicity	3	02-01-2024	Lecture & Performance of experiment
	Purification of IgG.	3	03-01-2024	Lecture & Performance of experiment
	Slide agglutination test/ Blood	2	04-01-2024	Lecture & Performance of

	grouping			experiment
	Immunoprecipitation test-Ouchterlony double diffusion.	3	08-01-2024 To 09-01-2024	Lecture & Performance of experiment
	Purification of IgG.	3	11-01-2024 To 16-01-2024	Lecture & Performance of experiment
	Immunofluorescence for localization of an antigen.	3	17-01-2024 To 18-01-2024	Lecture & Performance of experiment
	ELISA for quantification of an antigen.	3	22-01-2024 To 23-01-2024	Lecture & Performance of experimentt
	Western blotting and detection.	3	24-01-2024 To 05-02-2024	Lecture & Performance of experiment
	Complement fixation	3	06-02-2024 To 15-02-2024	Lecture & Performance of experiment
	Clinical laboratory visits	3	19-02-2024	Lecture & Performance of experiment

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DEPARTMENT OF STUDIES IN BIOTECHNOLOGY
[Choice Based Credit System (CBCS)]

Lesson Plan For II& IV M.Sc., Biotechnology 2023-24

II Semester

Sl. No.	Code	Title of the Paper	Course Type	Credit Pattern L	T	P	Total Credits
1	**23D201**	Molecular Biology	FCHC	3	1	0	4
2	**23D202**	Genetic Engineering	FCHC	3	1	0	4
3	**23D203**	**Practical II** (Molecular Biology, Genetic Engineering and Molecular Diagnostics/Molecular Plant Pathology /Bioprocess Technology)	HC	0	0	5	5
	Soft Core (Any TWO)						
1	**23D205**	Molecular Diagnostics	FCSC	3	0	0	3
2	**23D208**	Molecular Plant pathology	SC	3	0	0	3
3	**22D207**	Bioprocess technology	SC	3	0	0	3
Open Elective							
1		**OPEN ELECTIVE** (Choose from other department)	OE				4
Open Elective (For other discipline students)							
1	**22D207**	Biotechnology and its applications	OE	4	0	0	4
TOTALCREDITS **3 Hard Core (2 theory + 1 practical): 13 credits** **2 Soft Core: 06 credits and 1 Open elective:04 credits**							**23 CREDITS**

Department: DoS in Biotechnology

Subject: Molecular Biology (FCHC)[Course code: **23D201**]

Term Period: May – July 2024

Hrs/week:03 **Total Hrs:48**

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module I: **A) Genome organization** **B) DNA**:	Prokaryotic and eukaryotic genome organization,	1	02-05-2024	Lecture
	Central dogma, structural organization of chromosome,	2	03-05-2024	Lecture
	structure and functions of DNA & RNA,	2	04-05-2024	Lecture
	Biochemical evidences for DNA as genetic material.	1	06-06-2024	Lecture
	Chemistry of DNA	2	08-05-2024	Lecture
	Forces stabilizing DNA structure, Physical Properties of Ds DNA	1	13-05-2024	Lecture
	(UV absorption spectra Denaturation and renaturation),	1	14-05-2024	Lecture
	Chemical that react with DNA, Interaction with small ions	1	15-05-2024 To 20-05-2023	Lecture
	DNA binding motifs: Zinc finger, leucine zipper, helix-turn- helix others motifs, DNA binding and kinks.	1	21-05-2024	Lecture
Module II: **A)DNA topology:** **B) DNA Replication:**	Supercoiled form of DNA	1	22-05-2024	Lecture
	Biology of super coiled DNA,	1	24-05-2024 To 27-052024	Lecture
	DNA topoisomerases,	1	28-05-2024	Lecture
	Effect of supercoiling on structure of DNA and role of supercoiling in gene expression and DNA replication.	2	04-06-2024	Lecture
	Characteristics and functions of bacterial DNA polymerases I,	1	05-06-2024	Lecture

	Mechanism of prokaryotic DNA replication,	1	08-06-2024	Lecture
	Models of replications in prokaryotes.	1	19-6-2024	Lecture
	Fidelity of replication, Eukaryotic DNA polymerases and mechanism of replication.	1	20-06-2024 To 24-06-2024	Lecture
	Replication of viral DNA, DNA replication in telomeric regions, Telomerases	1	25-06-2024	Lecture
	Telomerases, mechanism of action of topoisomerase I and II	1	02-07-2024	Lecture
	Models of DNA replication, Inhibitors of replication	1	03-07-2024	Lecture
Module III: **Transcription & Translation:**	Characteristics and function of bacterial RNA polymerases Eukaryotic RNA polymerases,	2	08-07-2024	Lecture
	Mechanism of transcription and regulation. transcription factors, Stringent response	2	09-07-2024	Lecture
	Post transcriptional modifications of mRNA mechanism of splicing, Processing of tRNA and rRNA	2	10-07-2024	Lecture
	Inhibitors of transcription. Mechanism of action of ribozymes	2	11-07-2024 To 15-07-2023	Lecture
	Structure and role of tRNA in protein synthesis, ribosome structure,	1	16-07-2024	Lecture
	Initiation, elongation and termination in detail in prokaryotes as well as eukaryotes and Post translational processing, Control of translation in eukaryotes (Antisense RNA, Heme and interferon).	2	17-07-2024	Lecture

Module IV **Regulation of Gene expression in prokaryotes and eukaryotes: localization & Gene Silencing**: **Non coding RNA**:	Positive and negative regulation. lac-, ara-, his- and trp- operon regulation;	2	18-07-2024	Lecture
	antitermination, global regulatory responses;	1	19-07-2024	Lecture
	Regulation of gene expression in eukaryotes	1	22-07-2024 To 24-07-2024	Lecture
	Transcriptional, translational and processing level control mechanisms.	2	25-07-2024	Lecture
	Export of secretory proteins-signal hypothesis,	1	26-07-2024	Lecture
	transport and targeting of proteins to mitochondria, chloroplast	1	27-07-2024	Lecture
	peroxisomes, Gene Silencing: Definition, types, RNAi pathway, shRNA& CRISPR-CAS.	1	28-07-2024	Lecture
	coding and non-coding RNA, types of ncRNA	1	29-07-2024	Lecture

Department: DoS in Biotechnology

Subject: Genetic Engineering (FCHC) [Course code: **23D202**]

Term Period: May –July 2024

Hrs/week:03 **Total Hrs:48**

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module-I **Cloning and Expression vectors**:	Plasmids, lambda vectors, M13 Phage, cosmids, phagemids,	2	02-05-2024	Lecture
	Artificial chromosome vectors-YACs, PACs and BACs	2	03-05-2024	Lecture
	plant and animal viruses as vectors, Transposons	2	04-05-2024	Lecture
	Expression vectors-prokaryotic (pRSET, pET), eukaryotic (pcDNA3, pCEP),	2	06-06-2024	Lecture
	Baculovirus and Pichia vector system, plant-based vectors-Ti and Ri,	2	08-05-2024	Lecture
	binary and shuttle vectors, Gene cloning: genomic cloning, c-DNA cloning,	2	13-05-2024	Lecture
Module-II **Gene manipulation**	Restriction enzymes, restriction mapping, cloning in plasmid, Phage and cosmid vectors	2	14-05-2024	Lecture
	insertion of foreign DNA into host cells- transformation, electroporation,	2	15-05-2024 To 20-05-2023	Lecture
	Transfection transient and stable, screening methods for transformants	2	21-05-2024	Lecture
	downstream processing of recombinant proteins, affinity tags- His-tag	2	22-05-2024	Lecture

	GST-tag, MBP-tag, Fc-tag.	1	24-05-2024 To 27-052024	Lecture
	Construction and screening of genomic and cDNA libraries,	1	28-05-2024	Lecture
	chromosome walking, Chromosome Jumping,	1	04-06-2024	Lecture
	BAC libraries and assembly of BACs into contigs	1	05-06-2024	Lecture
Module-III **Gene analysis techniques**	Hybridization techniques- Southern, Northern, South-western	2	08-06-2024	Lecture
	Far-western, Colony hybridization	1	19-6-2024	Lecture
	fluorescence in situ hybridization, molecular probes- preparation, labelling, amplification	2	20-06-2024 To 24-06-2024	Lecture
	Polymerase chain reaction- Principle, primer designing, Types- RT-PCR,	1	25-06-2024	Lecture
	Realtime PCR, colony PCR, Multiplex PCR, Hot-start PCR,	2	02-07-2024	Lecture
	asymmetric PCR, Sequencing methods- chemical sequencing of DNA (Maxam and Gilberts methods and Sangers dideoxy method),	1	03-07-2024	Lecture
	automated DNA sequencing, sequencing by DE-MALDI-TOFMS,	1	08-07-2024	Lecture
	microarray. ChIP and Chip-on-chip techniques	1	09-07-2024	Lecture
	Chromogenic in situ hybridization, qPCR, next generation sequencing.	1	10-07-2024	Lecture

Module-IV **Gene therapy, transgenics and Genome editing**	Ex vivo and in vivo gene therapy	2	11-07-2024 To 15-07-2023	Lecture
	Vectors and other delivery systems for gene therapy,	2	16-07-2024	Lecture
	Invitro gene therapy, gene therapy of genetic diseases	2	17-07-2024	Lecture
	Neurological, metabolic disorders and cystic fibrosis, ,	2	18-07-2024	Lecture
	viruses for gene therapy-lentivirus	2	19-07-2024	Lecture
	adenovirus. Gene targeting, knockout mice, genome editing by CRISPR-CAS	2	22-07-2024 To 24-07-2024	Lecture

Department: DoS in Biotechnology

Subject: Molecular Diagnostics (FCSC)[Course code: **23D205**]

Term Period: June - October

Hrs/week:03 **Total Hrs:48**

Prescribed Curriculum	Topics	No. of hours required to Complete	Date	Method of Deployment
Module 1: Introduction and History of diagnostics:	Introduction and History of diagnostics of diseases, mode of infection, types of infectious diseases	2	02-05-2024	Lecture
	Philosophy and general approach to clinical specimens. genetic basis of diseases, inherited diseases.	2	03-05-2024	Lecture
	Infection – mode of transmission in infections, factors predisposing to microbial pathogenicity, inborn errors of metabolism.	2	04-05-2024	Lecture
	Traditional disease diagnosis methods: Diagnosis of infectious diseases caused by bacteria, fungi, viruses, protozoa and Helminthes,	2	09-06-2024	Lecture
	Philosophy and general approach to clinical specimens, Sample collection- method of collection, transport	2	10-05-2024	Lecture
	Processing of samples, Interpretation of results, Normal microbial flora of the human body, Host-Parasite relationships	2	11-05-2024	Lecture with case study

Module II: Molecular techniques for diagnosis	Basics and Implication of Molecular techniques in Genome resolution, detection and analysis of pathogen causing disease: PCR, Real-time; Multiplex;	3	16-05-2024	Lecture
	FISH; RFLP; DGGE; SSCP; Nucleic acid sequencing: new generations of automated sequencers;	2	17-05-2024 To 20-05-2023	Lecture
	Microarray chips; EST; SAGE; microarray data normalization & analysis;	2	23-05-2024	Lecture
	Molecular markers: 16SrRNA typing; MALDITOF-MS;	3	24-05-2024	Lecture
	LCMS&NMR technological platforms. Biochemical tests & Immunoassays: Detection and quantification of biochemical parameters. Types: RIA, ELISA, Chemiluminescent IA, FIA and specific applications; Immunohistochemistry– principle and techniques. Different Levels of Biosafety, Containment.	4	25-05-2024 To 27-052024	Lecture
Module III: Major Metabolic & Genetic disorders:	Traditional methods for the diagnosis of metabolic errors (Diabetes Type 1 &Type 2	2	29-05-2024	Lecture
	Hyperthyrodism & Hypothyrodism). Disease due to genetic disorders (Sickle cell anemia & Cystic fibrosis).	1	30-05-2024	Lecture
	Identifying human disease genes., Methods available for the diagnosis of genetic diseases and metabolic	2	31-05-2024	Lecture

	disorders			
	Blood (formation, composition, function and pathology of blood disorders (haemoglobinopathies, hemophilia),	1	08-06-2024	Lecture
	Muscle disorders (Duchene muscular dystrophy-DMD, Becker's muscular dystrophy-BMD, spinal muscular atrophy-SMA),	1	12-6-2024 To 13-06-2024	Lecture
	Bone disorders Osteogenesis imperfecta, Rheumatoid arthritis), Skin disorder (Muir-Torre *syndrome*), Eye disorder (Retinitis pigmentosa).	2	20-06-2024 To 19-06-2024	Lecture
	Neonatal and Prenatal disease diagnostics. Gender identification using amelogenin genelocus. Amplification of Y chromosome specific Short Tandem Repeats (Y-STR). Analysis of mitochondrial DNA for maternal inheritance	2	21-06-2024	Lecture
	Karyotyping & characteristics of Karyotyping. Molecular diagnosis for early detection of cerebral palsy, Down syndrome etc.	1	04-07-2024	Lecture
Module -IV: Cancer diagnosis	Molecular Oncology Tests, Analysis of the Expression of Multiple Genes and Cancer Prognosis, Analysis of Lymph Nodes to Detect Metastasis of Breast Cancer,	3	05-07-2024	Lecture

	Screening for Colorectal Cancer: Stool-Based DNA Screening, Leukemias and Lymphomas, DNA Methylation Tests and Cancer, Predicting Risk of Developing Cancer.	3	06-07-2024	Lecture
	Personalized Medicine: Pharmacogenomics and Companion Diagnostics, CytochromeP450 and Drug Metabolism, Targeted Cancer Therapies and Companion Diagnostics Tests,	3	11-07-2024	Lecture
	Testing for HER2/neu Overexpression in Breast Cancer, Testing for Epidermal Growth Factor Receptor (EGFR), UGT1A1 Genetic Variants, Pharmacogenetics and Response to Antiretroviral Therapy, Thiopurine Methyltransferase and Metabolism of Thiopurine Drugs	4	12-07-2024	Lecture

Department: DoS in Biotechnology

Subject: Molecular plant pathology (SC) [Course code: **23D208**]

Term Period: May – July 2024

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Module I The fundamentals of plant pathology	The concept of plant disease, the causal agents	02	02-05-2024	Lecture
	The significance of plant diseases, the control of plant diseases	02	03-05-2024	Lecture
	Fungal diseases: establishing infection – dispersal spores	02	04-05-2024	Lecture
	Finding a suitable host, spore attachment, germination process penetration, germ-tube elongation, induction appressoria, cell-wall degrading enzymes	02	09-06-2024	Lecture
	Development of disease – Basic concepts of necrotrophy and biotrophy	02	10-05-2024	Lecture
	Host barriers,	02	11-05-2024	Lecture
Module II Bacterial and	Communication between bacteria, plant penetration,attachment	02	16-05-2024	Lecture

viral diseases	Stimulation gene expression, cell wall degrading enzymes	02	17-05-2024 To 20-05-2023	Lecture
	Toxins, hormones, extracellular polysaccharides	02	23-05-2024	Lecture
	Determinants of host specificity	02	24-05-2024	Lecture
	Plant viruses: structure and replication, infection,	02	25-05-2024 To 27-052024	Lecture
	Types of viruses, viroids	02	29-05-2024	Lecture
Module III Genetics of plant diseases and resistance	Genes and diseases, Mechanism of variability, stages of variation in pathogens	02	30-05-2024	Lecture
	Types of plant disease resistance to pathogens	02	31-05-2024	Lecture
	Defense mechanism of plants, Pre-existing, structural, chemical and biochemical defenses	02	08-06-2024	Lecture
	MAP kinases, ion fluxes and calcium homeostasis	02	20-06-2024 To 19-06-2024	Lecture
	. The oxidative burst, Nitric oxide, (p)ppGpp signaling	02	21-06-2024	Lecture
	Breeding for resistance	02	04-07-2024	Lecture

Module IV: **Application of molecular biology to conventional disease control strategies**	The use of tissue culture in plant breeding	02	05-07-2024	Lecture
	The use of chemicals for disease control, biological control- PGPR and PGPF	02	12-07-2024	Lecture
	Transgenic approaches for crop protection- Bt cotton	02	15-07-2024 To 16-07-2024	Lecture

Department: DoS in Biotechnology

Subject: Practical II:(**Molecular Biology, Genetic Engineering and Molecular Diagnostics/Molecular Plant Pathology /Bioprocess Technology**) [Course code: **23D203**]

Term Period: May–July 2024

Hrs/week:12 **Total Hrs:64**

Prescribed Curriculum	Topics	No. of hours required to complete	Date	Method of deployment
Practical II	Estimation of DNA by diphenylamine method.	3	02-05-2024	Lecture & Performance of experiment
	Estimation of RNA by orcinol method.	3	06-05-2024	Lecture & Performance of experiment
	Isolation of Genomic DNA from yeast cell, Determination of purity and concentration of isolated DNA using spectrophotometer and agarose gel electrophoresis.	4	07-05-2024	Lecture & Performance of experiment
	Restriction digestion of plasmid and analysis	9	08-06-2024	Lecture & Performance of experiment
	DNA ligation	3	09-05-2024	Lecture & Performance of experiment
	Isolation of plasmids from bacteria by agarose gel electrophoresis.	6	13-05-2024	Lecture & Performance of experiment
	Preparation of competent *E.coli* cells for Bacterial transformation.	6	14-05-2024	Lecture & Performance of experiment

	Induction of gene expression and purification of the induced protein from the host.	3	15-05-2024	Lecture & Performance of experiment
	Amplification, Purification and separation of PCR product	6	20-05-2024 To 23-05-2024	Lecture & Performance of experiment
	Production of recombinant protein	6	02-06-2023 To 03-06-2023	Lecture & Performance of experiment
	Isolation of Metagenome (sediment/soil).	4	21-05-2024	Lecture & Performance of experiment
	Nucleic acid labeling and Southern Hybridization.	4	05-06-2024 To 22-05-2024	Lecture & Performance of experiment
	RNA isolation and agarose gel electrophoresis.	4	12-06-2024 To 10-06-2024	Lecture & Performance of experiment
	Culture independent analysis of microbes by DGGE (Denatured Gradient Gel Electrophoresis).	4	13-06-2024 To 17-06-2024	Lecture & Performance of experiment
	Identification of human bacterial pathogens by Polymerase chain reaction	3	18-05-2024	Lecture & Performance of experiment
	Isolation of fungal pathogens from plant.	3	19-06-2024	Lecture & Performance of experiment
	Isolation of bacterial plant pathogens.	3	20-06-2024	Lecture & Performance of experiment
	Estimation of phenolic contents in diseased and healthy plants	3	24-06-2024	Lecture & Performance of experiment

	Extraction of cellulose from plant pathogens	3	01-07-2024 To 04-07-2024	Lecture & Performance of experiment
	Screening for antagonism	3	08-07-2024 To 10-07-2024	Lecture & Performance of experiment

IV Semester

Sl. No.	Code	Title of the Paper	Course Type	CreditPattern L	T	P	Total Credits
1	**23D401**	Project Work	HC	0	0	07	7
Soft Core (Any One)							
1	**23D402**	Molecular plant pathology	SC	3	1	0	4
2	**23D403**	Stem cell & regenerative medicine	SC	3	1	0	3
TOTALCREDITS **1 Hard Core:10 credits, 1 Soft core: 03 credits**							**11** **CREDITS**

Department: DoS in Biotechnology

Subject: Molecular plant pathology (SC) [Course code: **23D402**]

Term Period: May–July 2024

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Module I The fundamentals of plant pathology	The concept of plant disease, the causal agents	02	05-06-2024 To 06-06-2024	Lecture
	The significance of plant diseases, the control of plant diseases	02	07-06-2024 To 08-04-2024	Lecture
	Fungal diseases: establishing infection – dispersal spores	02	10-06-2024 To 11-06-2024	Lecture
	Finding a suitable host, spore attachment, germination process penetration, germ-tube elongation, induction appressoria, cell-wall degrading enzymes	02	12-06-2024 To 13-06-2024	Lecture
	Development of disease – Basic concepts of necrotrophy and	02	17-06-2024 To 18-06-2024	Lecture

	biotrophy			
	Host barriers, the role of toxins and enzymes, biotrophy	02	19-06-2024 To 20-06-2024	Lecture
Module II Bacterial and viral diseases	Communication between bacteria, plant penetration, attachment	02	22-06-2024 To 23-06-2024	Lecture
	Stimulation gene expression, cell wall degrading enzymes	02	24-06-2024 To 25-06-2024	Lecture
	Toxins, hormones, extracellular polysaccharides	02	26-06-2024 To 27-06-2024	Lecture
	Determinants of host specificity	02	28-06-2024 To 29-06-2024	Lecture
	Plant viruses: structure and replication, infection,	02	01-07-2024 To 02-07-2024	Lecture
	Types of viruses, viroids	02	03-07-2024 To 04-07-2024	Lecture
Module III Genetics of plant diseases and resistance	Genes and diseases, Mechanism of variability, stages of variation in pathogens	02	05-07-2024 To 06-07-2024	Lecture

	Types of plant disease resistance to pathogens	02	08-07-2024 To 09-07-2024	Lecture
	Defense mechanism of plants, Pre-existing, structural, chemical and induced biochemical defenses	02	10-07-2024 To 11-07-2024	Lecture
	Resistance genes: Gene-for-gene resistance, features of cloned resistance genes	02	12-07-2024 To 13-07-2024	Lecture
	MAP kinases, ion fluxes and calcium homeostasis	02	15-07-2024 To 16-07-2024	Lecture
	. The oxidative burst, Nitric oxide, (p)ppGpp signaling	02	17-07-2024 To 18-07-2024	Lecture
Module IV: **Application of molecular biology to conventional disease control strategies**	Breeding for resistance	02	19-07-2024 To 20-07-2024	Lecture
	The use of tissue culture in plant breeding	02	22-07-2024 To 23-07-2024	Lecture
	Marker-assisted breeding	02	24-07-2024 To 25-07-2024	Lecture

	Identification of novel resistance gene specificities	02	26-07-2024 To 27-07-2024	Lecture
	The use of chemicals for disease control, biological control- PGPR and PGPF	02	29-07-2024 To 30-07-2024	Lecture
	Transgenic approaches for crop protection- Bt cotton and brinjal.	02	31-07-2024	Lecture

SBRR Mahajana First Grade College
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DEPARTMENT OF SOCIAL WORK

MASTER OF SOCIAL WORK

Lesson Plan-2023-24

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SBRR Mahajana First Grade College (Autonomous)
Jayalakshmipuram, Mysuru – 570 012 Karnataka, INDIA
Affiliated to University of Mysore
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Lesson Plan – ODD Semester 2022-23 (I SEMESTER)

Department: Social Work (MSW)
Subject: **SOCIAL WORK – HISTORY AND IDEOLOGIES [**Course code: 10071]
Hrs/week: 4 Hrs **Total Hrs: 41 Hrs**

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
troduction to Social Work: Social Work Definitions and meaning of Social Work; Basic assumptions of social work, Scope/Fields of Social Work; Social Work and other concepts: social service, social welfare, social development, social reform, social security - Interrelation between social work and other disciplines; - History of social work education in Western countries and India. Professionalization of social work values, education, knowledge and professional associations - Goals, values, functions/roles and process of social work - Interface between professional and voluntary social work, social work ethics.	Introduction to Social Work: Social Work Definitions and meaning of Social Work	**3 hrs**	15.11.2023 16.11.2023 17.11.2023	Lecture method and PPT
	Basic assumptions of social work,	**1 hr**	20.11.2023 23.11.2023	Lecture method and PPT
	Scope/Fields of Social Work;	**1 hr**	24.11.2023	Lecture method and GD
	Social Work and other concepts: social service, social welfare, social development, social reform, social security –	**1 hr**	30.11.2023	Lecture method and PPT
	Interrelation between social work and other disciplines; -	**1 hr**	1.12.2023	Lecture method and PPT
	History of social work education in Western countries	**1 hr**	4.12.2023	Lecture method and PPT

	History of social work education in India	**1 hr**	7.12.2023	Lecture method and PPT
	Professionalization of social work values, education, knowledge and professional associations –	**1 hr**	8.12.2023	Lecture method and PPT
	Goals, values,	**1 hr**	11.12.2023	Lecture method and GD
	Functions/roles Process of social work -i nterface between professional and voluntary social work	**2 hrs**	14.12.2023	Lecture method and PPT
	Social work ethics	**1 hr**	15.12.2023	Lecture method and PPT
UNIT II Indian History of Ideologies for Social Change -Ancient period: Vedic, Vedantic and non- Vedic Ideologies, Spirituality - Medieval period: Zoroastrianism and Islam in India - Mysticism of Bhakti and Sufi movements and Sikhism. Modern period: Christianity in India - Hindu reform movements - Dalit movements - Gandhian ideology and Sarvodaya movement – Nationalism - Ideology of the Indian Constitution - Ideology of	Indian History of Ideologies for Social Change -Ancient period: Vedic,	**2 hrs**	18.12.2023 21.12.2023	Lecture method and PPT
	Vedantic and non-Vedic Ideologies Spirituality –	**1 hr**	22.12.2023	Lecture method and PPT
	Medieval period: Zoroastrianism	**1 hr**	28.12.2023	Lecture method and PPT
	Islam in India - .Mysticism of Bhakti and Sufi movements Sikhism.	**2 hrs**	29.12.2023 05.01.2024 08.01.2024 11.01.2024	Lecture method and PPT

voluntary organisations and voluntary action. Relevance of Ideologies for contemporary Social Work practice	Modern period: Christianity in India – Hindu reform movements - Dalit movements -	**2 hrs**	12.01.2024 18.01.2024 19.01.2024	Lecture method and PPT
	Gandhian ideology and Sarvodaya movement – Nationalism –	**1 hrs**	22.01.2024	Lecture method and PPT
	Ideology of the Indian Constitution – Ideology of voluntary organisations and voluntary action.	**1 hr**	25.01.2024 29.01.2024	Lecture method and PPT
	Relevance of Ideologies for contemporary Social Work practice	**1 hr**	01.02.2024	Lecture method and PPT
UNIT III Contemporary Ideologies for Social Change: Neoliberalism and Globalisation - Post modernism - Multiculturalism - Ideology of action groups and social movements -Ideology of non-governmental organisations. Role of state in providing social welfare services**.**	Contemporary Ideologies for Social Change: Neoliberalism	**1 hr**	02.02.2024	Lecture method and PPT
	Globalisation - Post modernism – Multiculturalism -	**1 hr**	05.02.2024	Lecture method and PPT
	Ideology of action groups and social movements – Ideology of non-governmental organisations.	**1 hr**		Lecture method and PPT
	Role of state in providing social welfare services**.**	**1 hr**	08.02.2024	Lecture method and PPT
UNIT IV Organized and scientific	Organized and scientific charity - Clinical social work -	**1 hr**	09.02.2024	Lecture method and PPT

charity - Clinical social work - Ecological social work - Attributes of a profession. Western History of Ideologies for Social Change: Western History of Social Work Profession - Medieval period: Judeo-Christian ideologies- Secular humanism and Protestantism - Modern period: Rationalism and Welfarism - Liberalism and democracy - Utilitarianism and Social Darwinism - Socialism and human rights. Emerging ideologies of professional social work: Relevance of Ideologies for Contemporary Social Work practice. Challenges for social workers in contemporary world.	Ecological social work – Attributes of a profession.	**1 hr**	12.02.2024	Lecture method and PPT
	Western History of Ideologies for Social Change: Western History of Social Work Profession	**1 hr**	15.02.2024	Lecture method and PPT
	Medieval period: Judeo-Christian ideologies-	**1 hr**	16.02.2024	Lecture method and PPT
	Secular humanism and Protestantism	**1 hr**	19.02.2024	Lecture method and PPT
	- Modern period: Rationalism and Welfarism , Liberalism and democracy	**1 hr**	22.02.2024	Lecture method and PPT
	Utilitarianism and Social Darwinism ,.	**1 hr**	23.02.2024	Lecture method and PPT
	Socialism and human rights	**1 hr**	26.02.2024	Lecture method and PPT
	Emerging ideologies of professional social work:	**1 hr**	29.02.2024	Lecture method and PPT
	Relevance of Ideologies for Contemporary	**1 hr**	01.03.2024	Lecture method and PPT
	Social Work practice .Challenges for social workers in contemporary world	**1 hr**	02.03.2024	Lecture method and PPT

Title of the Course : Society and Dynamics of Human Behaviour (Course Code: 10072

Curriculum As Prescribed by The University	Topic	Time Required	Date	Method Of Deployment
UNIT I: Social work and other social sciences; Society and Culture: Social Structure – meaning, status and roles; Culture: meaning and contents - traditions, customs, values, norms, folklore and mores. Socialization: Meaning, process of socialization – The development of self – Agencies of socialization.	Introduction About the Subject, Semester Plans, Detailing Syllabus and Activities to Be Carried Out in Classroom and Field Work for the semester	03 Hours	15.11.2023 16.11.2023 17.11.2023	Lecture and Discussion
	Social Work and other Social Sciences; C-1 assignment topics to be given	02 Hours	20.11.2023 23.11.2023	Lecture and Discussion
	Social Work other Social Sciences	01 Hour	24.11.2023	Lecture and Discussion
	Society and Culture	01 Hour	30.11.2023	Lecture with PPT
	Culture Meaning & Content, Tradition, Customs	01 Hour	1.12.2023	Group Discussion
	Values, Norms, Folklore and Mores; Role in social control	01 Hour	4.12.2023	Lecture and Discussion
	Social structure; Status & Role	01 Hour	7.12.2023	Lecture with PPT and Discussion
	Socialization- Meaning, Process, Agencies, development of Self concept	01 Hour	8.12.2023	Lecture with PPT and Discussion
	Composition of Indian Society; Unity among diversity	02 Hours	11.12.2023	Lecture with PPT
	Social stratification, Meaning, caste, class and Gender	01 Hour	14.12.2023	Lecture with PPT
	Social Institutions- Marriage, Family, Religion, State & Law	01 Hour	15.12.2023	Lecture with PPT
	Social Control through Social Institutions; Social Change	02 Hours	18.12.2023	Lecture with PPT

			21.12.2023	
	Social Change- meaning, Characteristics and factors inducing social change in India Summary of Unit I	01 Hour	22.12.2023	Lecture and Discussion
UNIT II Indian Society: Composition of Indian Society: The concept of unity amidst diversity- Social stratification in India: Meaning, caste, class divisions, Gender; Types of social institutions: Marriage, Family, Religion, State and Law-Meaning and Functions; Social Control exercised through the social institutions; Social Change: Meaning, characteristics and factors inducing change with reference to India.	Social Groups, Types, Social control through social groups	01 Hour	28.12.2023	
	Social Processes	04 Hours	29.12.2023 05.01.2024 08.01.2024 11.01.2024	Lecture with PPT and Interaction
	Development; theories of economic development	03 Hours	12.01.2024 18.01.2024 19.01.2024	Lecture with PPT
	Stages of Growth theory; Structural Internationalist theory	01 Hour	22.01.2024	Lecture with PPT
	Social Ideals of Indian Constitution- Fundamental Rights	02 Hour	25.01.2024 29.01.2024	Lecture with PPT and Discussion
	LPG and its impact on Developing countries	01 Hour	01.02.2024	Lecture with PPT and Interaction
	Role of International Financial Institutions	01 Hour	02.02.2024	Lecture with PPT
	Social Analysis, significance and its role in Indian context	01 Hour	05.02.2024	Lecture with PPT
C-I Assessment	Internal Assessment and Student Seminars	2 Hours		Test and Presentatio ns
UNIT III	Life span approach; Human	01 Hour	08.02.2024	Lecture with PPT

Social Groups, and Social Control – Primary and Secondary Groups, in-groups and out-groups. Social control through social groups and social institutions. Social Process. Development – social ideals of Indian Constitution. Fundamental Rights. Social Analysis: Significance of social analysis: A brief analysis of socioeconomic, political and cultural systems – Inter-linkages in the Indian context.	Reproductive system			
	Fertilization & development of fetus	02 Hours	09.02.2024	Lecture with PPT and Discussion
	Prenatal care; delivery and post-natal care	02 Hours	12.02.2024	Lecture with PPT
	Importance of early development in human beings	02 Hours	15.02.2024	Lecture with PPT
	Mile stones of development-Infancy & babyhood	02 Hour	16.02.2024	Lecture with PPT
	Childhood, puberty, adolescent	01 Hour	19.02.2024	Lecture with PPT
	Adulthood & old age	02 Hours	22.02.2024	Lecture with PPT
	Principles of growth and development	01 Hour	23.02.2024	Lecture & Discussion
	Methods of studying human behavior	01 Hour	26.02.2024	Lecture with PPT
	Role of heredity and environment; Nature & Nurture	01 Hour	29.02.2024	Lecture with PPT
	Deprivation and development during the life span	01 Hour	01.03.2024	Lecture with PPT
	Indian Concept of Life cycle stages	01 Hour	02.03.2024	Lecture with PPT and Discussion
UNIT IV Theories of Economic Development, Globalization and its impact on Developing Countries: Stages of growth	Human Needs; Hierarchy of needs	02 Hours	04.03.2024	Lecture
	Stress, coping and Social	01 Hour	05.03.2024	Lecture with PPT

theory – Structural internationalist theory. Privatization, liberalization and structural adjustment programmes – Role of international financial institutions.	Support			
	Motivation, Frustration and conflicts	01 hour	06.03.2024	Lecture with PPT
	Emotions and emotional behavior	02 hours	07.03.2024	Lecture with PPT
	Personality- definition, types and assessment	01 Hour	08.03.2024	Lecture with PPT
	Intelligence	01 Hour	09.03.2024	Lecture with PPT and Discussion
	Relevance of Psychology to Social Work practice	02 Hours	11.03.2024	Discussion
Summary of the Subject	Revision and QP	2 Hours	12.03.2024	Interaction and Discussion
C-II Assessment	Internal Assessment and Student Seminar	2 Hours		Test and Presentations

Subject: WORK WITH INDIVIDUALS AND FAMILIES [Course code: 10073]

Hrs/week: 4 Hrs **Total Hrs: 41 Hrs**

Curriculum as prescribed by the university	**Topics**	**No. of hours required to cover**	**Date**	**Method of deployment**
Unit 1 Social case work: Definitions, scope, historical development - Influence of psychoanalysis on casework - Introduction of casework as a method of	Definitions, scope, historical development.	03 hrs.	15.11.2023 16.11.2023 17.11.2023	Lecture method
	Influence of psychoanalysis on casework.	01 hr	20.11.2023	Lecture method

social work - Concepts of adjustment and maladjustment - Philosophical assumptions and casework values. Principles of casework: Individualization, acceptance, non-judgmental attitude, participation, relationship, effective communication of feeling, client self-determination, and confidentiality. Components of social casework: The person, the problem, the place and the process. Process in casework: Study, assessment, intervention, evaluation, follow-up, and termination.			23.11.2023	
	Introduction of casework as - a method of social work –	02 hrs	24.11.2023	Lecture method.
	Concepts of adjustment and maladjustment	01 hr	30.11.2023	Lecture method and GD
	Philosophical assumptions and casework values.	02 hrs	1.12.2023	Lecture method
	Principles of casework: Individualization, acceptance, non-judgmental attitude, participation, relationship, effective communication of feeling, client self-determination, and confidentiality.	05 hrs	4.12.2023	Lecture method Demonstration
	Components of social casework: The person, the problem, the place and the process.	02 hrs	7.12.2023	Lecture method
	Process in casework: Study, assessment, intervention, evaluation, follow-up, and termination	05 hrs	8.12.2023	Lecture method and GD
Unit 2: Types of problems faced by Individuals and families; individual differences and needs - Family assessment in casework practice. Theories and approaches: Psycho-social approach, Functional approach, Problem-solving approach, Crisis Theory, Family intervention, Behavioral modification, Transactional analysis and Holistic approach.	Types of problems faced by Individuals and families; individual differences and needs - Family assessment in casework practice	03hrs	11.12.2023	Lecture method
	Psycho-social approach	01 hr	14.12.2023	Lecture method
	Functional approach,	01 hr	15.12.2023	Lecture method
	Problem-solving approach	01 hr	18.12.2023 21.12.2023	Lecture method.
	Crisis Theory,	01 hr	22.12.2023	Lecture method and GD
	Psychiatric settings,	01 hr	28.12.2023	Lecture method

	correctional institutions Family intervention, , and industry.			
	Behavioral modification,	01 hr	29.12.2023 05.01.2024 08.01.2024 11.01.2024	Lecture method
	Transactional analysis and Holistic approach.	01 hr	12.01.2024 18.01.2024 19.01.2024	Lecture method
Unit 3: Tools for Help: Case work tools: Interview, home visit, observation, listening, communication skills, rapport building. Records: Nature, purpose and principles of recording. Techniques of casework: Supportive, resource enhancement and counseling. Self as a professional: Professional self - Conflicts and dilemmas in working with individuals and families	Interview, home visit,	01 hr	22.01.2024	Lecture method.
	observation, listening,	01 hr	25.01.2024 29.01.2024	Lecture method and GD
	communication skills,	01 hr	01.02.2024	Lecture method
	Rapport building.	01 hr	02.02.2024	Lecture method
	Records: Nature, purpose and principles of recording.	01 hr	05.02.2024	Lecture
	Techniques of casework: Supportive, resource enhancement and counseling.	01 hr		Lecture method.
Unit 4: Application of Method: Primary and secondary settings - Application of methods in family, women, and child welfare settings, marriage counseling centers, schools settings, medical and psychiatric settings, correctional institutions, and industry. :	Primary and secondary settings - Application of methods in family,	04 hr	08.02.2024- 12.02.2024	Lecture method and GD
	women, and child welfare settings, marriage counseling centers,	2 hr	15.02.2024	Lecture method
	and psychiatric settings, correctional institutions, and industry.	02 hr	16.02.2024	Lecture method

Subject: Work with Groups [Course code: 10074]
Hrs/week: 4 **Total Hrs: 61**

Curriculum as prescribed by the college	Topics to be covered	No. of Hours	Date	Deployment method
Introduction and history of Group Work: Understanding of groups - Characteristics and significance of group - Definition of Social Group Work - Characteristics of Social Group Work - Purpose of Social Group Work; Historical evolution of group work with special emphasis on the Indian Context. Type of Groups: Types and approaches based on objectives and purpose - Type of membership - Time duration - Social group work in different settings and analysis of group processes. Values and Principles in group work and Characteristics of Group formation: Values in social group work- Principles in group work - Assumptions underlying social group work - Factors of group formation - Formulation of goals - Identification of problems for work. Pre-group and Initial Phase: Planning model - Characteristics of pre group phase - Group structures - Facilitation skills and role of worker in pre-group and initial phase.	Introduction About The Subject, Semester Plans, Detailing Syllabus And Activities To Be Carried Out In Classroom And Field Work for the semester	03 hours	15.11.2023 16.11.2023 17.11.2023	Lecture
	Understanding of groups, concept and significance of groups	02 hour	20.11.2023 23.11.2023	Lecture
	Different types of groups	01 hour	24.11.2023	Lecture
	Social group work- concept and definition	01 hour	30.11.2023	Lecture
	Characteristics and purpose of social group work	01 hour	1.12.2023	Group Discussion on group work in field work
	Types And Approaches Based Aon Objectives And Purpose	01 hour	4.12.2023	Lecture
	Historical evolution of group work: group work in the Indian context	01 hour	7.12.2023	Group activity on designing a group activity for clients
	Values and Principles of group work. Assumptions underlying social group work	01 hour	8.12.2023	Lecture
	Formation of groups: factors affecting group formation, formulation of goals, identification	02 hours	11.12.2023	Lecture and class activity

	of problem for group work			
	Phases of group: Pre-group and initial phase, Planning model	01 hour	14.12.2023	Lecture
	Felicitation skills for a group worker	01 hour	15.12.2023	
	Role of worker in pre-group and initial phase.	02 hour	18.12.2023 21.12.2023	
	Summarizing unit I	01 hour	22.12.2023	Lecture
UNIT II **Group Processes and Group Dynamics:** Importance of group processes - Typical patterns - Processes in different type of groups - Worker's skills in identifying and understanding processes - Bond, sub-groups, role. Leadership - Isolation - Decision making - Conflict – Communication -Relationships.	Introduction to Group Processes and Group Dynamics:	02 hour	28.12.2023	Activity and lecture
	Importance of group processes, Processes in different type of groups - Worker's skills in identifying and understanding processes	4 hours	29.12.2023 05.01.2024 08.01.2024 11.01.2024	Lecture
	Dynamics in a group: Bond, sub-groups, role, Isolation, Decision making,, Communication, Relationships	03hours	12.01.2024 18.01.2024 19.01.2024	Lecture
	Group conflict: workers role in resolving conflict	01 hour	22.01.2024	Lecture
	Leadership in group: types, workers skill in identifying group leader	02 hour	25.01.2024 29.01.2024	
	Summarizing unit II	01 hour	01.02.2024	
UNIT III Middle Phase and Use of Program: Characteristics of middle phase - Group structures - Group dynamics - Facilitation skills - Role of group workers - -	Phase II: Middle phase, characteristics,	01 hour	02.02.2024	Lecture
	Role of group workers in middle phase. Comparison across phases	02 hours	05.02.2024	Discussion

Comparison across phases - Concept and principles - Program planning - Skills in program planning Facilitation: Knowledge of skills and techniques for effective work with groups/problem solving. Recordings in Group work: Importance of recording in social group work - Principles of recording - Recording structure - Types of recording.	Program planning - Skills in program planning	02 hours		Lecture and activity on planning a programme
	Facilitation: Knowledge of skills and techniques for effective work with groups/problem solving.	02 hours	08.02.2024-12.02.2024	Lecture
	Recordings in Group work	02 hour	15.02.2024	Lecture
	Summarizing unit III	01 hour	16.02.2024	
	Evaluation in Groups and Termination Phase: Importance, Types and methods of evaluation	02 hours	16.02.2024	
UNIT IV Evaluation in Groups and Termination Phase: Importance of evaluation - Types of evaluation - Methods of evaluation - Need for termination - Types of termination - Characteristics of termination phase - Worker's skills. Application of Group Work: Application in health settings, school settings, family welfare settings, industrial settings, women and child welfare settings.	Termination: need for termination, Characteristics and types. Workers skill in this phase	02 hours	22.02.2024	Lecture
	Sociogram	01 hour	23.02.2024	Lecture and sociogram drawing activity
	Application of Group Work in different settings	02 hours	26.02.2024	Lecture
	Activity on writing a group work report including all the three phases	01 hour	29.02.2024	Lecture and activity
	Evaluation of the semester	01 hour	01.03.2024	Lecture and group discussion
	Presentation	02 hours	02.03.2024	Presentation by students
	Revision and question paper discussion	04 hours	04.03.2024-8.03.2024	Discussion

	Activities of group work done in field work	05 Hours		Activity
C2				

Title of the Course : Work With Communities (Course Code: 10075)

Curriculum as prescribed by the college	Topics to be covered	No. of Hours	Date	Deployment method
UNIT I Community: Concept, characteristics, types and functions. Community organization practice: Definition of community organization. Values and principles of Community Organizations. Ethics of community organization practice. Understanding Human Rights in community organization practice. Historical development of community organization practice. Gender and Empowerment: Gender sensitive community organization practice	Induction: about the topics covered in the paper	1 Hour	15.11.2023 16.11.2023 17.11.2023	Lecture
	Concept and Characteristics of Community	1 Hour	20.11.2023 23.11.2023	Lecture
	Types and Functions 0f Community	2 Hours	24.11.2023	Lecture, PPT & Activity
	Community Organisation Practice: Definitions	1 Hour	30.11.2023	Lecture
	Values and Principles of Comm unity Organisation Practice	2 Hours	1.12.2023	Lecture with PPT
	Ethics of Community Organisation Practice	1 Hour	4.12.2023	Lecture
	Understanding Human Rights in community organization practice.	2 Hours	7.12.2023	Lecture with PPT
	Historical development of community organization practice.	2 Hours	8.12.2023	Lecture with PPT
	Gender and Empowerment	1 Hour	11.12.2023	Lecture
	Gender sensitive community organization practice	1 Hour	14.12.2023	Lecture with PPT

UNIT II Models and Strategies of Community Organization - Locality Development Model – Social Planning Model - Social Action Model. Select methods of public interest: Mobilization, litigation, protests and demonstrations, dealing with authorities. Public Relations, Planning, Monitoring and Evaluation - Roles in different models' attributes and attitude.	Models and Strategies of Community Organisation Practice	1 Hour	15.12.2023	Lecture with PPT
	Locality Development Model Social Planning Model Social Action Model	2 hours	18.12.2023 21.12.2023	Lecture with PPT
	Select methods of public interest: Mobilization, litigation	1 Hour	22.12.2023	Lecture and Discussion
	Protests and Demonstrations, dealing with authorities.	1 Hour	28.12.2023	Lecture with PPT and Discussion
	Public Relations, Planning, Monitoring and Evaluation	2 Hours	29.12.2023 05.01.2024 08.01.2024 11.01.2024	Lecture with PPT
	Roles in different models' attributes and attitude.	1 Hour	12.01.2024 18.01.2024 19.01.2024	Lecture with PPT
C-I Assessment	Internal Assessment and Students Seminars	2 Hours	22.01.2024	Test and Presentations
UNIT III Community Organization as a Method: Relevance of community organization as a Method across different spheres of social work intervention and relook at own attitudes.	Community Organization as a Method	1 Hour	25.01.2024 29.01.2024	Lecture with PPT
	Relevance of community organization as a Method across different spheres of social work intervention and relook at own attitudes.	1 Hour	01.02.2024	Lecture
	Skills of Community Organization Practitioner	1 Hour	02.02.2024	Lecture with PPT

Skills of Community Organization Practitioner: Participatory approaches - Problem analysis, resource mobilization, conflict resolution, organizing meetings, writing and documentation, networking, training. Participatory Rural Appraisal (PRA), Role of community organizer: Organizer, enabler, motivator, counselor… Fund raising and its techniques.	Participatory approaches: Problem analysis	1 Hour	05.02.2024	Lecture with PPT
	Resource Mobilization, Conflict Resolution, Organizing meetings	1 Hour		Lecture with PPT and Activities
	Writing and Documentation, networking, training.	1 Hour	08.02.2024-12.02.2024	Lecture with PPT
	Participatory Rural Appraisal (PRA)	1 Hour	15.02.2024	Lecture with PPT
	Role of community organizer: Organizer, enabler, motivator, counselor…	1 Hour	16.02.2024	Lecture, PPT & Activities
	Fund raising and its techniques.	1 Hour	16.02.2024	Lecture with PPT
UNIT IV Human rights: Understanding human rights, need for the protection of human rights. Strategy and Roles: Unionization as a strategy – Advocacy in community organization. Current debates in Community Organization Practice: Emerging issues - Impact of Macro policies. NGO working with Community.	Understanding human rights, need for the protection of human rights.	1 Hour	22.02.2024	Lecture
	Strategy and Roles: Unionization as a strategy	1 Hour	23.02.2024	Lecture
	Advocacy in community organization.	1 Hour	26.02.2024	Lecture
	Current debates in Community Organization Practice	1 Hour	29.02.2024	Lecture & PPT
	Emerging issues - Impact of Macro policies.	1 Hour	01.03.2024	Lecture & PPT

	NGO working with Community.	1 Hour	02.03.2024	Lecture & PPT
Summary of the Subject	Revision and QP	2 Hours	04.03.2024-8.03.2024	Discussion
C-II Assessment	Internal Assessment and Students Seminars	2 Hours		Test and Presentations

III SEMESTER

Subject: HUMAN RESOURCE MANAGEMENT [Course code: 30071]

Hrs/week: 4 **Total Hrs:60**

Curriculum as prescribed by the college	Topics to be covered	No. of Hours	Date	Deployment method
UNIT I Human Resource Management: Concept, scope, philosophy and objectives; Evolution; Approaches, Structure and Functions; Line and staff relations of HRM; HRM Model. Hierarchy, formal and informal structure, Organization chart/reporting structure. Human Resource Planning: Concept and objectives; Human resource inventory; Human resource planning process; job analysis; job description; job specification; job design; career planning and career paths; job rotation.	Introduction about the subject, semester plans, detailing syllabus and activities to be carried out in classroom and field work for the semester	01 hour	15.11.2023 16.11.2023 17.11.2023	Lecture
	Concept of HRM	02 hour	20.11.2023 23.11.2023	Lecture
	Philosophy and Scope of HRM	02 hour	24.11.2023	Lecture
	Evolution of HRM	01 hour	30.11.2023	Lecture
	Objectives, functions and Challenges of HRM	02 hour	1.12.2023	Group Discussion on HRM concepts
	Organizational structure, Types	02 hour	4.12.2023	Lecture
	Line and staff relations, Organizational chart/reporting	02 hours	7.12.2023	Group activity on designing an organizational chart
	HRM model and Approaches to HRM	02 hour	8.12.2023	Lecture
	Concept of Human resource planning	01 hour	11.12.2023	Lecture
	HRP process, HR inventory	01	14.12.2023	Lecture
	Job design-analysis, description, specification, enrichment, enlargement, rotation	02	15.12.2023	Lecture and activity on job designing for any designation/profession
	Career planning and path	01	18.12.2023 21.12.2023	Lecture and group discussion on HRP
	Introduction to talent	02	22.12.2023	Lecture

UNIT II Talent Acquisition: Goals; polices, sources and methods. Selection: Concept, process. Talent Acquisition Tests, Theories and issues in psychological testing, Intelligence testing – theoretical background, Aptitude Testing, Personality Assessment, MBTI. Placement, Induction and socializing the new employee. Talent retention: Concept, importance and methods.	management and talent acquisition- polices, sources and methods		28.12.2023	
	Recruitment-sources and types.	01	29.12.2023 05.01.2024 08.01.2024 11.01.2024	Lecture
	Selection-Concept, process, types	02	12.01.2024 18.01.2024 19.01.2024	Lecture
	Selection tests: intelligence, psychological tests, personality tests and aptitude test	03	22.01.2024	Lecture and classroom activity on selection strategies for various profession
	Placement and induction	02	25.01.2024 29.01.2024	Lecture
	Talent retention: concept and strategies	01	01.02.2024	Lecture and group discussion on retention strategies
	Presentation by students and group discussion of talent management	02	02.02.2024	Presentation by students and group discussion of talent management
UNIT III Compensation Management: Factors influencing compensation plans and policies; Job evaluation - Fixation of salary, components of salary. Pay for performance – Incentive Schemes, principles and types, Employee Stock	Revision of unit I and II	01	05.02.2024	Lecture
	Introduction to wage and salary administration	01		Discussion
	Compensation management, plans and policies	03	08.02.2024	Lecture
	Job evaluation and salary fixation	01	09.02.2024	Lecture

Option Plan, compensation survey / review	Pay for performance model	01	12.02.2024	Lecture
	Incentives-types of allowances, ESOP	03	15.02.2024	Lecture and group discussion on compensation management
	Components of salary	01	16.02.2024	Activity on making a salary slip
UNIT IV Strategic Human Resource Management (SHRM): Business strategy and organizational capability, SHRM: aligning HR with Corporate strategy, Strategic HR planning and Development, Change Management and restructuring and SHRM, Corporate Ethics, Values and SHRM, Competencies of HR professional in a SHRM scenario.	Concept of SHRM	02	19.02.2024	Lecture
	Business strategy and organizational capability	01	22.02.2024	Lecture
	SHR planning and development	01	23.02.2024	Lecture
	Corporate ethics	01	26.02.2024	Lecture
	Change management and SHRM	01	29.02.2024	Lecture
	Competencies of HR professional in SHRM Scenario	01	01.03.2024	Lecture and group discussion
	Presentation by students	02	02.03.2024	Presentation by students
	Activity on ideas for startups	01	04.03.2024	Discussion
	Case studies semester	01	05.03.2024	Discussion
	Revision of all units and question paper discussion Entry of internal marks	04	07.03.2024	Discussion

Title of the Course : Preventive Social Medicine and Medical Social Work (Course Code: 30074)
Name of the Faculty : Revathi R.

Curriculum Prescribed by The University	Topics	No. of Hours Required	Date	Method of Deployment
UNIT-I Concept of Health: Physical, Social, Mental & Spiritual Dimensions of Health - Positive Health - Determinants of Health - Health & Development - Indicators of Health. Concept of Prevention: Levels of Prevention - Hygiene, Public Health, Preventive Medicine, Community Health, Social Medicine, Community Medicine. Health Care of the Community, Concept of Health Care - Levels & Principles of Health Care	Introduction to the Course - Concept of Health: Physical, Social, Mental & Spiritual Dimensions of Health	2 hours	15.11.2023 16.11.2023 17.11.2023	Lecture & PPT
	Positive Health	1 Hour	20.11.2023 23.11.2023	Lecture
	Determinants of Health	1 hour	24.11.2023	Lecture & PPT
	Indicators of Health	2 hours	30.11.2023	Lecture & PPT
	Health &Development	1 hour	1.12.2023	Lecture & PPT
	Concept of Prevention: Levels of Prevention	1 hour	4.12.2023	Lecture & PPT
	Public Health - Preventive Medicine	1 hour	7.12.2023	Lecture & PPT
	Hygiene - Community Health - Social Medicine - Community Medicine	1 hour	8.12.2023	Lecture & PPT
	Health Care of the Community - Concept of Health Care - Levels & Principles of Health Care	2 hours	11.12.2023	Lecture & PPT
UNIT-II Communicable & Non-Communicable Diseases: Leprosy, Tuberculosis, Sexually Transmitted Diseases (STDs), HIV/AIDS, Cancer, Hypertension, Accidents, Diabetes, Blindness, Neurological Problems, Mental Illnesses. Maternal & Child Health Services - Immunization – Integrated Child Development Services (ICDS) Scheme - School	Communicable & Non-Communicable Diseases: Leprosy, Tuberculosis	1 Hour	14.12.2023	Assignment Presentation & Discussion
	Sexually Transmitted Diseases (STDs), HIV/AIDS	1 Hour	15.12.2023	Assignment Presentation & Discussion
	Cancer, Hypertension, Diabetes	1 Hour	18.12.2023 21.12.2023	Assignment Presentation & Discussion
	Accidents, Blindness	1 Hour	22.12.2023	Assignment Presentation & Discussion

Health Programmes	Neurological Problems, Mental Illnesses	1 Hour	28.12.2023	Assignment Presentation & Discussion
	Maternal & Child Health Services - Immunization – Integrated Child Development Services (ICDS) Scheme	1 Hour	29.12.2023 05.01.2024 08.01.2024 11.01.2024	Assignment Presentation & Discussion
	School Health Programmes	1 Hour	12.01.2024 18.01.2024 19.01.2024	Assignment Presentation & Discussion
C-I Assessment	Internal Assessment and Seminars	2 Hours	22.01.2024	Test and Presenations
UNIT-III Medical Social Work: Meaning, Definition and Scope - Historical Background & Nature: Medical Social Work in India and Abroad - Team Work and Multidisciplinary Approach in Health Care; Organization & Administration of Medical Social Work Departments in Hospitals. Patient as a Person and Role of Social Worker: Understanding the Patient as a Person - Illness Behaviour and Treatment Behaviour of the Patient - Impact of illness on the Patient & Family. Role of Social Worker with Patients and their Families – Rehabilitation	Medical Social Work: Meaning, Definition & Scope - Historical Background & Nature	2 Hours	25.01.2024 29.01.2024	Lecture & PPT
	Historical Background & Nature: Medical Social Work in India and Abroad	2 Hours	01.02.2024	Lecture & PPT
	Team Work & Multidisciplinary Approach in Health Care	2 Hours	02.02.2024	Role play and case studies
	Organization & Administration of Medical Social Work Departments in Hospitals	2 Hours	05.02.2024	Lecture & PPT
	Patient as a Person & Role of Social Worker: Understanding the Patient as a Person; Illness Behaviour & Treatment Behaviour of the Patient	2 Hours		Student Interaction And role play
	Impact of Illness on the Patient and Family. Role of social worker with patients and their families	2 Hours	08.02.2024	Case Studies

	Rehabilitation- settings and types of services	1 Hour	09.02.2024	Student assignments
UNIT-IV National Health Policy of India, Directorate General of Health Services, Indian Council of Medical Research (ICMR), Health as a concurrent subject. Health System in India - at the Centre, at the State level, at the district level, and village level. Health Education and Communication. Voluntary Health Agencies in India - International health - World Health Organisation (WHO), UNICEF, UNDP, FAO, ILO, World Bank. Non - governmental and other Agencies - Ford Foundation, CARE, International Red Cross, Indian Red Cross.	Health as a concurrent subject National Health Policy of India	1 Hour	12.02.2024	GD
	Directorate General of Health Services; Indian Council of Medical Research (ICMR)	1 Hour	15.02.2024	Lecture & PPT
	Health System in India - at the Centre, at the State level, at the district level, and village level.	2 Hours	16.02.2024	Lecture & PPT from students
	Health Education and Communication	2 Hours	19.02.2024	Lecture and PPT; Students' Pamphlet / Poster Presentation
	Voluntary Health Agencies in India	1 Hour	22.02.2024	Lecture & PPT
	International health - World Health Organisation (WHO)	1 Hour	23.02.2024	Lecture & PPT
	UNICEF, UNDP	1 Hour	26.02.2024	Lecture & PPT
	FAO, ILO	1 Hour	29.02.2024	Lecture & PPT
	World Bank, Ford Foundation, CARE	1 Hour	01.03.2024	Lecture & PPT
	International Red Cross, Indian Red Cross.	1 Hour	02.03.2024	Lecture & PPT
Summary of the Subject	Revision and QP	2Hours	04.03.2024	Interaction and discussion
C-II Assessment	Internal Assessment and	2Hours	05.03.2024	Test and

	Student Seminars			Presentations

Subject: ORGANISATIONAL BEHAVIOUR AND DEVELOPMENT(30073)
Hrs/week: 4 Total Hrs: 49

Curriculum as prescribed by the college	Topics to be covered	No. of Hours	Date	Deployment method
UNIT I Conceptual Framework: Organization Behavior: Definition, concept, approaches and scope, historical background of Organization Behavior. Introduction to Enneagram, personality types according to Enneagram. Emotional Intelligence; Attitude, Values, Personality; Job satisfaction, Employee Morale : Meaning, influences and outcomes - Measuring job satisfaction. Assertiveness Training: Benefits of assertiveness – components of assertive behavior, measuring assertiveness, handling fear, handling anger, handling depression, developing assertive behavior skills, assertiveness on the job, assertiveness in interpersonal relations.	Conceptual Framework: Organization Behavior: Definition, concept	2	15.11.2023 16.11.2023 17.11.2023	Lecture and case study
	Approaches and scope of OB, historical background of Organization Behavior	1	20.11.2023 23.11.2023	Lecture
	Introduction to Enneagram, personality types according to Enneagram	2	24.11.2023	Lecture
	Emotional Intelligence; Attitude- concepts	1	30.11.2023	Lecture
	Personality: Types	1	1.12.2023	Lecture
	Job satisfaction, Employee Morale : Meaning, influences and outcomes - Measuring job satisfaction.	2	4.12.2023	Lecture
	Assertiveness Training: benefits, components, measurement, skills	3	7.12.2023	Lecture
	Handling fear, handling anger, handling depression, developing assertive behavior skills, assertiveness on the job, assertiveness in interpersonal relations.	2	8.12.2023	Lecture and case study
Summary to unit I	Role play on interview and selection process	1	11.12.2023	Role play
UNIT II Transactional Analysis (TA), TA and self awareness, Winners and Losers, Structural analysis, Life positions, transactions, games and strokes, Life scripts, TA applications in motivation, Leadership and Teamwork, TA in counseling.	Transactional Analysis (TA), TA and self awareness	2	14.12.2023	Lecture
	Transactions, games and strokes,	1	15.12.2023	Lecture
	TA applications in motivation, Leadership and Teamwork, TA in counseling.	2	18.12.2023 21.12.2023	Lecture

Motivation: Concept and theories, techniques of motivation, role of reinforcement and punishment, motivation and organization reward system, awards, employee empowerment and engagement.	Motivation: Concept and theories, techniques of motivation	3	22.12.2023	Lecture
	Role of reinforcement and punishment, motivation and organization reward system, awards	2	28.12.2023	Lecture
	Employee empowerment and engagement.	1	29.12.2023 05.01.2024 08.01.2024 11.01.2024	Lecture
Summary to unit II	Case study presentation on TA, Motivation strategies and employee counseling	2	12.01.2024 18.01.2024 19.01.2024	Presentation by students
UNIT III Leadership: Meaning, roles, skills, and styles, leadership theories, types of leadership, powerful persuasion strategies. Group dynamics: Concept, types of groups, dynamics of group formation, decision making in groups. Organization Development: Concept, emerging approaches and techniques, Foundations of OD, Organizational Diagnosis, OD interventions – An overview, individual and interpersonal interventions, team/group interventions, comprehensive interventions, organizational transformation, success and failure of OD, Planned Organizational change, feedback and OD.	Leadership: concepts, roles and types	2	22.01.2024	Lecture and case study discussion
	Leadership theories and styles	2	25.01.2024 29.01.2024	Lecture
	Group dynamics	1	01.02.2024	Lecture
	Organization Development	3	02.02.2024	Lecture
	OD interventions	2	05.02.2024	Lecture and group discussion
	Planned Organizational change, feedback and OD.	1		Lecture
Summary to Unit III	Case study discussions on Leadership, OD interventions by large	1	08.02.2024	group discussion

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UNIT IV Organizational Conflict: Concepts, causes and types, conflict-resolution strategies. Organizational change: Concept, forces of change and resistance to change, managing organizational change and diversity, facilitating creative and divergent thinking, planned organizational change. Stress and Burn Out: Concepts, causes, consequences and coping strategies. Managerial Ethics: Individual ethics, ethical dilemmas in management, Ethical practices of Indian Managers, Corporate ethics.	Organizational Conflict	2	09.02.2024	Lecture
	Organizational change	2	12.02.2024	Lecture and case study discussion
	Stress and Burn Out	2	15.02.2024	Lecture
	Managerial Ethics	1	16.02.2024	Lecture
	Ethical practices of Indian Managers, Corporate ethics.	1	19.02.2024	Lecture and case study discussion
Summary to Unit IV	Guest lecture on managing stress and burnout and work-life balancing	1	22.02.2024	Guest Lecture

Subject: Legal System in India [Course code: 30075]

Hrs/week: 4 Hours **Total Hrs: 40 hours**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
UNIT I Social Justice: Meaning and Concept; Social legislation: Meaning, definitions and concept. Social justice as an essential basis of social legislations; Social legislations in a welfare state with special reference to India. Rights: Concept and definitions of Rights; types of Rights; Rights of women and children; Rights of Scheduled Castes and Scheduled Tribes; Rights of accused and offender under Constitution of India, Indian Penal Code and Criminal Procedure Code.	Social Justice: Meaning and Concept;	03 hrs	15.11.2023 16.11.2023 17.11.2023	Lecture and Interactive discussion
	Social legislation: Meaning, definitions and concept.	02 hrs	20.11.2023 23.11.2023	Lecture with PPT
	Social justice as an essential basis of social legislations; Social legislations in a welfare state with special reference to India.	03 hrs	24.11.2023	Lecture with PPT
	Rights: Concept and definitions of Rights; types of Rights;	02 hrs	30.11.2023	Lecture with PPT
	Rights of women and children;	02 hrs	1.12.2023	Lecture with PPT
	Rights of Scheduled Castes and Scheduled Tribes;	02 hrs	4.12.2023	Lecture with PPT
	Rights of accused and offender under Constitution of India, Indian Penal Code and Criminal Procedure Code	02 hrs	7.12.2023	Lecture and Interactive discussion
UNIT II Division of Law: Substantive Law and Procedural Law. Legislations pertaining to Social Institutions: Marriage, divorce, maintenance of spouse, adoption. Legislations for prevention of Crime and Deviance:	Division of Law: Substantive Law and Procedural Law.	02 hrs	8.12.2023	Lecture with PPT
	Legislations pertaining to Social Institutions: Marriage, n.	01 hr	11.12.2023	Lecture with PPT

Indian Penal Code (relevant chapters like of Offences against Public Tranquility, of Offences affecting the Public Health, Safety, Convenience, of Decency and Morals, of Offences relating to Religion, of Offences affecting the Human Body, of Offences relating to Marriage, of Cruelty by Husband or Relatives of Husband) Legislations pertaining to women.	divorce,	01 hr	14.12.2023	Lecture with PPT
	maintenance of spouse,	01 hr	15.12.2023	Lecture with PPT
	Adoption	01 hr	18.12.2023 21.12.2023	Lecture with PPT
	Legislations for prevention of Crime and Deviance: Indian Penal Code (relevant chapters like of Offences against Public Tranquility, of	01 hr	22.12.2023	Lecture with PPT
	Offences affecting the Public Health, Safety, Convenience, of Decency and Morals, of	02 hrs	28.12.2023	discussion with PPT
	Offences relating to Religion, of Offences affecting the Human Body, of	01 hr	29.12.2023 05.01.2024 08.01.2024 11.01.2024	Lecture and Interactive discussion
	Offences relating to Marriage, of Cruelty by Husband or Relatives of Husband) Legislations pertaining to women.	01 hr	12.01.2024 18.01.2024 19.01.2024	Lecture with PPT
UNIT III Criminal Justice System in India: Police: Structure, powers and functions and their role in maintaining peace and order in the society.	Criminal Justice System in India:	01 hr	22.01.2024	Lecture with PPT
	Police: Structure, powers and functions and their role in maintaining peace and order in the society.	01 hr	25.01.2024 29.01.2024	Lecture with PPT

Prosecution: Meaning, structure, its role in criminal justice, trial participation. Judiciary: Supreme Court, High Court - Constitution of Supreme Court and High Court: Powers and functions. Sub-ordinate Courts - District Sessions Court, Magistrate Courts, and other subordinate courts.				
	Prosecution: Meaning, structure, its role in criminal justice, trial participation.	01 hr	01.02.2024	Lecture with PPT
	Judiciary: Supreme Court, High Court - Constitution of Supreme Court and High Court: Powers and functions.	01 hr	02.02.2024	Lecture with PPT
	Sub-ordinate Courts - District Sessions Court, Magistrate Courts, and other subordinate courts	01 hr	05.02.2024	Lecture and Interactive discussion
UNIT IV Correction and Correctional Laws: Corrective measures as per Criminal Procedure Code, Probation of Offenders Act, Juvenile Justice (Care and Protection of Children) Act. Legal Aid: Concept of legal-aid, history of legal-aid, persons needing legal-aid, legal-aid schemes. Public Interest Litigation: Meaning, Concept, Process and Problems. Right to Information Act-Provisions and implementation.	Correction and Correctional Laws: Corrective measures as per Criminal Procedure Code,	01 hr		Lecture with PPT
	Probation of Offenders Act,	01 hr	08.02.2024	Lecture with PPT
	Juvenile Justice (Care and Protection of Children) Act.	01 hr	09.02.2024	Lecture with PPT
	Legal Aid: Concept of legal-aid, history of legal-aid, persons needing legal-aid, legal-aid schemes.	01 hr	12.02.2024	Lecture with PPT
	Public Interest Litigation: Meaning,	02 hrs	15.02.2024	Lecture with PPT

Role of Social Worker: Social Work intervention, need, methods.	Concept, Process and Problems. .			
	Right to Information Act- Provisions and implementation. Role of Social Worker: Social Work intervention, need, methods01 hr	02 hrs	16.02.2024	Lecture with PPT

Curriculum as prescribed by the Institution	Topics					Method of Deployment

Lesson Plan – EVEN Semester 2022-23

Subject: Management of developmental and welfare services [Course code: 20071]

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
UNIT I Social Services: Need for welfare and developmental organizations, Factors determining social welfare programmes, Development and Welfare organizations‟ response to societal needs; role of state, voluntary and corporate sector. Management services: Types of settings, organizational characteristics like origin, nature, size, structure, and design, organizational climate and impact of socio-political environment – Management process: Vision, Planning, Organizing, Directing, Staffing, Coordination, Reporting, and Budgeting. Establishment: Registration, different types of legislations, legal status, constitution, rules and procedure, goals - Financial resources: Organizational Budget,	Social Services: Need for welfare and developmental organizations,	2 hour	18.04.2024 & 19.04.2024	Lecture and Interactive discussion
	Factors determining social welfare programmes, Development and Welfare organizations‟ response to societal needs; role of state,	2 Hours	20.04.2024 & 22.04.2024	Lecture with PPT
	Voluntary and corporate sector.	2 hour	25.04.2024 & 26.04.2024	Lecture with PPT
	Management services: Types of settings, organizational characteristics like origin, nature, size, structure, and design, organizational climate and impact of socio-political environment -	1 hour	27.04.2024	Lecture with PPT
	Management process: Vision, Planning, Organizing, Directing, Staffing, Coordination,	4 Hours	29.04.2024 02.05.2024 03.05.2024 & 04.05.2024	Lecture with PPT
	Reporting, Budgeting	2 Hour	06.05.2024 &	Lecture with PPT

Sources of finance, Fund Raising, Records, Audit.			09.05.2024	
	Establishment: Registration, different types of legislations, legal status, constitution, rules and procedure, goals	3 Hours	10.05.2024 11.05.2024 & 13.05.2024	Lecture with PPT
	Organizational Budget, Sources of finance, Fund Raising,	3 hours	16.05.2024 18.05.2024 & 20.05.2024	discussion with PPT
	Records, Audit.	2 Hours	23.05.2024 &24.05.2024	Lecture with PPT
UNIT II Physical: All activities related to acquiring, hiring and maintaining importable structure and infrastructure, maintenance of premises and daily upkeep. Enhancing the involvement and the potential of people in organization's executive boards, committees; professionals and other staff-relationship, communication, team work, and facilitating team building, supervision, and participation in training	Physical: All activities related to acquiring, hiring and maintaining importable structure and infrastructure, maintenance of premises and daily upkeep.	2 hours	25.05..2024 &27.05.2024	Lecture with PPT
	Enhancing the involvement and the potential of people in organization's executive boards, committees	2 hours	30.05.2024 & 31.05.2024	Lecture with PPT
	professionals and other staff-relationship, communication,	1 hour	01.06.2024	Lecture with PPT
	team work, and facilitating team building, supervision	2 hour	03.06.2024 &06.06.2024	Lecture with group Discussion
	Participation in training	1 hour	07.06.2024	Lecture with group Discussion
UNIT III Programme Development: Programme management: long term, short term, and Documentation. Project proposals based on felt-needs, nature of resources, eligibility criteria, records, evaluation and research. Impact analysis - Qualitative and quantitative	Programme Development: Programme management:	2 hour	08.06.2024 & 10.06.2024	Lecture with PPT
	long term, short term, and Documentation	1 hour	13.06.2024	Lecture with PPT
	Project proposals based on felt-needs, nature of resources, eligibility criteria,	2 hours	24.06.2024 & 27.06.2024	Lecture with PPT
	Records, evaluation and research.	2 hour	28.06.2024 & 29.06.2024	Lecture with group Discussion

	Impact analysis - Qualitative and quantitative	2 hour	01.07.2024 &04.07.2024	Lecture with group Discussion
UNIT IV Public Relations: Public relations need and its promotion by all in the organisation. Representing the organization, networking, public, corporate and voluntary sector, resource building, accountability, transparency, use of media for publicity. Change and its Management: Understand and manage change, innovation in a rapidly changing social environment: for policy programmes and structure. Organizational understanding: Conflict, conflict resolution, creating positive climate	Public relations need and its promotion by all in the organization.	1 hours	05.07.2024	Lecture with PPT
	Representing the organization, networking, public, corporate and voluntary sector	2hour	08.07.2024 & 11.07.2024	Lecture with group Discussion
	Resource building, accountability, transparency,	2 hours	12.07.2024 & 13.07.2024	Lecture with group Discussion
	Use of media for publicity.	1 hour	15.07.2024	Lecture with PPT
	Change and its Management: Understand and manage change, innovation in a rapidly changing social environment: for policy programmes and structure.	2 hours	18.07.2024 & 19.07.2024	Lecture with PPT
	Organizational understanding: Conflict, conflict resolution, creating positive climate	2 hours	20.07.2024 & 22.07.2024	Lecture with PPT

Hrs/week: 4 Hours **Total Hrs: 46 Hour**

Subject: Social Work Research and Statistics (Course code: 20072)
Hrs/week: 4 Hours **Total Hrs: 45 Hours**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
UNIT I Science - Meaning and assumptions, scientific approach in comparison to the native or common sense approach. Scientific attitude; Scientific method; application of scientific method for the study of	Science - Meaning and assumptions, scientific approach in comparison to the native or common sense approach.	01	18.04.2024 & 19.04.2024	Lecture

social phenomena. Research: Definition and objectives, Social Work Research: Meaning, objectives, functions and limitations; Scope of social work research in India; Agencies sponsoring and conducting social work research, ethics in research. Problem identification: Criteria for the selection of research problem; Problem formulation. Concepts, constructs, variables, conceptual and operational definitions. Hypothesis: Meaning, importance, uses and requirements.	Scientific attitude; Scientific method; application of scientific method for the study of social phenomena.	01	20.04.2024 & 22.04.2024	Lecture
	Research: Definition and objectives	02	25.04.2024 & 26.04.2024	Lecture
	Social Work Research: Meaning, objectives, functions and limitations;	02	27.04.2024	Lecture
	Scope of social work research in India;	01	29.04.2024 02.05.2024 03.05.2024 & 04.05.2024	Lecture
	Agencies sponsoring and conducting social work research, ethics in research.	01	06.05.2024 & 09.05.2024	Lecture
	Problem identification: Criteria for the selection of research problem	02	10.05.2024 11.05.2024 & 13.05.2024	Lecture
	Problem formulation. Concepts, constructs, variables, conceptual and operational definitions.	03	16.05.2024 18.05.2024 & 20.05.2024	Lecture
	Hypothesis: Meaning, importance, uses and requirements.	02	23.05.2024 &24.05.2024	Lecture and activity on hypothesis formulation
UNIT II			25.05..2024 &27.05.2024	
Design of research: Definition and importance; types of research design; exploratory, descriptive, experimental, evaluative design, participatory research and action	**Research design:** Definition and importance; types of research design; exploratory, descriptive, experimental, evaluative	04	30.05.2024 & 31.05.2024	Lecture

research. Source and Types of Data: Primary and secondary, objective and subjective, qualitative and quantitative. Sampling: Sample and population: Rationale and Characteristics of sampling; methods of sampling, general considerations in the determination of sample size. Methods of collection of primary data: Observation: Structured and unstructured; participant and non-participant. Questionnaire, interview schedule and interview guide. Pilot study and Pre-testing. Scales: Need for scales, some prominent scaling procedures. Case study: Meaning, uses, steps. Secondary data: Official data, personal documents, problem in the use of secondary data	design, participatory research and action research.			
	Source and Types of Data: Primary and secondary, objective and subjective, qualitative and quantitative.	02	01.06.2024	Lecture
	Sampling: Sample and population: Rationale and Characteristics of sampling; methods of sampling, general considerations in the determination of sample size.	02	03.06.2024 &06.06.2024	Lecture
		02	07.06.2024	
	Methods of collection of primary data: Observation: Structured and unstructured; participant and non-participant. Questionnaire, interview schedule and interview guide.		08.06.2024 & 10.06.2024	Lecture
	Pilot study and Pre-testing.	01	13.06.2024	Lecture
	Scales: Need for scales, some prominent scaling procedures.	01	24.06.2024 & 27.06.2024	Lecture
	Case study: Meaning, uses, steps.	01	28.06.2024 & 29.06.2024	Lecture
	Secondary data: Official data, personal documents, problem in the use of secondary data	02	01.07.2024 &04.07.2024	Lecture
UNIT III Processing of data: Content, editing, coding data classification, manual and mechanical tabulation of data; frequency distribution, diagrammatic and graphic presentation - use of computers. Issues related to Social Work Research: Interpretation of	Processing of data: Content, editing, coding data classification, manual and mechanical tabulation of data;	03	05.07.2024	Lecture
	frequency distribution	01	08.07.2024 & 11.07.2024	Lecture

data, research reporting: contents of research report: foot-note, references, bibliography, preparation of abstract; the art of making book review.				
	diagrammatic and graphic presentation - use of computers	02	12.07.2024 & 13.07.2024	Lecture
	Issues related to Social Work Research:	01	15.07.2024	Lecture
	Interpretation of data, research reporting: contents of research report: foot-note, references, bibliography, preparation of abstract;	03	18.07.2024 & 19.07.2024	Lecture
	The art of making book review.	01	20.07.2024 & 22.07.2024	Lecture
UNIT IV Statistics: Definition, functions and importance Measures of Central Tendency; Measures of Dispersion. Chi-square, Correlation Coefficient, ‘t’ distribution; Analysis of Variance and „ ‘F’ distribution. SPSS package.	Statistics: Definition, functions and importance	01		Lecture
	Measures of Central Tendency;	02		Lecture and practicals
	Measures of Dispersion. Chi-square, Correlation Coefficient, ‘t’ distribution;	02		Lecture and practicals
	Analysis of Variance and „ ‘F’ distribution.	02		Lecture and practicals
	SPSS package.	02		Lecture and practicals
Activity	Community mobilization project, data collection and presentation	01 day		practicals
Construction of research methodology	Workshop	01 day workshop		

Subject: Communication and Counselling (Course code: 20075)

Curriculum as Prescribed by the Institution	Topics	No. of Hours	Date	Method of Deployment
UNIT I: Communication: Meaning and importance of communication. Process of communication: Key elements in the communication process - Communication, message, audience; channel of communication. Verbal and nonverbal communication. Basics of Communication. Education and communication for national development. Interpersonal communication: Interviewing - Objectives, principles of interviewing; listening, qualities of effective communicator. Seminars, conferences, lectures, group discussion, panel discussion, symposium, workshop, role playing, simulation exercises, written communication, report writing, letter writing, article/essay writing, games, brain storming, street play, field work exposure.	Discussion about the subject	1 Hour	18.04.2024 & 19.04.2024	Lecture and discussion
	Communication: Meaning and importance of communication.	2 Hours	20.04.2024& 22.04.2024	Lecture with PPT
	Process of communication	1 Hour	25.04.2024 & 26.04.2024	Lecture with PPT
	Verbal and nonverbal communication.	2 Hours	27.04.2024	Lecture with PPT Role play
	Education and communication for development	2 Hours	29.04.2024 02.05.2024 03.05.2024 & 04.05.2024	Lecture with PPT
	Interview - Objectives, principles of interview	1 Hour	06.05.2024 & 09.05.2024	Practical demo
	qualities of effective communicator	1 Hour	10.05.2024 11.05.2024 & 13.05.2024	Lecture with PPT
	Seminars, conferences, lectures, group discussion, panel discussion,	1 Hour	16.05.2024 18.05.2024 & 20.05.2024	Lecture with PPT
	symposium, workshop, role playing, simulation exercises	2 Hours	23.05.2024& 24.05.2024	Group activity
	written communication, report writing, letter writing, article/essay writing,	2 Hours	25.05..2024& 27.05.2024	Lecture with PPT

	Games, brain storming, street play, field work exposure.	2 Hours	30.05.2024& 31.05.2024	Group activity
UNIT II: Visual aids in communication: Poster making, use of notice boards, flip charts, charts, flash cards, photographs, pamphlets, slide shows. Mass Communication: Television, exhibition, newspapers and magazines, advertisements, radio, film, VCD/ DVD, e-mail, internet. Impact of mass communication on society, family, marriage and child development. Communication Analysis and Planning: Planning and executing a communication campaign on an issue using various methods of communication.	Poster making, use of notice boards, flip charts, charts, flash cards, photographs, pamphlets, slide shows	2 Hours	01.06.2024	Group activity
	Mass Communication: Television, exhibition, newspapers magazines, advertisements,	1 Hour	03.06.2024 &06.06.2024	Presentations and Demonstrations
	Radio, film, VCD/ DVD, e-mail, internet	1 Hour	07.06.2024	Demonstration
	Impact of mass communication on society, family, marriage and child development	1 Hour	08.06.2024& 10.06.2024	Group Discussion
	Communication analysis Planning and executing	1 Hour	13.06.2024	Lecture with PPT
	communication campaign on an issue using various methods of communication	1 Hour	24.06.2024 & 27.06.2024	Lecture, PPT and Discussion
	Counseling: concept and Definition,	1 Hour	28.06.2024 & 29.06.2024	Lecture
	Counseling: nature and goals Historical background and origins of counseling	1 Hour	01.07.2024 &04.07.2024	Lecture with PPT
C-I Assessment	Internal Assessment and Seminars	2 Hours	05.07.2024	Test And Presentations
UNIT III Counseling:	Qualities of an effective counselo	1 Hour	08.07.2024 & 11.07.2024	Lecture with PPT

Definition, nature and goals, areas of counseling; Historical background and origins of counseling, ethical nature of counseling, qualities of an effective counselor. Counseling Situations: Developmental, preventive, facilitative, and crisis. Counseling and Psychotherapy - Skills in counseling - Establishing the relationship. Process of Counseling. Approaches to Counseling: Approaches; Theoretical base, thrust, goals, key concepts, techniques - Approaches like person-centered, rational-emotive, behavioral approaches, gestalt, existential approaches, Egan's three stage model, eclectic model. Indigenous Approach: Indigenous approaches of help and self-help like yoga, reflection. Act of Prayashchit.	Counseling Situations: Developmental	1 Hour	12.07.2024 & 13.07.2024	Lecture with PPT
	Developmental, preventive, facilitative, and crisis	2 Hours	15.07.2024	Lecture with PPT
	Counseling and Psychotherapy - Skills in counseling - Establishing the relationship	1 Hour	18.07.2024 & 19.07.2024	Lecture with PPT
	Process of Counseling	1 Hour	20.07.2024 & 22.07.2024	Lecture with PPT
	Approaches to Counseling: thrust, goals	1 Hour		Lecture with PPT
	Approaches to counseling: person-centered approach	1 Hour		Lecture with PPT
	Rational-emotive,	1 Hour		Lecture with PPT
	Behavioral approach	1 Hour		Lecture with PPT
	Gestalt approach	1 Hour		Lecture with PPT
	Existential approach	1 Hour		Lecture with PPT
	Egan's three stage model, Eclectic model	1 Hour		Lecture with PPT
	Indigenous approaches of help and self-help Like yoga, reflection. Act of Prayashchit	1 Hour		Group Discussion, Lecture with PPT

	Couple and Family Counseling- process and stages	1 Hour		Demonstration
	Crisis Counseling			Lecture with PPT
UNIT IV Couple and Family Counseling: Issues in such counseling, its process and stages. Crisis Counseling Group Counseling: Counseling for groups - Process, advantages and disadvantages of group counseling. Practice of, counseling bureau - Premarital and marital counseling, vocational counseling centres, mental health centres, child guidance clinics, correctional institutions, deaddiction and rehabilitation centres, educational institutions.	Group Counseling Process, advantages and disadvantages	1 Hour		Demonstration
	Premarital and marital counseling	1 Hour		Lecture
	counseling in vocational centers	1 Hour		Lecture
	Counseling in mental health centers and clinics	1 Hour		Lecture with PPT
	Counseling in correctional institutions, deaddiction and rehabilitation centers, and educational institutions.	1 Hour		Lecture with PPT
Syllabus	Review &QP Discussion	1 Hour		Interaction
C-II Assessment	Internal Assessment and Seminars	2 Hours		Test and Presentations

Subject: Personal and Professional Growth (Course Code: 20076)
Hrs/week: 4 Hours **Total Hrs: 48 Hours**

Curriculum as prescribed by the Institution	Topic	No. of hours required	Date	Method of Deployment
UNIT-I Self and Self Awareness: Understand self through a cognitive construct/paradigm (two/three models from among those available may be offered as workshops). Suggested approaches are: Rational Emotive Therapy, Gestalt	Introduction to the subject	1 Hour	18.04.2024 & 19.04.2024	Discussion
	Self and Self Awareness: Understand self through a cognitive construct/paradigm	1 Hour	20.04.2024& 22.04.2024	Lecture and Group discussion

Approach, Transactional Analysis, Reality Therapy, Yoga for Therapy, Meditation Techniques. Explore self as being, and understand the process of becoming. (Through observation). Practice consciously measures to sustain and experience continuous awareness. Observation & Reflection: Theory and techniques. Communication Choices: Communication mode and patterns and effectiveness, Interpersonal communication, nature of choices made.	Rational Emotive Therapy, Gestalt Approach	2 Hours	25.04.2024 & 26.04.2024	Lecture with PPT
	Transactional Analysis, Reality Therapy	2 Hours	27.04.2024	Lecture with PPT and Activities
	Yoga for Therapy and Meditation techniques	1 Hour	29.04.2024 02.05.2024 03.05.2024 & 04.05.2024	Lecture with PPT
	Explore self as being, and understand the process	1 Hour	06.05.2024 & 09.05.2024	Lecture and Discussion
	Practice consciously measures to sustain and experience continuous awareness	1 Hour	10.05.2024 11.05.2024 & 13.05.2024	Lecture with PPT
	Observation & Reflection: Theory and techniques.	1 Hour	16.05.2024 18.05.2024 & 20.05.2024	Lecture with PPT
	Communication mode and patterns, Interpersonal communication	1 Hour	23.05.2024&24. 05.2024	Lecture with PPT and Discussion
UNIT-II Emotions & Its Expressions: Emotions, nature of expression. Understand own pattern of communication, choices made to express emotions, modes used, examine need for change. Communication: Informal and knowledge and skills of rapid reading, writing, creative writing, report writing and public speaking.	Emotions & Its Expressions: Emotions, nature of expression	1 Hour	25.05..2024&27. 05.2024	Lecture with PPT and Discussion
	Understand own pattern of communication	1 Hour	30.05.2024& 31.05.2024	Lecture with PPT
	Skills of Rapid Reading	1 Hour	01.06.2024	Lecture with PPT
	Writing and Creative writing	1 Hour	03.06.2024 &06.06.2024	Lecture with PPT
	Report Writing and Public Speaking	1 Hour	07.06.2024	Lecture with PPT and Discussion

C-I Assessment	Internal Assessment and Seminars	2 Hours	08.06.2024& 10.06.2024	Test and Presentations
UNIT-III Creativity and Self: Understand brain functions: Creativity, need and development Life Style: Conscious life style - enhanced life skills: Communication, decision making, empathy, critical thinking, use of time and money, building and sustaining bonds-relational, collegial and personal. Self-defeating behaviour - nature and impact. Choices for change.	Brain functions	1 Hour	13.06.2024	Lecture with PPT
	Creativity and need and development	1 Hour	24.06.2024 & 27.06.2024	Lecture with PPT and Discussion
	Conscious Life style	1 Hour	28.06.2024 & 29.06.2024	Interactions
	Communication, Decision Making, Empathy	1 Hour	01.07.2024 &04.07.2024	Interaction and Group Discussion
	Critical thinking, Use of time and money	1 Hour	05.07.2024	
	Building and sustaining bonds- Personal and Collegial	1 Hour	08.07.2024 & 11.07.2024	
	Self-Defeating behvaiour-nature and impact. Choices for change	2 Hours	12.07.2024 & 13.07.2024	
UNIT-IV Values, Attitude and Professional Ethics: Values and attitudes - their role in life, Value conflict - its impact, value clarification. Integration: Through Eastern and Western approaches experience the processes of integration. Approaches recommended are: Yoga as a science, meditation (tool for	Values, Attitudes and professional ethics	1 Hour	15.07.2024	Lecture with PPT
	Conflict - its impact, value clarification.	1 Hour	18.07.2024 & 19.07.2024	Lecture with PPT
	Eastern and western approaches and experience the process of integration	2 Hours	20.07.2024 & 22.07.2024	Lecture with PPT
	Yoga as a science, Meditation	1 Hour		Interaction and Discussion

meditation - own choice). Stress / Burn out - Self help Methods: Stress, Stressors, nature and impact of stress, its expression, and burnout. Spirituality and Growth.	Stress/Burn out- self-help methods and impacts	1 Hour		Lecture with PPT and discussion
	Spirituality and Growth	1 Hour		Discussion
Summary of the Subject	Revision and QP	2 Hours		Interaction and Discussion
C-II Assessment	Internal Assessment and Seminar	2 Hours		Test and Presentations
Communication workshop		05		
Cousellingpracticals		06		

Subject: SCIENCE OF CRIME, PENOLOGY AND SOCIAL WORK PRACTICE (OE)

Hrs/week: 4 Hours **Total Hrs: 45 Hours**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
UNIT I Crime: Meaning and definition, historical perspective; Nature and Scope of Criminology, Causation of Crime, Characteristics and Classification of Crimes, Crime patterns - Habitual, Professional, Organised, White collar, Public order crimes; Gender related issues in crimes; Classification of offenders under Indian Penal Code. Trial duration and pending cases, its impact.	Introduction science of crime, penology and social work practice	1 hour	18.04.2024 & 19.04.2024	Lecture and Interactive discussion
	Crime: Meaning and definition, historical perspective;	2 Hours	20.04.2024 & 22.04.2024	Lecture with PPT
	Nature and Scope of Criminology,	1 hour	25.04.2024 & 26.04.2024	Lecture with PPT
	Causation of Crime,	1 hour	27.04.2024	Lecture with PPT
	Characteristics and Classification of Crimes, Crime patterns - Habitual, Professional, Organised,	2 Hours	29.04.2024 02.05.2024 03.05.2024 & 04.05.2024	Lecture with PPT
	White collar, Public order crimes; Gender related issues in crimes;	1 Hour	06.05.2024 & 09.05.2024	Lecture with PPT
	Classification of offenders under Indian Penal Code	2 Hours	10.05.2024 11.05.2024 & 13.05.2024	Lecture with PPT
	Trial duration and pending cases, its impact	2 hours	16.05.2024 18.05.2024 & 20.05.2024	discussion with PPT
UNIT II Penology: Meaning, definition, historical perspective, scope. Theories of Punishment: Deterrent theory, retributive theory, preventive theory and reformative theory. Efficacy of punishment. Essentials of an ideal penal system, penal policy in India. Forms of Punishment: Corporal and capital punishment - pros and cons.	Penology: Meaning, definition, historical perspective	2 hours	23.05.2024 &24.05.2024	Lecture with PPT
	scope. Theories of Punishment:	2 hours	25.05..2024 &27.05.2024	Lecture with PPT
	Deterrent theory, retributive theory, preventive theory and reformative theory	2 hour	30.05.2024 & 31.05.2024	Lecture with PPT
	Efficacy of punishment. Essentials of an ideal penal system, penal policy in India	1 hour	01.06.2024	Lecture with group Discussion

Agencies involved in criminal justice system: Correctional institutions. Impact of imprisonment, maintenance of prisons, staff dynamics.	Forms of Punishment: Corporal and capital punishment - pros and cons.	1 hour	03.06.2024 &06.06.2024	Lecture with group Discussion
	Agencies involved in criminal justice system:	2 hour	07.06.2024	Lecture with PPT
	Correctional institutions. Impact of imprisonment, maintenance of prisons, staff dynamics.	2 hour	08.06.2024 & 10.06.2024	Lecture with PPT
UNIT III Victimology: Meaning, definition, historical perspective, scope of the study. Problems of victims - physical, psychological, socio-cultural. Victim offender relationship. Hurdles in crime reporting, investigation and justice delivery in the Indian context. Compensation and restitution measures.	Victimology: Meaning, definition,	1 hour	13.06.2024	Lecture with PPT
	historical perspective, scope of the study	1 hour	24.06.2024 & 27.06.2024	Lecture with PPT
	Problems of victims - physical, psychological, socio-cultural. Victim offender relationship	2 hours	28.06.2024 & 29.06.2024	Lecture with PPT
	Hurdles in crime reporting, investigation and justice delivery in the Indian context.	2 hour	01.07.2024 &04.07.2024	Lecture with group Discussion
	Compensation and restitution measures.	1 hour	05.07.2024	Lecture with group Discussion
UNIT IV Social Work Practice in Correctional Setting: Scope for social work practice in institutional and non institutional settings. Application of Social Work interventions with under - trials, prisoners, rehabilitation of prisoners, work with families of prisoners, work with victims of crime. Human Rights in the context of crime and punishment - Agencies to protect Human Rights - National Human Rights Commission, State Human	Social Work Practice in Correctional Setting:	1 hours	08.07.2024 & 11.07.2024	Lecture with PPT
	Scope for social work practice in institutional and non institutional settings.	1 hour	12.07.2024 & 13.07.2024	Lecture with group Discussion
	Application of Social Work interventions with under - trials, prisoners, rehabilitation of prisoners, work with families of prisoners, work with victims of crime.	2 hours	15.07.2024	Lecture with group Discussion
	Human Rights in the context of crime and punishment -	1 hour	18.07.2024 & 19.07.2024	Lecture with PPT
	Agencies to protect Human	2 hours	20.07.2024	Lecture with

Rights Commissions, Right to information Act and in the context of Human Rights violation, Social Work measures with the Police, the Judiciary and the prison staff - Job stress, burn out and other issues.	Rights - National Human Rights Commission, State Human Rights Commissions		& 22.07.2024	PPT
	Right to information Act and in the context of Human Rights violation,	2 hours		Lecture with PPT
	Social Work measures with the Police, the Judiciary and the prison staff - Job stress, burn out and other issues.	2 hours		Lecture with PPT

Lesson Plan –Forth Semester

Subject: EMPLOYEE RELATIONS AND LEGISLATION [Course code: 40071]

Hrs/week: 4 Hours **Total Hrs: 51 hours**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
UNIT I Employee relations, History of industria1ization in India - Issues related to employees in organized and unorganized sector. Concept, Definition, Philosophy and Principles of employee relations. Employee relations with special reference to Occupation - Safety - Health and Environment (OSHE) Education. Analysis of the terms industrial discipline – misconduct, disciplinary proceedings. Domestic Enquiry: Contents and Process, Principles of Natural Justice, Tribunal; Discharge/Dismissal	Employee relations,	2 hour	18.04.2024 & 19.04.2024	Lecture and Interactive discussion
	History of industria1ization in India	1 Hour	20.04.2024& 22.04.2024	Lecture with PPT
	Issues related to employees in organized and unorganized sector.	1 hour	25.04.2024 & 26.04.2024	Lecture with PPT
	Concept, Definition, Philosophy and Principles of employee relations.	1 hour	27.04.2024	Lecture with PPT
	Employee relations with special reference to Occupation - Safety - Health and Environment (OSHE) Education	2 Hours	29.04.2024 02.05.2024 03.05.2024 & 04.05.2024	Lecture with PPT
	Analysis of the terms industrial discipline – misconduct, disciplinary proceedings.	1 Hour	06.05.2024 & 09.05.2024	Lecture with PPT
	Domestic Enquiry: Contents and Process, Principles of Natural Justice, Tribunal; Discharge/Dismissal	1 Hour	10.05.2024 11.05.2024 & 13.05.2024	Lecture with PPT
UNIT II Trade Unions: Trade Unionism in India, emergence, history and growth, Trade Union as an organization –	Trade Unions: Trade Unionism in India,	2 hour	16.05.2024 18.05.2024 & 20.05.2024	Lecture with PPT
	emergence, history and growth,	1 hour	23.05.2024&	Lecture with

Various Trade Unions in India, Role of Trade Unions in India, Employers' Associations – Objectives, structure and activities. Contemporary issues in employee relations	Trade Union as an organization		24.05.2024	PPT
	Various Trade Unions in India, Role of Trade Unions in India	1 hour	25.05..2024& 27.05.2024	Lecture with PPT
	Employers' Associations – Objectives, structure and activities. Contemporary issues in employee relations	1 Hour	30.05.2024& 31.05.2024	Lecture with group Discussion
UNIT III Fundamentals of Labour laws, The Constitution of India and labour laws. Employee Legislations: - The Payment of Bonus Act, 1965, Employees Provident Fund (and Misc. Provisions) Act 1952, Workmen's Compensation Act 1923, Employees State Insurance Act 1948, Payment of Gratuity Act, 1972,ChildLabour (Prohibition and Regulation) Act, 1986. The Factories Act 1948, The Contract Labour (Regulation and Abolition) Act 1970,The Minimum Wages Act 1948 and The Payment of Wages Act 1936; The Apprentices Act, 1961,The Maternity Benefit Act 1961. The Trade Union Act 1926, The Industrial Employment (Standing Orders) Act 1946, The Industrial Dispute Act 1947, The Employment Exchanges (Compulsory Notification of Vacancies) Act 1958	Fundamentals of Labour laws, The Constitution of India and labour laws.	1 hour	01.06.2024	Lecture with PPT
	Employee Legislations: - The Payment of Bonus Act, 1965	1 hour	03.06.2024 &06.06.2024	Lecture with PPT
	Employees Provident Fund (and Misc. Provisions) Act 1952,	1 hour	07.06.2024	Lecture with PPT
	Workmen's Compensation Act 1923	2 hour	08.06.2024& 10.06.2024	Lecture with group Discussion
	Payment of Gratuity Act, 1972	1 hour	13.06.2024	Lecture with group Discussion
	Child Labour (Prohibition and Regulation) Act	1 hour	24.06.2024 & 27.06.2024	Lecture with group Discussion
	The Factories Act 1948,	2 hour	28.06.2024 & 29.06.2024	Lecture with PPT
	The Contract Labour (Regulation and Abolition) Act 1970	1 hour	01.07.2024 &04.07.2024	Lecture with PPT
	The Minimum Wages Act 1948 and	1 hour	05.07.2024	Lecture with PPT
	The Payment of Wages Act 1936; The Apprentices Act, 1961,	1 hour	08.07.2024 & 11.07.2024	Lecture with PPT
	The Maternity Benefit Act 1961.	1 hour	12.07.2024 & 13.07.2024	Lecture with PPT

	The Trade Union Act 1926, The Industrial	1 hour	15.07.2024	Lecture with PPT
	Employment (Standing Orders) Act 1946, The Employment Exchanges (Compulsory Notification of Vacancies) Act 1958	1 hour	18.07.2024 & 19.07.2024	Lecture with PPT
	The Industrial Dispute Act 1947,	3 hour	20.07.2024 & 22.07.2024	Lecture with PPT

Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**

Subject: Human Resource Development and Employee Wellness

Hrs/week: 4 Hours **Total Hrs: 51 hours**

UNIT I **Human Resource Development (HRD):** Concept, origin and needs for HRD; Overview of HRD as a Total system; Approaches to HRD; human capital approach; social psychology approach and poverty alleviation approach; HRD and its dimensions, Competency Mapping.	Introduction about the subject, semester plans, detailing syllabus and activities to be carried out in classroom and field work for the semester	01 hour	18.04.2024 & 19.04.2024	Lecture
	Concept of HRD	02 hour	20.04.2024& 22.04.2024	Lecture and PPT
	Need for HRD in Indian industries	01 hour	25.04.2024 & 26.04.2024	Lecture and PPT
	HRD as a total system	02 hour	27.04.2024	Lecture and PPT
	Approaches to HRD	01 hour	29.04.2024 02.05.2024 03.05.2024 & 04.05.2024	Group Discussion on HRM concepts
	HRD dimensions	01 hour	06.05.2024 & 09.05.2024	Lecture and PPT
	Competency mapping	01hour	10.05.2024 11.05.2024 & 13.05.2024	Activity on mapping competency for a job

	Group discussion on unit 1 and field observation of the concepts		16.05.2024 18.05.2024 & 20.05.2024	Discussion
UNIT II **HRD Interventions:** Performance Measurement Systems – Fundamental issues. Feedback sessions. Organizational goal setting process, Key Result Area (KRA) and Key Performance Indicator (KPI), Coaching, Mentoring, career planning, career development, reward system, quality of work life. HRIS: - Computers and computer based Information Systems. Measuring HR : Changing role of HR, HR as a strategic partner, the need for measuring HR. Approaches to measuring HR: - Competitive Benchmarking, HR Accounting, HR Auditing, HR Effectiveness Index, HR Key Indicators, HR MBO (Management by Objectives). Instructional Technology: Learning and HRD; Building Learning Organization:	Introduction to HRD interventions: PMS concept and issues	02	23.05.2024&24.05.2024	Lecture and PPT
			25.05..2024&27.05.2024	
	Importance of feedback sessions	01	30.05.2024& 31.05.2024	Lecture
	Organizational goal setting process	01	01.06.2024	Lecture and PPT
	Key Result Area (KRA) and Key Performance Indicator (KPI)	01	03.06.2024 &06.06.2024	Lecture and discussion
	Coaching, Mentoring-Importance	02	07.06.2024	Lecture and PPT
	career planning and career development	02	08.06.2024& 10.06.2024	Lecture and discussion
	Reward system	01	13.06.2024	Activity on designing reward system

measuring learning – the intellectual capital, architecting a learning organization, Organizational Learning, models and curriculum; factors and principles of learning; group and individual learning; HRD trends; behavioural sciences; transactional analysis; Concepts of continuous learning, behavior modeling and self-directed learning; evaluating the HRD effort; data gathering; analysis and feedback; HRD experience in Indian organizations; future of HRD - Organization culture and development	quality of work life	01	24.06.2024 & 27.06.2024	Lecture and discussion
	HRIS: - Computers and computer-based Information Systems.	01	28.06.2024 & 29.06.2024	Activity on working in MS excel and HRIS software
	Measuring HR : Changing role of HR, HR as a strategic partner, the need for measuring HR.	02	01.07.2024 &04.07.2024	Lecture and discussion
	Approaches to measuring HR: Competitive Benchmarking, HR Accounting, HR Auditing, HR Effectiveness Index, HR Key Indicators, HR MBO (Management by Objectives).	02	05.07.2024	Lecture and discussion
	Learning and HRD; Building Learning Organization: measuring learning – the intellectual capital, architecting a learning organization, Organizational Learning, models and curriculum; factors and principles of learning; group and individual	02	08.07.2024 & 11.07.2024	Lecture and discussion, Presentation by students

	learning;			
	HRD trends; behavioural sciences; transactional analysis;	02	12.07.2024 & 13.07.2024	Lecture and discussion
	Concepts of continuous learning, behavior modeling and self-directed learning;	02	15.07.2024	Lecture and discussion
	Evaluating the HRD effort; data gathering; analysis and feedback;	01	18.07.2024 & 19.07.2024	Lecture and discussion
	HRD experience in Indian organizations;	01	20.07.2024 & 22.07.2024	Lecture and discussion. Screening a video on HRD in India
	future of HRD - Organization culture and development	02		Lecture and discussion

Title of the Course : Mental Health and Psychiatric Social Work

Name of the Faculty : Ms.Revathi R.

Curriculum prescribed by the Institution	Topic	No. of Time	Method of Deployment	Date

		Required		
UNIT I Concept of mental health and mental illness - Mental health as a part of general health - Misconceptions about mental illnesses. General approaches to the mentally ill - International Classification of Mental Disorders. Signs, symptoms, etiology, diagnosis, prognosis and management of the following: - Neuroses,Psychoses, Psycho physiologic disorders, Personality disorders, Psychiatric disturbances in children and adolescents, Organic psychotic conditions, Mental retardation.	Concept of mental health and mental illness- Mental health as a part of general health.	1 Hour	Lecture and Discussion	2.05.2024
	Misconceptions about mental illnesses. General approaches to the mentally ill	1 Hour	Lecture and Discussion	3.05.2024
	International Classification of Mental Disorders	1 Hour	Lecture with PPT	9.05.2024
	Neuroses, Psychoses,Psycho Physiological disorders	2 Hours	Lecture with PPT	13.05.2024 16.05.2024
	Personality disorders, Mental Retardation	2 Hours	Lecture with PPT	17.05.2024 20.05.2024
	Psychiatric Disturbances in Children and Adolescents, Organic psychotic conditions	2 Hours	Lecture with PPT	24.05.2024 27.05.2024
UNIT II Introduction to Psychiatric Social Work: Meaning and Scope - Historical background of psychiatric social work in India and abroad - Reasons for its development as a specialty. Application of social work methods and other related techniques used in the field - Multi disciplinary approach and team work in mental health care - Problems of hospitalization - Impact of mental illness on the patient, family and community. Practice of Social Work: Importance of home visit and visit to the place of work - Role of family in the treatment of mentally ill - Preparing the family and community for the return of	Meaning, scope and Historical background of Psychiatric Social Work	2 Hours	Lecture with PPT	30.05.2024 31.05.2024
	Applications of Social Work Methods and other related techniques used in the field.	1 Hour	Lecture with PPT	3.06.2024
	Multi-disciplinary and team work in Mental health care	1 Hour	Lecture with PPT and Discussion	6.06.2024
	Problems of hospitalization - Impact of mental illness on the patient, family and community.	1 Hour	Lecture with PPT and Discussion	7.06.2024
	Importance of home visit and visit to the place of work - Role of family in the treatment of mentally ill	2 Hours	Interaction and Discussion	10.06.2024 13.06.2024

the affected individual, follow-up.	Preparing the family and community for the return of the affected individual, follow-up	1 Hour	Lecture	14.06.2024
C I Assessment	Internal Assessment and Student Seminars	2 Hours	Test and Presentations	
UNIT III Care of mentally ill: Day-care centre, night-care centre, half-way-home, sheltered workshop, Occupational therapy units - Role of social worker and role of voluntary organisations. Role of voluntary organisations, governmental-agencies and paraprofessionals in the welfare of mentally ill. Role of social worker in mental health centers, departments of psychiatry in general hospitals, child guidance clinics, community mental health units, correctional institutions, industries, and family welfare centres. Role of social worker with head injured, paraplegics and epileptics. Role of social worker in the management of substance abuse – Educational avenues in psychiatric social work - Research Avenue in the field of mental health for social workers.				
	Care of mentally ill: Day-care centre, night-care centre, half-way-home, sheltered workshop, Occupational therapy units	2 Hours	Lecture with PPT	21.06.2024 24.06.2024
	Role of voluntary organisations, governmental-agencies and paraprofessionals in the welfare of mentally ill.	1 Hour	Lecture and Discussion	27.06.2024
	Role of social worker in mental health centers, departments of psychiatry in general hospitals	1 Hour	Lecture with PPT and Discussion	28.06.2024
	Child guidance clinics, community mental health units, correctional institutions, industries, and family welfare centres.	2 Hours	Lecture with PPT	1.07.2024 4.07.2024
	Role of social worker with head injured, paraplegics and epileptics. Role of social worker in the management of substance abuse	1 Hour	Lecture with PPT and Discussion	5.07.2024

	Educational avenues in psychiatric social work - Research Avenue in the field of mental health for social workers.	1 Hour	Group Discussion	8.07.2024
UNIT IV Organisation of psychiatric social work department - Functions; and collaboration with other departments. Community mental health and social work, NMHP, Innovations like Satellite clinics, district mental health programme etc. Rehabilitation and Acts: Occupational therapy - Principles and practice - Psychosocial rehabilitation. Mental Health Act, 1987. The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.	Organization of Psychiatric Social Work Department	1 Hour	Lecture and Discussion	11.07.2024
	Community Mental Health and Social Work and NMHP	1 Hour	Lecture with PPT	12.07.2024
	Satellite Clinics and District Mental Health Programmes	1 Hour	Lecture with PPT and Discussion	15.07.2024
	Occupational Therapy: Principles and Practice. Psycho-Social Rehabilitation	2 Hours	Lecture with PPT and Group Discussion	18.07.2024 22.07.2024
	Mental Health Act 1987	1 Hour	Lecture with PPT	25.07.2024
	The Person with Disabilities Protection of Rights Act 1995	1 Hour	Lecture with PPT	29.07.2024
Summary of the Subject	Revision and QP	2 Hours	Interaction and Group Discussion	1.08.2024 5.08.2024
C II Assessment				

LESSON PLAN 2023-2024

MTTM 1st SEMESTER

01. Subject: TOURISM PRINCIPLES AND PRACTICES

Course/Programme: MTTM-I Semester

Teaching Hours per week: 04

Credit: 04

Total no. of working hours available – 40

Date	**Curriculum as prescribed by the university**	**Topics**	**No. of hours required to cover**	**Method of deployment**
Module-1: Introduction to Tourism				
13/11/23 14/11/23	Concept of Tourism	Definition, meaning, nature and scope; Tourist, travelers, visitor, transit visitor and excursionist - definition and differentiation; Leisure, recreation and tourism and their Interrelationship; Brief history of tourism worldwide and in India	02	Lecture method & GDs
16/11/23 17/11/23 18/11/23 20/11/23	Types and Forms	Forms of Tourism: Concept of tourism resource, attraction, product, market, industry and destination in the context of tourism; components (5A's Attraction,	04	

		Accessibility, Accommodation, Amenities and Activities), Tourism system and Elements of tourism (Lieper's Model)		
22/11/23 23/11/23 24/11/23 27/11/23	Characteristics of Tourism	(Intangibility, Perish ability, Variability, Inseparability, Heterogeneous, Multitude of industry, Pricing competitiveness/Flexi bility) inbound and outbound tourism, domestic, international tourism.	04	
Module-2: Fundamentals of Management for Tourism:,				
28/11/23 29/11/23 30/11/23 1/12/23	Introduction to Management	Meaning, concept and characteristics of management - Nature of management: Management as a science, arts	04	Lecture method, Case study & GDs
2/12/23 4/12/23 5/12/23 6/12/23	Functions of Management	Functions of management and their relevance in tourism industry - Types of management.	04	
	Module-3: Planning and Organizing			
7/12/23 8/12/23 9/12/23 11/12/23	Concept of Planning	The nature and purpose of planning- principles of planning- types of planning advantages and limitations of planning	04	Lecture method, (PPT) Case

12/12/23 13/12/24 14/12/24 15/12/23	Concept of Organizing	Nature and purpose of organizing- basis of departmentalisation, span of management-line and staff relationship line and staff conflicts-bases of delegation-methods of decentralization..	04	study & GDs
Module-4: Directing & Controlling				
16/12/23 18/12/23 19/12/23 22/12/23 26/12/23 29/12/23	Concept of Directing	Directing and problems in human relationship-motivation communication and leadership-coordinating. Management by objectives (MBO	06	Lecture method, (PPT) Case study & GDs
1/1/24 2/1/24 3/1/24 4/1/24	Concept of Controlling	Concept and process of control, control of overall performance, human aspect of control..	04	
Module-5: Types of Tourism:.:				
11/1/24 18/1/24 19/1/24 20/1/24	Conventional Tourism Types	Heritage Tourism, Adventure Tourism, and Cultural tourism, Sports Tourism, MICE Tourism, Educational Tourism and Mass Tourism	04	Lecture method, (PPT) Case study & GDs
5/2/24 7/2/24 13/2/24 15/2/24 22/2/24 26/2/24	Alternative Tourism	Eco Tourism, Rural Tourism, Agro/Farm Tourism, Yoga Tourism.	06	

02. Subject: AIR TRAVEL MANAGEMENT

Course/Programme: MTTM-I Semester

Teaching Hours per week: 04

Credit: 04

Total no. of working hours available – 40

Date	**Curriculum as prescribed by the university**	**Topics**	**No. of hours required to cover**	**Method of deployment**
	Module-1: Introduction to Aviation Industry			
13/11/23 14/11/23 16/11/23 17/11/23	Concept of Aviation	History of aviation, types of aviation, Domestic and international Airlines, Scheduled, Non scheduled airlines	04	Lecture method & GDs
18/11/23 20/11/23 22/11/23 23/11/23	Conventions	Chicago and Warsaw convention, five freedoms of Air	04	
28/11/23 29/11/23 30/11/23 1/12/23	Aviation terminology & Airline terms and abbreviations	Types of journey. IATA geography, Global alliances in airline industry, countries – capital, currencies, city codes, Airport codes	04	
	Module-2: Types of civilian aircraft and Interior of an air craft –			
2/12/23 4/12/23 5/12/23 6/12/23	Types and theory of Airplane	Seating, arrangement, Classes of service, theory of an Aero plane, profile of Air	04	

		crew, Aircraft exterior – External features of an Aircraft & its function.		Lecture method, Case study & GDs
7/12/23 8/12/23 9/12/23 11/12/23	Interior of an air craft	Cabin layout, seating arrangements, doors, windows, galley, Air craft communication system, emergency exit. Theory of an Airplane,	04	
	Module-3: Policies of Airlines			
16/12/23 18/12/23 19/12/23 22/12/23 26/12/23 29/12/23	Baggage Regulations	unaccompanied minor, Dangerous goods- classification, packing and marking, carrying of pet animals, trends in airline industry in new millennium	06	Lecture method, (PPT) Case study & GDs
	Module-4: Baggage Handling –			
1/1/24 2/1/24 3/1/24 4/1/24	Baggage Handling	Checked baggage, Free baggage allowance – weight & piece concept, excess baggage charges, Baggage tracing – type of mishandled baggage, systems for tracing mishandled baggage, found & unclaimed baggage. Property irregularity report.	04	Lecture method, (PPT) Case study & GDs
	Module-5: Health considerations in Air travel .			
5/2/24 7/2/24 13/2/24	Health regulations and Policies	cabin air pressure, Immobility and Circulatory problems,	04	Lecture method,

15/2/24 22/2/24 26/2/24		Jet lag, Travelers with medical conditions, Infants, pregnant women, pre-existing illness, Travelers with disabilities, communicable diseases, medical assistance		(PPT) Case study & GDs

03. Subject: MARKETING MANAGEMENT FOR TOURISM

Course/Programme: MTTM-I Semester

Teaching Hours per week: 04

Credit: 04

Total no. of working hours available – 40

Date	**Curriculum as prescribed by the university**	**Topics**	**No. of hours required to cover**	**Method of deployment**
	Module-1: Introduction to Marketing Management			
13/11/23 14/11/23 16/11/23 17/11/23	Concept of Marketing	meaning – nature – differences between selling and marketing	04	Lecture method & GDs
18/11/23 20/11/23 22/11/23 23/11/23	Marketing Mix	Promotion Mix: Meaning – elements of promotion mix, Public Relations and Sales promotion - Determinants of Promotion Mix	04	
	Module-2: Role of promotion in the marketing mix for tourism management			
28/11/23 29/11/23	Distinguish between	Difference between advertising and sales promotions	02	Lecture method, Case study & GDs
2/12/23 4/12/23 5/12/23 6/12/23	Promotion Mix	Determinants of promotion mix – Advertisability for Hotel & Tourism	04	
	Module-3: Advertising			
16/12/23 18/12/23 19/12/23	Concept of Advertising	Need, scope and importance of advertising	03	Lecture method,

22/12/23				(PPT) Case study & GDs
1/1/24 2/1/24 3/1/24 4/1/24	Role of advertising in the Economic development	Advertising and society, latest trends in advertisements – Different types of advertisements.	04	
	Module-4: Advertising Campaign Planning			
5/1/24 6/1/24 8/1/24 9/1/24	Advertising campaign planning	advertising copy design and communication strategy, copy-visualization layout, advertising appeals and themes	04	Lecture method, (PPT) Case study & GDs
11/1/24 12/1/24 13/1/24 21/1/24	Classifications	classification of advertising copies, essentials of good copy.	04	
	Module-5: Advertising media			
23/1/24 28/1/24 29/1/24 30/1/24	Advertising Media &Agencies	types of media, media planning and scheduling – advertisement budget – approaches to advertising budgeting. Advertising agencies – legal and ethical aspects of advertising business in India	04	Lecture method, (PPT) Case study & GDs
5/2/24 6/2/24 8/2/24 15/2/24 16/2/24 22/2/24	Advertisement aids	trade market – slogans – packages – point of purchase displays - below the line promotion.	06	

04. Subject: COMMUNICATION SKILLS FOR TOURISM

Course/Programme: MTTM-I Semester

Teaching Hours per week: 03

Credit: 03

Total no. of working hours available – 34

Date	**Curriculum as prescribed by the university**	**Topics**	**No. of hours required to cover**	**Method of deployment**
	Module-1: Imtroduction to Marketing			
13/11/23 14/11/23 16/11/23 17/11/23	Concept of Marketing	Meaning and characteristics of Communication – Role of Communication in Business - Process of Communication – Objectives	04	Lecture method & GDs
18/11/23 20/11/23 22/11/23 23/11/23	Barriers to Communication	Physical Barriers – Language (Semantic Barriers) – Socio Psychological Barriers – Cross Cultural Barriers – How to overcome Barriers.	04	
2/12/23 4/12/23 5/12/23 6/12/23	Methods of communication	Methods of Communication – Verbal – Oral – Written – Non Verbal	04	
	Module-2: Media and Modes			
16/12/23 18/12/23 19/12/23 22/12/23	Conventional Modes	Mail – courier – Telegraph – Telex – Electronic Communication – Telephone – Cellular	04	Lecture

		phones – Fax – Email – Tele Conferencing - Internet –		method, Case study & GDs
1/1/24 2/1/24 3/1/24 4/1/24	Media of Mass Communication	Notice Board – Hoarding – Newspaper – Magazines – Film – Television – Internet (Social Media).	04	
	Module-3: Layout of a Business Letter			
5/1/24 6/1/24 8/1/24 9/1/24 10/1/24 11/1/24	Layout of a Business Letter	Job applications – resume - Enquiries and replies – Order and replies – Complaints and Claims – Sales Letters – Credit letters and Status Enquiries - Meeting Notice – Agenda – memos – e-mails– Reports – Structure of a report – executive Summaries – Representation.	06	Lecture method, (PPT) Case study & GDs
	Module-4: Non-Verbal Communication			
23/1/24 28/1/24 29/1/24 30/1/24	listening	discussing, listening and negotiating - Use of body language – business etiquettes – making speeches	04	Lecture method, (PPT) Case study & GDs
5/2/24 6/2/24 8/2/24 15/2/24	Telephone Etiquette	Dialogue skills – Feedback skills – Telephone Dialogue – Telephone Etiquette	04	
	Module-5: Presentations			
1/3/24 2/3/24 4/3/24 5/3/24	Presentation preparation	Making a Presentation – Preparing the text using Audio -Visual Aids – Power point Presentations	04	Lecture method, (PPT) Case study

				& GDs

04. Subject: HOTEL AND HOSPITALITY OPERATIONS

Course/Programme: MTTM-I Semester

Teaching Hours per week: 02

Credit: 02

Total no. of working hours available – 20

Date	**Curriculum as prescribed by the university**	**Topics**	**No. of hours required to cover**	**Method of deployment**
	Module-1: Introduction to hospitality industry:, ,			
13/11/23 17/11/23	Concept of Hospitality	Definition, characteristics, Inter-relationship between hotel and tourism industry. Introduction to Hotels, definition	02	Lecture method & GDs
20/11/23 22/11/23	Growth and development of hotel industry	Pioneer companies in hotel and accommodation sector in India, types of tourist accommodation, types of rooms, meal plans.	02	
	Module-2: :Classification of Hotel-Star categorization-Location –and.			
1/12/23 5/12/23	Categorisation	Size- Ownership, Organization Structure operational department – Front office, Housekeeping, Food & Beverage Service	02	Lecture method, Case study & GDs
13/12/23 16/12/23	non-operational department	Food Production and non-operational department – Human Resource, Sales & Marketing, Finance, IT,	02	

		Purchase & Receiving, Engineering & Maintenance, Store, Security department		
	Module-3: ORGANISATION OF FRONT OFFICE AND BELL DESK			
27/12/23 30/12/23 4/1/24 5/1/24	Functions of Front Office	Layout, staff, duties and responsibilities of front office staff, symbols used in Front Office, Co-ordination of Front Office with other departments, Functions of receptionist. Guest Cycle	04	Lecture method, (PPT) Case study & GDs
16/1/24 19/1/24 22/1/24	Lobby & Bell Desk Operation	Role of Lobby Manager, Functions of Bell Desk, staff organization and luggage handling procedure on guest arrival and departure, Left Luggage Procedure.	03	
	Module-4: Organisation of Housekeeping –			
23/1/24 27/1/24 28/1/24	Functions	importance of housekeeping, Layout, Staff Organization, brief outline of duties of executive Housekeeper, role of control desk	03	Lecture method, (PPT) Case study & GDs
	Module-5: Future trends in Hospitality Industry			
1/2/24 8/2/24	CRS	Usage of CRS in Hotel Industry, operational usage through chain of hotels	02	Lecture method, (PPT) Case study & GDs
4/3/24 7/3/24	FHRAI,	Role of FHRAI in hotel industry- Functions and operations	02	

LESSON PLAN 2023-24

MTTM 2nd SEMESTER

01. Subject: ORGANISATIONAL BEHAVIOUR

Course/Programme: MTTM-II Semester

Teaching Hours per week: 04

Credit: 04

Total no. of working hours available – 40

Date	**Curriculum as prescribed by the university**	**Topics**	**No. of hours required to cover**	**Method of deployment**
	Module-1: Foundation of Organizational Behaviors ——.			
8/4/24 10/4/24 11/4/24 12/4/24	Concept of OB	Psychology as a Science of Human Behavior – Contribution of behavior Science to Management	04	Lecture method & GDs
13/4/24 17/4/24 18/4/24 19/4/24	Personal Growth	Meaning and Concepts of personal Growth, Personal Life style choices, personal growth and Training Individual conflict	04	
	Module-2: : Individuals and organization——..			
20/4/24 24/4/24	Individual differences	Attitudes – Aptitudes and interest	02	
25/4/24 26/4/24 27/4/24 28/4/24 2/5/24 3/5/24	personality theories	personality tests – personality determination – perception – beliefs – values problems and perception, Engineering & Maintenance, Store,	06	Lecture method, Case study & GDs

		Security department		
	Module-3: Employee Counseling:			
9/5/24 10/5/24 11/5/24	Concept of employee Counselling	Meaning – need – Manager's role in changing behavior	03	Lecture method, (PPT) Case study & GDs
15/5/24 16/5/24 17/5/24 18/5/24	Negotiation Skills	Creating Climate – Opening Process – Conducting the negotiation – Preparing for Negotiation- Styles of Negotiating – Rules of Negotiating	04	
	Module-4: Motivation- Concepts and Application			
23/5/24 24/5/24 26/5/24 29/5/24	Concept of Motivation	Definition, Early and Contemporary theories, From Concept of Applications – Job design, goal setting and other programmes. Stress: Meaning, Nature and levels of stress, causes, effects and coping strategies	04	Lecture method, (PPT) Case study & GDs
30/5/24 31/5/24 1/6/24	Employee discipline	standing orders – discipline and disciplinary procedures – charge sheet – enquire – punishment – dismissal – appeal	03	
	Module-5: Organizational culture			
5/6/24 7/6/24 8/6/24 9/6/24	types of culture	creativity and innovation -– Authoritarian and participative culture- Dominant and sub- culture – strong and weak culture – healthy and unhealthy culture – how to acquire	04	Lecture method, (PPT) Case study & GDs

		good culture		

02. Subject: TOUR OPERATIONS MANAGEMENT

Course/Programme: MTTM-II Semester

Teaching Hours per week: 04

Credit: 04

Total no. of working hours available – 40

Date	**Curriculum as prescribed by the university**	**Topics**	**No. of hours required to cover**	**Method of deployment**
	Module-1: Tour operators and Tour operations,:			
8/4/24 10/4/24 11/4/24 12/4/24	Concept of Tour operation Business	Definition – Functions and types– Departmentalization,	04	Lecture method & GDs
13/4/24 17/4/24 18/4/24 19/4/24	The Travel Market	Business Travel, Corporate travel, Commercial group travel, Institutional travel – Leisure Travel: Family Travel, Single resort travel, special interest travel – Segments of travel industry: Travel agencies – Airlines – Lodging establishments – Tour wholesalers – Cruise liners – Car rentals – Rail transportation.	04	
	Module-2: : Rules for Recognition			
24/4/24 26/4/24	Tour Operator	Role of Tour operator – Income of Tour operator – Tour Wholesalers – Designing a Tour – Tour order – Input and Output of Tour operation	02	Lecture method, Case study & GDs
2/5/24 3/5/24	Centralized Reservation systems	CRS in travel agency and tour operation business and	06	

4/5/24 8/5/24 10/5/24 12/5/24		Global Distribution System (GDS).		
	Module-3: Package Tours,–,			
15/5/24 16/5/24 17/5/24	Concept Package Tour	types and forms of tour package, Components of Package Tour – Basic Principles in packaging – factors affecting tour packaging and package selection	03	Lecture method, (PPT) Case study & GDs
22/5/24 23/5/24 24/5/24 25/5/24	Mass Market Package holidays	inbound and out bound package tours – Free Independent Traveller (FIT'S) Packages or Inclusive Tours, Merits and demerits of package tour, special requirements for outbound packages, Sources of earning: commissions, service charges.	04	
	Module-4: Stages of Package Tour formulation:			
29/5/24 30/5/24 31/5/24 2/6/24	Tour formalities	Initial Research- pre experience and post experience; Development of itinerary; Appointment of destination Coordinators; Negotiation with vendors, designing tour brochure, Developing reservation system, Common package types, different trip types	04	Lecture method, (PPT) Case study & GDs
5/6/24 7/6/24 8/6/24	Itinerary preparation	important considerations for preparing itinerary, Different types of tour itinerary, Travel Terminology	03	
	Module-5: Tour costing and pricing			
21/6/24	components of tour	consumer trends affecting the		Lecture

22/6/24 23/6/24 26/6/24	cost	future of tour operating, consumer issues in tour operating	04	method, (PPT)

03. Subject: TRAVEL AGENCY MANAGEMENT

Course/Programme: MTTM-II Semester

Teaching Hours per week: 04

Credit: 04

Total no. of working hours available – 40

Date	**Curriculum as prescribed by the university**	**Topics**	**No. of hours required to cover**	**Method of deployment**
	Module-1: : Introduction to Tourism Industry,			
8/4/24 10/4/24 11/4/24 12/4/24	History & Growth of Travel Agency	Business, Emergence of Thomas Cook and American Express, Scope, Travel trade-Concept of travel & tourism – Nature and features of tourism as an industry.,	04	Lecture method & GDs
13/4/24 17/4/24 18/4/24 19/4/24	The Travel Organisation	Role of TAAI and UFTA in travel agency business.	04	
	Module-2: : Travel agency			
24/4/24 26/4/24 27/4/24	Travel agency	Definition of Travel Agency and Tour Operations	03	
2/5/24 3/5/24 4/5/24	Differentiation, Interrelationship	Role and contributions of travel agency in the growth and development of tourism.).	03	Lecture method, Case

				study & GDs
	Module-3: Travel Agent: Organization Structure of Travel Agency.			
8/5/24 10/5/24 12/5/24	Concept Travel agent	Travel formalities – Passport & Visa – Types, Types and Functions of a Travel Agent, Ancillary tourism service. Sources of income for the travel agency: Commission, Service charges	03	Lecture method, (PPT) Case study & GDs
22/5/24 23/5/24 24/5/24 25/5/24	Dealing with Principal Suppliers:	Dealing with air travel, tourist transport and accommodation. Supplier challenges, travel search engines	04	
	Module-4: Introduction to Online Travel Agency business,.			
29/5/24 30/5/24 31/5/24 2/6/24	Online Travel Agency business	Business Model, Case study on Expedia/ Make my trip/ trip advisor.	04	Lecture method, (PPT) Case study & GDs
5/6/24 7/6/24 8/6/24 9/6/24	Travel Agent access	To GDS and CRS, booking cruises, USA rail pass, Eurail pass, Brit rail pass, India rail pass. International car hires	04	
	Module-5: How to set up travel agency:, ,			
21/6/24 22/6/24 23/6/24 26/6/24	Market research	sources of funding, comparative study of various types of organisation proprietorship, partnership, private limited and limited	04	Lecture method, (PPT) Case study & GDs
27/6/24 28/6/24 30/6/24	Govt. rules for getting approval	Govt. rules for getting approval, IATA rules, regulation for accreditation, Documentation, Office	03	

		automation, Practical exercise in setting up a Travel Agency.		

04. Subject: DESTINATION PLANNING AND DEVELOPMENT

Course/Programme: MTTM-II Semester

Teaching Hours per week: 04

Credit: 04

Total no. of working hours available – 40

Date	**Curriculum as prescribed by the university**	**Topics**	**No. of hours required to cover**	**Method of deployment**
	Module-1: Destination Development			
8/4/24 10/4/24 11/4/24 12/4/24	Concept of destination	Types of destinations, Characteristics of destinations - Destinations and products	04	Lecture method & GDs
13/4/24 17/4/24 18/4/24 19/4/24	Destination Management Systems	Destination planning guidelines - Destination Selection Process - The Values of Tourism.	04	
	Module-2: Destination Planning Process and Analysis - - -.			
24/4/24 26/4/24 27/4/24	Planning Process and Analysis	National and Regional Tourism Planning and Development -	03	

		Assessment of tourism potential - Planning for Sustainable Tourism Development		Lecture method, Case study & GDs
2/5/24 3/5/24 4/5/24	Contingency Planning	Economic, Social, Cultural and Environmental considerations - Demand and supply match - Design and innovations	03	
	Module-3: Destination Image Development			
22/5/24 23/5/24 24/5/24	Concept Image Development	Attributes of Destinations: Person's determined image, Destination determined image, measurement of destination image	03	Lecture method, (PPT) Case study & GDs
29/5/24 30/5/24 31/5/24 2/6/24	Destination branding perspectives and challenges	Creating the Unique Destination Proposition -Destination image formation process; unstructured image - Product	04	
	Module-4: Destination Promotion and Publicity			
5/6/24 7/6/24 8/6/24 9/6/24	Promotion and Publicity	Ten 'A's framework for tourism destinations - The dynamic wheel of tourism stakeholders	04	Lecture method, (PPT) Case study & GDs
21/6/24 22/6/24 23/6/24 26/6/24	Destination Marketing Mix	Destination Competitiveness – Distribution Channels- Marketing Communication and Strategies and Role of DMO's in destination marketing strategies- Case studies.,.	04	
	Module-5: Institutional Support: - -–.:, ,			

27/6/24 28/6/24 30/6/24	Public Private Partnership (PPP)	National Planning Policies for Destination Development- WTO Guidelines for Planners - Role of urban civic bodies: Town planning - Characteristics of rural tourism plan	04	Lecture method, (PPT) Case study & GDs

05. Subject: TRAVEL AND TOURISM MANAGEMENT (OE)

Course/Programme: MTTM-II Semester

Teaching Hours per week: 04

Credit: 04

Total no. of working hours available – 40

Date	**Curriculum as prescribed by the university**	**Topics**	**No. of hours required to cover**	**Method of deployment**
	Module-1: Concepts of Tourism			
8/4/24 10/4/24 11/4/24 12/4/24	Concept of Tourism	Meaning-Definitions-Visitors-Excursionist-Tourist-TravellerHospitality-Nature- Forms – Types of tourism	04	Lecture method & GDs
13/4/24 17/4/24 18/4/24 19/4/24	Tourism System	Purpose of Travel-Travel Motivators-Five ‘A’S of Tourism-Historical	04	

		development of Tourism-Tourism in India..		
	Module-2: Impacts of Tourism- -			
2/5/24 3/5/24 4/5/24	Impact of Tourism	Significance of Tourism-Multipliers Effect	03	Lecture method, Case study & GDs
22/5/24 23/5/24 24/5/24	types	Economic-Social-Cultural Environmental impacts of Tourism (Positive and Negative)- Case Studies	03	
	Module-3: Travel Intermediaries:,			
29/5/24 30/5/24 31/5/24	Travel agents and Tour operators	types and functions	03	Lecture method, (PPT) Case study & GDs
2/6/24	Government rules for getting approval	IATA rules & regulations for accreditation	02	
5/6/24 7/6/24 8/6/24 9/6/24	Tour Packages	Types-Formulation of Tour Packages-Itinerary-Types-Steps in Itinerary preparation-Tour Packaging and Costing-Interrelationship between tour operator and travel agents.	04	
	Module-4: Travel Formalities and Regulations:			
21/6/24 22/6/24 23/6/24 26/6/24	Travel Formalities and Regulations	Passport-Visa-Customs-Currency Exchange-Health Regulations and Travel Insurance.	04	Lecture method, (PPT) Case

				study & GDs
	Module-5: Tourism Transportation- -			
3/7/24 11/7/24	Tourist transport)	Air-Road-Water-Rail-essential Features of tourist transport-	04	Lecture method, (PPT) Case study & GDs
17/7/24 26/7/24	Civil Aviation in India	Civil Aviation in India and its role-Airports Authority of India, Airports In India	04	

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FIRST SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Department: Department of Studies in Business Administration
Course: Management Theory and Practices
Course Code: 22C101
Term Period: 6th March – 22nd June 2024
Hrs/week: 5 Hrs
Total Hrs: 56 Hrs

Unit	Topic	No. of Hours	Date	Method of Deployment
Unit I: Management	**Definition of Management**	3	06-03-2024 to 08-03-2024	Lecture
	Nature and Scope of Management, Basic functions of Management, Evolution of management theory and practice from Taylor, Fayol, to the present day			
	Neo-Classical (Mayo & Hawthorne Experiments), Modern era – system & contingency approach	3	11-03-2024 to 13-03-2024	Lecture
	Managerial skills, Professional code of conduct & ethics in management	3	14-03-2024 to 18-03-2024	Lecture
	Review and Discussion	4	19-03-2024 to 21-03-2024	Group Activity
Unit II: Planning & Decision Making	**Planning**	3	22-03-2024 to 25-03-2024	Lecture
	Nature and purpose, Planning process - Types of plans - Objectives - Managing by Objective (MBO)			

	Types of strategies and policies, Decision Making - Types and Process, Decision-making under different conditions	3	26-03-2024 to 28-03-2024	Lecture
	MBO Strategies & Review	4	01-04-2024 to 03-04-2024	Group Discussion
Unit III: Organizing	Nature and purpose of organizing, Organization structure - Line and staff authority, Depart mentation & Bases of Depart mentation, Span of control	3	04-04-2024 to 08-04-2024	Lecture
	Centralization and Decentralization, Delegation of authority, Span of Management, Informal Organization & Grapevine	3	10-04-2024 to 12-04-2024	Lecture
	Impact of Technology on Organisation structure, Review and discussion	4	15-04-2024 to 17-04-2024	Group Activity
Unit IV: Coordination	Features of Coordination, Principles of Coordination, Process of coordination in Management	3	18-04-2024 to 22-04-2024	Lecture
	Coordination as the Essence of Management, Elements of coordination	3	23-04-2024 to 25-04-2024	Lecture
	Coordination principles, group task and review	4	26-04-2024 to 29-04-2024	Group Task
Unit V: Controlling	Managerial Control, Relationship between Planning and Control, Limitations of Control	3	30-04-2024 to 03-05-2024	Lecture
	Feedback, Types of Control Systems, Management by Exception	3	06-05-2024 to 08-05-2024	Lecture
	Budgetary Control, Functional and Dysfunctional aspects of Budgetary Control, Internal Control Systems, Internal Audit and Management Audit	3	09-05-2024 to 13-05-2024	Lecture
	Case study on control systems, review & discussion	4	14-05-2024 to 16-05-2024	Group Activity

Department: Department of Studies in Business Administration
Course Name: Organizational Behaviour
Course Code: 22C102
Term Period: 6th March – 22nd June 2024
Hrs/week: 5 Hrs
Total Hrs.: 56 Hrs

Unit I: Organizational Behaviour (8 Hours)				
Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date**	**Method of Deployment**
Module 1 - Organizational Behaviour	Definition, Key elements of OB, Nature, scope and challenges of OB	3	06-03-2024 to 08-03-2024	Lecture
	Models of Organizational Behaviour, Contributions of other disciplines	3	11-03-2024 to 13-03-2024	Lecture
	Emerging issues in Organizational Behaviour, Impact of globalization and IT on OB	2	14-03-2024 to 15-03-2024	Case Study
Unit II: Personality, Perception, and Attitudes (15 Hours)				
Module 2 - Personality	Personality: Meaning, Determinants (Heredity, Environment, Situation), Types of personality (Introvert, Extravert, Type A, Type B, etc.)	4	18-03-2024 to 21-03-2024	Lecture
	Theories of personality (Trait theory, Type theory, Psycho-analytical theory, etc.)	4	22-03-2024 to 26-03-2024	Discussion
	Perception: Meaning, Perceptual Process (Receiving, selecting, organizing, and interpreting stimuli), Factors influencing perception, Applications in OB	4	27-03-2024 to 01-04-2024	Lecture

	Attitude: Meaning, Formation (Direct experience, Social learning), Types of attitude (Job satisfaction, Job Involvement), Components of Attitude, Changing attitude	3	02-04-2024 to 04-04-2024	Lecture
Unit III: Group Dynamics (10 Hours)				
Module 3 - Group Dynamics	Group definition, characteristics, reasons for group formation, Types of Groups (Formal and informal)	3	05-04-2024 to 09-04-2024	Lecture
	Group development stages, Group Behavior, Norms, Cohesiveness, and roles	3	10-04-2024 to 12-04-2024	Case Study
	Inter-group conflicts, Decision making, JOHARI window, Transactional analysis	2	15-04-2024 to 16-04-2024	Lecture
	Teams: Types of teams, team vs. group, Causes for team failure, Making teams successful	2	17-04-2024 to 18-04-2024	Lecture
Unit IV: Motivation (13 Hours)				
Module 4 - Motivation	Meaning, Nature of motivation, Need for motivation	3	19-04-2024 to 22-04-2024	Lecture
	Theories of motivation: Content theories (Maslow, Herzberg)	5	23-04-2024 to 26-04-2024	Lecture
	Process theories (Equity theory, Expectancy theory, Goal-setting theory)	5	29-04-2024 to 02-05-2024	Lecture
Unit V: Leadership (10 Hours)				
Module 5 - Leadership	Meaning of leadership, Differences between leadership and management,	3	03-05-2024 to 06-05-2024	Lecture

	Leadership styles (Autocratic, Democratic, Laissez faire)			
	Leadership theories (Trait theory, Behavioral theories, Contingency models, Path-goal theory, Situational leadership theory)	4	07-05-2024 to 09-05-2024	Discussion
	Leadership in practice: Managerial grid, Transactional & Transformational leadership	3	10-05-2024 to 13-05-2024	Lecture

Department: Department of Studies in Business Administration
Course: Corporate Economics
Course Code: 22C103
Term Period: 06th March – 22nd June
Hrs/Week: 04
Total Hours: 56

Unit	Topics	Hours	Date	Mode of Deployment
Unit I: Introduction	Definition, nature, and scope of managerial economics	2	6th & 8th March 2024	Lecture/Discussion
	Theory of the firm - goals of the firm	2	12th & 13th March 2024	Case Study/Interactive Discussion
	Indifference curve analysis	2	14th & 15th March 2024	Lecture/Practical Examples
	Equilibrium Analysis	2	19th & 20th March 2024	Group Activity/Case Study
Unit II: Demand Analysis	Concept of demand, determinants of demand	2	21st & 22nd March 2024	Lecture/Discussion
	Law of demand, exceptions to the law of demand	2	26th & 27th March 2024	Case Study/Interactive Session
	Elasticity of demand, types and measurement	4	28th March & 2nd, 3rd April 2024	Group Discussion/Problem Solving
Unit III: Production and Cost Analysis	Concepts, production function with one variable input - Law of Variable Proportions	2	4th & 5th April 2024	Lecture/Discussion
	Production functions with two variable inputs and Laws of returns to scale	2	9th & 10th April 2024	Case Study/Problem Solving
	Cost analysis: Concepts, types of cost	2	11th & 12th April 2024	Lecture/Discussion

	Cost curves	2	16th & 17th April 2024	Group Activity/Problem Solving
	Cost-Output Relationship in the short run and in the long run	2	18th & 19th April 2024	Case Study/Practical Examples
	LAC curve	2	23rd & 24th April 2024	Lecture/Interactive Session
Unit IV: Market Structures	Market Structures: Perfect Competition, Features, Determination of price under perfect competition	3	25th, 26th & 30th April 2024	Lecture/Discussion
	Monopoly: Features, Pricing under monopoly, Price Discrimination	2	2nd & 3rd May 2024	Case Study/Group Activity
	Monopolistic Competition: Features, Pricing under monopolistic competition, Product differentiation	3	7th, 8th & 9th May 2024	Lecture/Discussion
	Oligopoly: Features, Kinked demand Curve, Cartels, Price leadership	2	10th & 14th May 2024	Case Study/Problem Solving
Unit V: Regression Model for Managerial Decisions	Introduction to Regression Analysis	2	15th & 16th May 2024	Lecture/Interactive Session
	Estimating and Testing Regression Equation	2	17th & 21st May 2024	Group Activity/Discussion
	Problems in the Use of Regression Analysis	4	22nd & 23rd May 2024, 28th & 29th May 2024	Case Study/Problem Solving

	Two-Variable Regression Analysis	4	30th & 31st May, 4th & 5th June 2024	Workshop/Practical Examples
Consolidated Review & Applications	Application of Key Concepts Across Units	4	6th & 7th June, 11th & 12th June 2024	Group Discussion/Case Study
Comprehensive Case Study	Real-Life Case Study Applying All Concepts	4	13th, 18th, 19th & 20th June 2024	Group Project/Presentation

Department: Department of Studies in Business Administration
Course: Accounting for Managers
Course Code: 22C104
Term Period: 06th March – 22nd June
Hrs/Week: 04
Total Hours: 56

Unit	Topics	Hours	Date	Mode of Deployment
Unit I: Introduction & Preparation of Books of Accounts	Meaning and Scope of Accounting; Accounting Concepts and Conventions	2	6th & 7th March 2024	Lecture/Discussion
	Journals, Ledgers and Trial Balance	2	8th & 12th March 2024	Practical Problem Solving
	Depreciation: Meaning, characteristics and causes of depreciation	1	13th March 2024	Lecture/Interactive Session
	Types of Depreciation (Problems on straight line and WDV method)	1	14th March 2024	Problem Solving
Unit II: Final Accounts of Companies & Non-Profit Organisations	Preparation of final accounts of companies in vertical form as per Companies Act of 2013 with Appropriation accounts (Problems)	4	15th, 19th, 20th & 21st March 2024	Case Study/Problem Solving
	Window dressing	2	22nd & 26th March 2024	Lecture/Group Discussion
	Preparation of Final Accounts of Non-Profit Organisation	3	27th, 28th & 29th March 2024	Case Study/Problem Solving
	Additional problem-solving sessions	6	2nd, 3rd, 4th, 9th, 10th & 11th April 2024	Practical Problems

Unit III: Analysis of Financial Statements	Financial Statements – Meaning and concepts, Nature of financial statements – Objectives, Limitations	3	12th, 16th & 17th April 2024	Lecture/Discussion
	Types of Analysis and Interpretation – Horizontal analysis, vertical analysis	3	18th, 19th & 23rd April 2024	Group Activity/Discussion
	Comparative Financial Statements, Common size statements, Trend Analysis	3	24th, 25th & 26th April 2024	Problem Solving/Case Study
	Accounting ratios – Meaning, Uses, and Limitations	2	30th April & 2nd May 2024	Lecture/Case Study
	Calculations of various ratios (Problems)	4	3rd, 7th, 8th & 9th May 2024	Practical Problems/Group Discussion
Unit IV: Cash Flow Statement	Preparation of Cash flow Statement (Indirect method) under AS-3	4	10th, 14th, 15th & 16th May 2024	Workshop/Problem Solving
	Additional problem-solving sessions	4	17th, 21st, 22nd & 23rd May 2024	Practical Examples/Problem Solving
Unit V: Direct and Indirect Tax (Theory only)	Direct Tax – Basic Concepts – Various heads of Income	2	24th & 28th May 2024	Lecture/Discussion
	Tax Planning & Tax Evasion	1	29th May 2024	Interactive Session/Discussion
	Indirect Tax – Introduction – GST – Advantages and disadvantages	2	30th May & 4th June 2024	Lecture/Group Discussion
	Types of GST returns and their due dates	2	5th & 6th June 2024	Practical Problem Solving

	Composition Tax Payer – Registration under GST – Unique Identification Number	1	7th June 2024	Lecture/Interactive Discussion
Final Problem Solving Sessions	Consolidated Review & Case Studies	4	11th, 12th, 13th & 14th June 2024	Group Activity/Problem Solving
Comprehensive Case Study	Practical Case Studies Across Units	4	18th, 19th, 20th & 21st June 2024	Project/Presentation

Department: Department of Studies in Business Administration
Course: Business Communication
Course Code: 22C105
Term Period: 06th March – 22nd June
Hrs/Week: 03
Total Hours: 56

Unit	Topics	Hours	Date	Mode of Deployment
Unit I: Introduction	Meaning & Definition, Importance of communication in management	2	6th & 7th March 2024	Lecture/Discussion
	Purpose of communication, Communication Process	2	8th & 12th March 2024	Interactive Session
	Shannon – Weaver Model, Characteristics of successful communication	2	13th & 14th March 2024	Case Study/Discussion
	Communication in conflict resolution, Communication in crisis	2	15th & 19th March 2024	Lecture/Examples
	Cost of poor communication, Committing to legal and ethical communication	4	20th & 21st March 2024	Group Activity/Discussion
Unit II: Oral Communication	Meaning, Principles of successful oral communication	2	22nd & 26th March 2024	Lecture/Discussion
	Three aspects of oral communication: Conversing, Listening, and Body Language	2	27th & 28th March 2024	Case Study/Examples
	Conversation control, Non-verbal communication	2	2nd & 3rd April 2024	Interactive Workshop
	Communicating in diverse workgroups,	2	4th & 5th April 2024	Group Activity/Problem Solving

	Barriers to communication			
	Suggestions to overcome the barriers	4	9th & 10th April 2024	Discussion/Examples
Unit III: Written Communication	Purpose of writing – Clarity in writing – Principles of effective writing	2	11th & 12th April 2024	Lecture/Discussion
	Approaching the writing process systematically, 3X3 writing process	2	16th & 17th April 2024	Workshop/Examples
	Pre-writing – Writing – Revising, Specific writing features, Coherence	2	18th & 19th April 2024	Group Activity/Case Study
	Electronic writing process, Positive, Negative, and Persuasive writing	4	23rd & 24th April 2024	Lecture/Discussion
Unit IV: Business Letters & Reports	Introduction to business letters – Types of Business Letters	2	25th & 26th April 2024	Case Study/Examples
	Purpose, Writing Reports: Objectives, Organization and Preparing Reports	2	30th April & 2nd May 2024	Workshop/Interactive Session
	Types of reports, Writing Proposals: Structure & preparation	2	3rd & 7th May 2024	Group Activity/Problem Solving
	Writing memos, Writing for websites	4	8th & 9th May 2024	Discussion/Case Study
Unit V: Case Method of Learning	Understanding the case method of learning, Different types of cases	2	10th & 14th May 2024	Lecture/Discussion
	Difficulties and overcoming the difficulties of the case method	2	15th & 16th May 2024	Group Activity/Problem Solving

	Reading a case properly, (previewing, skimming, reading, scanning)	2	17th & 21st May 2024	Interactive Session/Workshop
	Case analysis approaches (Systems, Behavioural, decision, Strategy)	2	22nd & 23rd May 2024	Discussion/Case Study
	Analysing the case – Do's and don'ts for case preparation	2	24th & 28th May 2024	Case Study/Group Activity
	Discussing and Presenting a Case Study	4	29th May & 30th May 2024, 4th & 5th June 2024	Group Project/Presentation
Case Study Application	Case selection and administering following case guidelines	4	6th & 7th June, 11th & 12th June 2024	Case Administration/Discussion
Case Discussion & Feedback	Final case discussion and feedback	4	13th & 14th June, 18th & 19th June 2024	Group Discussion/Review
Final Session	Review of Key Learnings from Units I to V	4	20th & 21st June 2024	Interactive Session/Wrap-Up

Department: Department of Studies in Business Administration
Course: Statistics for Management
Course Code: 22C106
Term Period: 06th March – 22nd June
Hrs/Week: 04
Total Hours: 56

Unit	Topics	Hours	Date	Mode of Deployment
Unit I: Introduction	Quantitative data interpretation: Collection, Classification, Tabulation, Frequency Distribution	2	6th & 7th March 2024	Lecture/Interactive Discussion
	Charts and Graphs, Measures of Central Tendency (Mean, Median, Mode)	2	8th & 12th March 2024	Group Activity/Practical Examples
	Measures of Dispersion: Range, Variance, Standard Deviation	2	13th & 14th March 2024	Case Study/Examples
	Coefficient of Variation	2	15th & 19th March 2024	Lecture/Examples
	Recap and practical exercises on Unit I topics	2	20th & 21st March 2024	Workshop
Unit II: Correlation and Regression	Types of Correlation: Scatter Diagram, Karl Pearson Coefficient	2	22nd & 26th March 2024	Lecture/Discussion
	Spearman Rank Correlation: Repeated Ranks	2	27th & 28th March 2024	Interactive Session
	Regression Coefficients and Lines of Regression	2	2nd & 3rd April 2024	Lecture/Discussion
	Recap and practical exercises on Unit II topics	4	4th & 5th April 2024	Problem Solving/Examples

Unit III: Probability Theory	Basic Probability Concepts, Counting Rule for Outcomes, Permutation & Combination	2	9th & 10th April 2024	Lecture/Discussion
	Conditional Probability, Bayes Theorem	2	11th & 12th April 2024	Case Study/Interactive Session
	Probability Distributions: Binomial and Poisson Distribution	2	16th & 17th April 2024	Group Activity/Examples
	Normal Distribution and Recap on Probability	4	18th & 19th April 2024	Problem Solving
Unit IV: Sampling Techniques	Census and Sampling: Non-sampling & Sampling Errors	2	23rd & 24th April 2024	Lecture/Case Study
	Probability Sampling Techniques, Non-Probability Sampling Techniques	2	25th & 26th April 2024	Practical Examples/Workshop
	Sample Size and Estimation: Point and Interval Estimation	4	30th April & 2nd May 2024	Lecture/Examples
Unit V: Statistical Decision Theory	Hypothesis Testing for Mean and Proportion (One and Two Sample Tests) (z-test, t-test)	2	3rd & 7th May 2024	Lecture/Discussion
	Chi-Square Test: Goodness of Fit and Independence of Attributes	2	8th & 9th May 2024	Lecture/Discussion Examples
	Analysis of Variance (ANOVA): One-Way and Two-Way ANOVA	2	10th & 14th May 2024	Case Study/Problem Solving
	Business Analytics: Meaning, Types, and Applications	2	15th & 16th May 2024	Interactive Session

	Use of Spreadsheet for Descriptive and Predictive Analytics Recap and practical exercises on Unit V topics	2 4	17th & 21st May 2024 22nd & 23rd May 2024	Practical Workshop Group Activity/Case Study
Practical Application	Spreadsheet Analysis: Data Analysis for Decision Making (Descriptive and Predictive Analytics)	4	24th & 28th May, 29th & 30th May 2024	Workshop/Hands-on Sessions
Recap & Review	Recap of Key Topics and Practical Exercises across all units	4	4th & 5th June, 6th & 7th June 2024	Group Discussion/Review
Final Assignment and Feedback	Case-Based Problem Solving and Final Feedback on Statistical Techniques	4	11th & 12th June, 13th & 14th June 2024	Case Presentation/Discussion
Closing Sessions	Final Review of Key Learnings and Concluding Remarks	4	18th & 19th June, 20th & 21st June 2024	Interactive Discussion/Wrap-Up

Department: Department of Studies in Business Administration
Course: Skill Development - 1
Course Code: 22C108
Term Period: 06th March – 22nd June
Hrs/Week: 2
Total Hours: 16

Unit	Topics	Hours	Date	Mode of Deployment
Unit I: Presentation Skills	Technical aids for presentation	1	March 1, 2024	Lecture, Demo
	Presentation with OHP, Handouts	1	March 4, 2024	Lecture, Group Practice
	Flip Chart, Props, Basic PowerPoint	1	March 6, 2024	Lecture, Hands-on Activity
Unit II: Advanced Presentation Skills	Guidelines for a Good Presentation	1	March 8, 2024	Lecture, Presentation
	Structuring Speech Content	1	March 11, 2024	Lecture, Role Play
	Engaging Audience & Handling Questions	1	March 13, 2024	Lecture, Q&A Practice
Unit III: Email Etiquettes	Email Subject & Body	1	March 15, 2024	Lecture, Sample Drafting
	Email Rules (No Spamming, Disclaimer)	1	March 18, 2024	Lecture, Case Study Analysis

	Email Guidelines (Reply, Forward, etc.)	1	March 20, 2024	Lecture, Email Simulation
	Mass Mail Services (e.g., MailChimp)	1	March 22, 2024	Lecture, Hands-on Exercise
Unit IV: E-Mail Analytics	Key Email Analytics	1	March 25, 2024	Lecture, Data Analysis Exercise
	Click-through, Open Rates	1	March 27, 2024	Lecture, Real-world Case Discussion
	Email Threats (Phishing, Spamming)	1	March 29, 2024	Lecture, Interactive Quiz
Unit V: Data Interpretation	Graphical Data Interpretation	1	April 1, 2024	Lecture, Chart Analysis Exercise
	Percentage Data Interpretation	1	April 3, 2024	Lecture, Group Data Interpretation
	Practical Data Interpretation	1	April 5, 2024	Lecture, Hands-on Case Analysis

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SECOND SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Marketing Management
Course Code: 24201
Term Period: 10th July – 21st October
Hrs/week: 5 Hrs
Total Hrs.: 56 Hrs

Unit I: Introduction to Marketing Management (12 hours)				
Curriculum as prescribed by the Institution	**Topics**	**No. of Hours required to complete**	**Date Range**	**Method of Deployment**
Unit I: Introduction to Marketing Management	Differences between Selling and Marketing, Scope & nature of Marketing, Product/Service Classification	8	10-07-2023 to 19-07-2023	Lecture
	Marketing Concepts, Marketing Environment, Elements of Marketing Mix	4	20-07-2023 to 24-07-2023	Lecture
Unit II: Nature of Consumer Behaviour (10 hours)				
Unit II: Nature of Consumer Behaviour	Steps in Consumer & Buyer Behaviour Process, Models of Consumer Behaviour	5	25-07-2023 to 02-08-2023	Lecture
	Fundamentals of Marketing Research, Marketing Information System	5	03-08-2023 to 07-08-2023	Lecture
Unit III: Segmentation, Targeting, Positioning (10 hours)				

Unit III: Segmentation, Targeting, Positioning	Test Marketing, Basis for Segmentation, Targeting & Positioning	6	08-08-2023 to 14-08-2023	Lecture
	Differences between Consumer & Business Marketing	4	16-08-2023 to 18-08-2023	Lecture
Unit IV: Product Mix & Product Life Cycle (12 hours)				
Unit IV: Product Mix & Product Life Cycle	Product Mix, Product Line, Portfolio, Life Cycle Strategies	6	21-08-2023 to 28-08-2023	Lecture
	Branding, Types of Brands, Brand Equity, Packaging, Labelling, Pricing Strategies	6	29-08-2023 to 04-09-2023	Lecture
Unit V: Promotion & Distribution (12 hours)				
Unit V: Promotion & Distribution	Elements of Promotion Mix, Marketing Communication, Internet Marketing, E-tailing, Distribution Channels	6	05-09-2023 to 18-09-2023	Lecture
	Logistics Management, Pricing Strategies, Public Policy	6	19-09-2023 to 22-09-2023	Lecture

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SECOND SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Human Resource Management
Course Code: 24202
Hrs/week: 5 Hrs
Total Hrs.: 56 Hrs

Unit 1 Introduction (10 Hours)				
Curriculum as prescribed	**Topics**	**No. of Hours Required**	**Date Range**	**Method of Deployment**
	Evolution and Development of HRM, Meaning of HRM, Definition, Nature and scope of HRM	3	18-06-2024 to 21-06-2024	Lecture
	Personnel v/s HR, features of HRM, role of HRM, managerial functions and operative functions	2	24-06-2024 to 26-06-2024	Lecture
	Objectives of HRM, HRM policies procedures and programmes	2	27-06-2024 to 01-07-2024	Lecture
	Organization of HRM: line and staff relationship, HR manager, qualities of HR / personnel manager, Recent trends in HRM	3	02-07-2024 to 05-07-2024	Lecture
Unit II: HR Planning, Recruitment and Selection (15 Hours)				
	Topics	**No. of Hours Required**	**Date Range**	**Method of Deployment**
	Job Analysis – Need, Process, Techniques of Data Collection, Job Description, Job Specification	4	26-07-2023 to 01-08-2023	Lecture
	Components of Job Description and Specification, Benefits of Job Analysis	1	02-08-2023 to	Lecture

			04-08-2023	
	Human Resource Planning (HRP): Meaning, Objectives, and Benefits, Factors Affecting HRP, Process of Human Resource Planning	3	07-08-2023 to 09-08-2023	Lecture
	Recruitment – Definitions and Objectives, process of recruitment, Recruitment policy, Centralized versus Decentralized recruitment	2	11-08-2023 to 12-08-2023	Lecture
	sources of Recruitment – Internal and external sources of recruitment	1	14-08-2023	Lecture
	Selection: Meaning, Steps in Selection Process – Preliminary screening, Application Blank, Selection Tests, Selection Inter-view, Reference Checks, Physical examinations, Final selection.	2	16-08-2023 to 17-08-2023	Lecture
	Placement – meaning and definition, Induction – Meaning, objectives and benefits, Contents of induction program – Formal and informal induction, Differences between induction and orientation programs.	2	18-08-2023 to 19-08-2023	Lecture
Unit III: Training and Development (10 Hours)				
	Topics	**No. of Hours Required**	**Date Range**	**Method of Deployment**
	Training: Meaning, Objectives, Need for Training, Benefits of Training	2	21-08-2023 to 22-08-2023	Lecture
	Differences between Training and Development, Training Methods (On-the-Job, Off-the-Job)	2	23-08-2023 to 24-08-2023	Lecture
	Training Procedure: Identification of Training Needs, Training Design and Delivery	2	28-08-2023 to 29-08-2023	Lecture
	Training Evaluation: Reaction, Learning, Behaviour, Results	2	30-08-2023 to 31-08-2023	Lecture

	Case Study/Discussion on Training and Development	2	01-09-2023 to 04-09-2023	Group Activity
Unit IV: Performance Management (10 Hours)				
	Topics	**No. of Hours Required**	**Date Range**	**Method of Deployment**
	Performance Appraisal: Meaning, Objectives	2	05-09-2023 to 06-09-2023	Lecture
	Methods (Traditional and Modern)	3	07-09-2023 to 09-09-2023	Lecture
	360-Degree Performance Appraisal: Uses and Limitations	2	11-09-2023 to 12-09-2023	Lecture
	Potential appraisal, Differences between performance and potential appraisal.	3	14-09-2023 to 16-09-2023	Lecture
Unit V: Compensation Planning (11 Hours)				
	Topics	**No. of Hours Required**	**Date Range**	**Method of Deployment**
	Compensation Planning: Meaning, Objectives of Wage and Salary Administration	3	19-09-2023 to 21-09-2023	Lecture
	Components of Wage and Salary Administration, Methods of Wage Payment	3	22-09-2023 to 25-09-2023	Lecture
	Perks, Fringe benefits	2	26-09-2023 to 28-09-2023	
	Benefits: Types of Benefits, Incentives: Types of Incentive Schemes (Individual and Group)	3	03-10-2023 to 05-10-2023	Lecture

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SECOND SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Corporate Finance
Course Code: 24203
Hrs/week: 5 Hrs
Total Hrs.: 56 Hrs

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit I: Introduction to Financial Management	Objectives of financial management, profit maximization, wealth maximization	3 hours	10-07-2023 to 12-07-2023	Lecture
	Nature of basic managerial finance functions: investing, financing, dividend	3 hours	13-07-2023 to 15-07-2023	Lecture
	Agency problems (Issues and Conflicts)	2 hours	17-07-2023 to 18-07-2023	Lecture
	Time value of money – Compounding, Discounting, Present Value	2 hours	19-07-2023 to 21-07-2023	Lecture
	Annuities (Problems)	2 hours	24-07-2023 to 25-07-2023	Lecture
Unit II: Valuation of Long Term Securities	Valuation concepts	2 hours	26-07-2023 to 27-07-2023	Lecture
	Bond valuation, bond yields (current yield, YTM), bond market	3 hours	28-07-2023 to 31-07-2023	Lecture

	Valuation of preference stock	2 hours	01-08-2023 to 02-08-2023	Lecture
	Equity valuation – Dividend discount model, P/E ratio approach	3 hours	03-08-2023 to 05-08-2023	Lecture
Unit III: Investment Decisions	Cost of capital – Basic concepts	2 hours	07-08-2023 to 08-08-2023	Lecture
	Cost of debenture, preference, and equity capital	3 hours	09-08-2023 to 11-08-2023	Lecture
	Determination of WACC and marginal cost of capital	3 hours	14-08-2023 to 16-08-2023	Lecture
	Capital budgeting process	2 hours	17-08-2023 to 18-08-2023	Lecture
	Investment evaluation techniques: NPV, IRR, etc.	4 hours	21-08-2023 to 24-08-2023	Lecture
Unit IV: Dividend Policy Theories	Walter's & Gordon's model	3 hours	25-08-2023 to 29-08-2023	Lecture
	Modigliani & Miller approach	2 hours	30-08-2023 to 31-08-2023	Lecture
	Dividend policies – stable dividend, stable payout, and growth	3 hours	01-09-2023 to 04-09-2023	Lecture
	Bonus shares, stock splits, and corporate dividend behavior	2 hours	05-09-2023 to 06-09-2023	Lecture
Unit V: Working Capital Management	Factors influencing working capital requirements	2 hours	07-09-2023 to 08-09-2023	Lecture
	Current asset policy, current asset finance policy	3 hours	11-09-2023 to 13-09-2023	Lecture

Revision and Problem Solving Sessions	Determination of operating cycle and cash cycle	3 hours	14-09-2023 to 16-09-2023	Lecture
	Estimation of working capital requirements of a firm	3 hours	18-09-2023 to 20-09-2023	Lecture
	Review of concepts and problems	4hours	21-09-2023 to 25-09-2023	Lecture/Discuss

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SECOND SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Business Research Methods
Course Code: 24204
Hrs/week: 5 Hrs
Total Hrs.: 56 Hrs

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit I: Research in Business	Role of Business Research, Information Systems and Knowledge Management	2	10-07-2023 to 12-07-2023	Lecture
	Theory Building, Overview of Research Process	3	13-07-2023 to 17-07-2023	Lecture
	Ethical Issues in Business Research	3	18-07-2023 to 20-07-2023	Lecture
Unit II: Problem Formulation	Problem Definition and Research Proposal	3	21-07-2023 to 25-07-2023	Lecture

	Basic Research Designs – Exploratory, Descriptive, and Causal Designs	3	26-07-2023 to 28-07-2023	Lecture
	Secondary Data Research Designs	2	31-07-2023 to 01-08-2023	Lecture
	Qualitative Analysis, Secondary Data	2	02-08-2023 to 03-08-2023	Lecture
Unit III: Survey	Basic Concepts in Survey Research, Methods of Communication with Respondents	3	04-08-2023 to 08-08-2023	Lecture
	Questionnaire and Interview Methods	2	09-08-2023 to 10-08-2023	Lecture
	Observation Method, Experimental Research	2	11-08-2023 to 14-08-2023	Lecture

	Measurement and Scaling Concepts	3	16-08-2023 to 18-08-2023	Lecture
	Principles of Questionnaire Design	2	21-08-2023 to 22-08-2023	Lecture
Unit IV: Sampling Design and Methods	Sample Design and Sampling Procedures	4	23-08-2023 to 28-08-2023	Lecture
	Determination of Sample Size	4	29-08-2023 to 01-09-2023	Lecture
Unit V: Data Analysis and Presentation	Editing and Coding for Transformation of Raw Data into Information	3	04-09-2023 to 06-09-2023	Lecture
	Basic Data Analysis – Descriptive Statistics	4	07-09-2023 to 12-09-2023	Lecture

	Univariate Analysis - Z-Test, T-Test	4	13-09-2023 to 18-09-2023	Lecture
	Bivariate Analysis: Measures of Association	3	19-09-2023 to 21-09-2023	Lecture
	Presentation of Research Findings – Report Writing	4	22-09-2023 to 26-09-2023	Lecture
	Final Review and Wrap-up	3	27-09-2023 to 29-09-2023	Lecture

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SECOND SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Operations Management
Course Code: 24205
Hrs/week: 5 Hrs
Total Hrs.: 56 Hrs

Unit	Topics	Hours	Date	Mode of Deployment
Unit I: Introduction to Operations Management	Definitions, Key Elements	1	10th July 2023	Lecture
	Differences Between Services and Goods	1	11th July 2023	Lecture
	OM's Link with Other Functional Areas	1	12th July 2023	Lecture
	Current Issues in OM	1	13th July 2023	Case Study
	Operations' Competitive Priorities and Dimensions	1	14th July 2023	Lecture
	Order Winners and Qualifiers	1	17th July 2023	Group Discussion
	Operations Strategies, Mission, Vision, and Strategy	2	18th & 19th July 2023	Lecture/Discussion
	Quality, Productivity, Types of Productivity	2	20th & 21st July 2023	Lecture/Case Study
	Factors Affecting Productivity	1	24th July 2023	Lecture
	Numerical Exercises on Productivity	1	25th July 2023	Problem Solving
Unit II: Production Policy	Production Policies and Decisions	1	26th July 2023	Lecture

and Process Management	Process Management and Process Strategies	1	27th July 2023	Lecture
	Process Selection	1	28th July 2023	Lecture
	Environmental Considerations & CSR	2	31st July & 1st Aug 2023	Lecture/Discussion
	Make or Buy Decisions	1	2nd August 2023	Case Study
	Breakeven Analysis	2	3rd & 4th August 2023	Lecture/Problem Solving
	Capacity Concepts and Measures	1	7th August 2023	Lecture
	Capacity Building Strategies (Lead and Lag)	2	8th & 9th August 2023	Lecture/Discussion
	Numerical Exercises on Breakeven Analysis	1	10th August 2023	Problem Solving
Unit III: Forecasting and Demand Management	Dependent & Independent Demand	1	11th August 2023	Lecture
	Types of Forecasting	1	14th August 2023	Lecture
	Components of Demand	1	16th August 2023	Lecture
	Time Series Analysis	1	17th August 2023	Lecture
	Causal Relationship Forecasting	1	18th August 2023	Lecture
	Forecast Error & Qualitative Techniques in Forecasting	2	21st & 22nd August 2023	Lecture/Problem Solving
	Numerical Exercises	1	23rd August 2023	Problem Solving
Unit IV: Location Strategies	Issues in Facility Location, Free Trade Zones	1	24th August 2023	Lecture
	Industrial Clusters and Special Economic Zones	1	25th August 2023	Lecture
	Plant Location Methods & Factor-Rating Systems	2	28th & 29th August 2023	Lecture/Case Study

	Breakeven Analysis for Location Decisions	1	30th August 2023	Problem Solving
	Centroid Method	1	31st August 2023	Lecture
	Numerical Exercises	1	1st September 2023	Problem Solving
	Facility Layout Design and Analysis	2	4th & 5th September 2023	Lecture
	Basic Production Layout Formats	1	6th September 2023	Lecture
	Process Layout & Product Layout	1	8th September 2023	Lecture
	Group Technology (Cellular) Layout & Fixed-Position Layout	1	11th September 2023	Lecture
	Retail Layout & Work Cells	1	12th September 2023	Lecture
	Computerised Layout Techniques	1	13th September 2023	Lecture
	Numerical Exercises	1	14th September 2023	Problem Solving
Unit V: Aggregate Planning	Long-Range, Intermediate-Range, Short-Range Planning	2	15th & 18th September 2023	Lecture
	Numerical Exercises on Planning	1	19th September 2023	Problem Solving
	Inventory Management & Inventory Costs	2	20th & 21st September 2023	Lecture
	Inventory Systems & Inventory Types	1	22nd September 2023	Lecture
	Single Period Model	1	25th September 2023	Lecture
	Fixed-Order Quantity Models (Q Models)	1	26th September 2023	Lecture

	Fixed-Time Period Models (P Models)	1	27th September 2023	Lecture
	Establishing Safety Stock Levels	1	28th September 2023	Lecture
	ABC Inventory Planning	1	29th September 2023	Case Study
	Review & Revision of Entire Course	2	3rd & 4th October 2023	Interactive Session/Discussion

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SECOND SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Management Information Systems
Course Code: 24208
Hrs/week: 3 Hrs
Total Hrs.: 48 Hrs

Unit 1: Information Systems (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit 1 Information Systems	Data vs Information, Strategic role of information in management	3	10 July 2023 - 14 July 2023	Lecture
	Organization as an information system, TPS, MIS, DSS, ESS, OAS	3	17 July 2023 - 21 July 2023	Lecture
	Networking concepts, telecommunications networks	4	24 July 2023 - 28 July 2023	Lecture
Unit 2: Systems Development (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit 2 Systems Development	Concept of systems development life cycle (SDLC), type of SDLC	4	31 July 2023 - 4 August 2023	Lecture
	Use of flow charts	3	7 August 2023 - 11 August 2023	Lecture
	Systems development methodologies	3	14 August 2023 - 18 August 2023	Lecture
Unit 3: Application Technologies (15 Hours)				

Curriculum as Prescribed	Topics	No. of Hours Required	Date	Method of Deployment
Unit 3 Application Technologies	ERP concepts, Evolution of ERP	4	21 August 2023 - 25 August 2023	Lecture
	ERP packages: SAP, Baan, MFG-PRO, Oracle	4	28 August 2023 - 1 September 2023	Lecture
	ERP Evaluation, ERP & BPR, ERP Implementation	4	4 September 2023 - 8 September 2023	Lecture
	Extended ERP, Case studies	3	11 September 2023 - 15 September 2023	Lecture
Unit 4: Web Publishing (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit 4 Web Publishing	Web publishing, Types of websites	3	18 September 2023 - 22 September 2023	Lecture
	Web surfing, E-commerce: B2B, B2C, C2C	4	25 September 2023 - 29 September 2023	Lecture
	E-commerce security issues, Ethical issues	3	2 October 2023 - 6 October 2023	Lecture
Unit 5: Practical on ERP (11 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit 5 Practical on ERP	Functional Units in business	4	9 October 2023 - 13 October 2023	Practical
	ERP practical sessions (hands-on exercises)	4	16 October 2023 - 19 October 2023	Practical
	ERP project presentation and review	3	20-Oct-23	Practical

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SECOND SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Skill Development Program-2
Course Code: 24209
Hrs/week: 2 Hrs
Total Hrs.: 16

Curriculum as prescribed by the Institution	Topics	No. of Hours	Dates	Method of Deployment
Unit I: Goal Setting	Advance Goal Setting	1	10-07-2023	Lecture and Activity
	Effective Communication Skills (Empathetic Communication), Power of Positive Thinking, Emotional Intelligence	2	11-07-2023 to 12-07-2023	Workshop and Group Discussion
Unit II: Problem Solving and Entrepreneurship	Problem Solving techniques, Power of Preparedness, Entrepreneurship (How to ideate and start a business),	2	08-08-2023 to 09-08-2023	Lecture,Activity and Discussion
	Stress Management tools	1	10-08-2023	Lecture and Activity
Unit III: Teamwork and Leadership	Teamwork, Team building exercise,	2	17-08-2023 to 18-08-2023	Group Activity and Discussion
	Leadership Skills, Self-confidence	2	21-08-2023 to 22-08-2023	Lecture,Activity and Discussion
Unit IV:Listening and Creativity	Listening skill exercises	1	4-09-2023	Activity and Discussion
	Creativity, Body Language	2	11-09-2023 to 12-09-2023	Activity and Discussion

Unit V: Grooming	Training on relevant courses before graduation	1	29-9-2023	Lecture, Interactive session,Webinar
	Grooming, Cleanliness, Decorum, Table Manners	2	3-10-2023 to 4-10-2023	Workshop , Mock Interview and Discussion

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THIRD SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Strategic Management
Course Code: 22C301
Term Period: 16/01/2024 – 07/05/2024
Hrs/week: 5 Hrs
Total Hrs.: 56 Hrs

Unit 1: Introduction (08 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit I: Introduction	Origin of strategy, strategy vs tactics, vision, mission, and objectives, elements of business strategies, Strategic Management process	8	16-01-2024 to 29-01-2024	Lecture
Unit 2: Competitive Analysis (06 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit II: Competitive Analysis	Strategically relevant components of internal and external environment, Industry and competitive analysis	3	30-01-2024 to 05-02-2024	Lecture
	Analysis of resources and competitive capabilities, environmental scanning techniques	3	06-02-2024 to 12-02-2024	Lecture
Unit 3: Strategy Models (08 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit III: Strategy Models	Strategy Models: BCG matrix, GE nine cell planning grid, Chandler's thesis	4	13-02-2024 to 19-02-2024	Lecture

	Levels of strategy making, Mackinsey 7s model, Porter's five forces model, Value Chain Analysis	2	20-02-2024 to 26-02-2024	Lecture
	Strategic intent and strategic pyramid, Corporate ethics, and CSR	2	27-02-2024 to 04-03-2024	Lecture
Unit 4: Generic Competitive Strategies (08 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit IV: Generic Competitive Strategies	Generic competitive strategies: stability, expansion, retrenchment, conglomerate and their variants	4	05-03-2024 to 18-03-2024	Lecture
	Strategic and competitive advantage	4	19-03-2024 to 01-04-2024	Lecture
Unit 5: Strategy Implementation (06 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit V: Strategy Implementation	Balanced Scorecard, Benchmarking, building core competencies and competitive capabilities	2	02-04-2024 to 09-04-2024	Lecture
	Developing policies and procedures for implementation	2	10-04-2024 to 16-04-2024	Lecture
	Designing and installing supporting and rewarding systems	1	17-04-2024 to 23-04-2024	Lecture
	Evaluating and monitoring implementation	1	24-04-2024 to 29-04-2024	Lecture

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THIRD SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Entrepreneurship
Course Code: 16/01/2024 – 07/05/2024
Term Period: 22C302
Hrs/week: 4Hrs
Total Hrs.: 56 Hrs

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Dates	Method of Deployment
Unit 1: Foundations of Entrepreneurship	Concept and nature of entrepreneurship, social & cultural factors, Lateral thinking	5	16-1-2024 to 20-1-2024	Lecture, Case Study, Activity,Quiz
	Entrepreneurship in economic development, Start-ups, Institutional support for incubation	5	23-1-2024 to 29-1-2024	Lecture,Guest lecture, Group discussion
Unit 2: Business Planning	Business planning process, developing a business model	6	31-1-2024 to 6-2-2024	Activity,Discussion, Case Study
	Market research, financial planning, risk management	6	8-2-2024 to 14-2-2024	Lecture, Presentation and Discussion
Unit 3: Rural & Social Entrepreneurship	Potential for entrepreneurship in rural India, SHGs, microcredit	6	15-1-2024 to 29-2-2024	Lecture, Case Study, Field Activity
	Case studies of rural & social	6	5-3-2024 to 10-5-2024	Lecture, Case Study, Field Activity

	entrepreneurship in India, MSMEs			
Unit 4: Critical Issues in Entrepreneurship	Entrepreneurial process, logistics strategy, idea generation, business plan exercises	6	14-3-2024 to 21-3-2024	Lecture, Activity, Group Discussion and Industrial visit
	Environmental scanning, angel investors, venture capital, corporate ethics	6	27 -3-2024 to 9-4-2024	Lecture and Activity
Unit 5: Entrepreneurial Perspectives	Enterprise marketing, growth strategies, creativity, innovation,	5	11-4-2024 to 16-4-2024	Lecture, Case Study,Quiz
	Government resource mobilization, sickness prevention, collaboration	5	23-4-2024 to 30-4-2024	Lecture, Case Study and Brainstorming

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THIRD SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Consumer Behaviour
Course Code: 22C3M1
Term Period: 16/01/2024 – 07/05/2024
Hrs/week: 4 Hrs
Total Hrs.: 56 Hrs

Unit 1: Introduction (08 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit I: Introduction	Differences between Motives, Motivating and Motivation, Dynamic Characteristics of Motivation	3	16-01-2024 to 22-01-2024	Lecture
	Personality, Values of Perception, Attitudes	3	23-01-2024 to 29-01-2024	Lecture
	Basis of Segmentation, Life Style Influences	8	30-01-2024 to 05-02-2024	Lecture
Unit 2: Models of Consumer Behavior (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit II: Models of Consumer Behavior	Introduction, Factors Influencing Consumer Behavior: Personality, Psychographics, Family, Society	3	06-02-2024 to 12-02-2024	Lecture
	Different Models: Economic, Learning, Psychoanalytical	3	13-02-2024 to 19-02-2024	Lecture

	Sociological, Howard Shett, Nicosia, Webster & Wind, Engel, Blackwell and Minard models	4	20-02-2024 to 05-03-2024	Lecture
Unit 3: Consumer Decision Making (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit III: Consumer Decision Making	Buying Roles, Stages of the Decision Process: High and Low Effort Decisions	4	06-03-2024 to 19-03-2024	Lecture
	Post-Purchase Decisions, Consumer Adaptation Process	6	20-03-2024 to 02-04-2024	Lecture
Unit 4: Consumer Satisfaction (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit IV: Consumer Satisfaction	Satisfaction vs. Service, Quality Level, and Customer Loyalty	5	03-04-2024 to 09-04-2024	Lecture
	Handling Customer Dissatisfaction and Complaints	3	10-04-2024 to 16-04-2024	Lecture
	Customerisation, Implications of Shaping Expectations	2	17-04-2024 to 19-04-2024	Lecture
Unit 5: Consumer Behavior Trends (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit V: Consumer Behavior Trends	Future of Consumer Behavior in India, Issues and Challenges of Social Class	3	22-04-2024 to 26-04-2024	Lecture
	Challenges in Cross-Cultural Influences, Rise of Consumerism	4	29-04-2024 to 02-05-2024	Lecture
	Consumer Protection Act in India	3	03-05-2024 to 07-05-2024	Lecture

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THIRD SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Sales and Logistics Management
Course Code: 22C3M2
Term Period: 16/01/2024 – 07/05/2024
Hrs/week: 4 Hrs
Total Hrs.: 56 Hrs

Unit 1: Sales Management (12 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit 1 Sales Management	Objectives of Sales Management, Personal Selling, Salesmanship	4	16 January 2024 - 19 January 2024	Lecture
Unit 2: Managing the Sales Force (12 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit 2 Managing the Sales Force	Effective Recruiting, Selecting and Training the Sales Force	4	5 February 2024 - 9 February 2024	Lecture
	Time and Territory Management, Sales Territories, Sales Quotas	4	12 February 2024 - 16 February 2024	Lecture
	Compensating, Motivating, Controlling, and Evaluating the Sales Force	4	19 February 2024 - 23 February 2024	Lecture
Unit 3: Trends in Retailing and Wholesaling (10 Hours)				

Curriculum as Prescribed	Topics	No. of Hours Required	Date	Method of Deployment
Unit 3 Trends in Retailing and Wholesaling	E-commerce: E-tailing, Marketing on the Net	4	26 February 2024 - 1 March 2024	Lecture
	Non-store Retailing, Emerging Trends in Retailing and Wholesaling in India	3	4 March 2024 - 8 March 2024	Lecture
	Case Studies on Retailing and Wholesaling Trends	3	11 March 2024 - 13 March 2024	Lecture/Discussion
Unit 4: Distribution and Logistics Management (12 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit 4: Distribution and Logistics Management	Objectives of Logistics Management, Modes of Transportation	3	14 March 2024 - 18 March 2024	Lecture
	Design of Distribution Channel, Strategies of Distribution Channel	4	19 March 2024 - 22 March 2024	Lecture
	Components of Logistics, Inbound and Outbound Logistics	3	25 March 2024 - 27 March 2024	Lecture
	Freight Forwarders, Packaging, Warehousing	2	28 March 2024 - 29 March 2024	Lecture
Unit 5: Logistics Strategies (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**

Unit 5: **Logistics Strategies**	Elements of Supply Chain Management, Logistics Information System	4	1 April 2024 - 4 April 2024	Lecture
	Computer packages used in Logistics	3	5 April 2024 - 9 April 2024	Lecture
	Sales and Logistics for Rural Markets	3	10 April 2024 - 12 April 2024	Lecture

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THIRD SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Advertising and Sales Promotion Management
Course Code: 22C3M3
Term Period: 16/01/2024 – 07/05/2024
Hrs/week: 4 Hrs
Total Hrs.: 56 Hrs

Module	Topics	No. of Hours Required	Dates	Method of Deployment
Module 1: Promotion Mix	Elements in Promotion Mix, Types of Advertising, Impact of Publicity on Society, Personal Selling Strategies, Public Relations, and Sales Promotion	3	18-06-2024 to 24-06-2024	Lecture
Module 2: Advertising	Advertise ability and Advertising aids, Advertising Planning and Decision Making, Media Frequency Plan	3	27-06-2024 to 01-07-2024	Lecture
Module 3: Advertising Campaign Planning	Advertising Effectiveness, Assessment and Criticism of DAGMAR Approach, Creative Approaches for Effective Advertising, Copywriting, Pre-testing and Post-testing, Designing an Advertising Copy	3	04-07-2024 to 08-07-2024	Lecture
	Pre-testing and Post-testing, Designing an Advertising Copy	4	11-07-2024 to 15-07-2024	Lecture

Module 4: Advertising Media	Types of Media, Conventional Media, Traditional Media, Media Planning and Scheduling, Advertisement Budgets	3	18-07-2024 to 22-07-2024	Lecture
	Advertising Strategies for Rural Markets	2	25-07-2024	Lecture
Module 5: Advertising Agencies	Ethics in Advertisement, Advertising Agencies in India and Abroad, Rural Advertising, Social Advertising	3	29-07-2024 to 01-08-2024	Lecture
	Characteristics of Advertising Standards Council of India (ASCI)	3	05-08-2024 to 08-08-2024	Lecture
	Ethics Followed in Advertising	2	12-08-2024	Lecture
Module 3: Advertising Campaign Planning	Marketing Communications, Different Types of Advertising Appeals and Themes, Drafting an Advertisement Copy	3	15-08-2024 to 19-08-2024	Lecture
	Copywriting and Designing an Advertisement Copy	3	22-08-2024 to 26-08-2024	Lecture
	Post-testing of Advertisement Campaign	4	29-08-2024 to 02-09-2024	Lecture
Module 4: Advertising Media	Media Planning and Scheduling for Effective Campaigns	2	05-09-2024	Lecture
	Traditional and Conventional Media	2	09-09-2024	Lecture
	Budget Allocation and Control in Media Plans	3	12-09-2024 to 16-09-2024	Lecture
Module 5: Advertising Agencies	Rural Advertising, Agencies in India and Abroad	2	19-09-2024	Lecture
	Ethics and Professional Standards in Advertising (ASCI)	3	20-09-2024 to 21-09-2024	Lecture

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THIRD SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Strategic Financial Management
Course Code: 22C3F1
Term Period: 16/01/2024 – 07/05/2024
Hrs/week: 4 Hrs
Total Hrs.: 56 Hrs

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit I: Conceptual Framework of Strategic Financial Management	Strategic Financial Decision-Making Framework, Functions of Strategic Financial Management	2	16-01-2024 to 17-01-2024	Lecture
	Strategy at Different Hierarchy Levels	2	18-01-2024 to 19-01-2024	Lecture
	Financial Planning: Process, Types of Financial Plans	2	22-01-2024 to 23-01-2024	Lecture

	Financial Models: Types and Process of Financial Model Development	4	24-01-2024 to 29-01-2024	Lecture
Unit II: Capital Structure Decisions	Capital Structure and Market Value of a Firm, NI Approach, NOI Approach	3	30-01-2024 to 01-02-2024	Lecture
	Modigliani-Miller Approach, Traditional Approach	3	02-02-2024 to 06-02-2024	Lecture
	Planning Capital Structure: EBIT and EPS Analysis	3	07-02-2024 to 09-02-2024	Lecture + Problems
	ROI & ROE Analysis	3	12-02-2024 to 14-02-2024	Lecture + Problems

Unit III: Investment Decisions under Risk and Uncertainty	Techniques of Investment Decision: Risk-Adjusted Discount Rate, Certainty Equivalent Factor	3	15-02-2024 to 19-02-2024	Lecture + Problems
	Statistical Method: Probability Distribution Approach, Normal Distribution Approach	3	20-02-2024 to 22-02-2024	Lecture + Problems
	Sensitivity Analysis, Simulation Method	4	23-02-2024 to 28-02-2024	Lecture + Problems
	Decision Tree	4	29-02-2024 to 05-03-2024	Lecture + Problems
Unit IV: Leasing	Importance and Types of Leasing, Tax Considerations	3	06-03-2024 to 08-03-2024	Lecture

	Accounting Considerations, Evaluation of Lease from the Perspective of Lessor and Lessee	3	11-03-2024 to 13-03-2024	Lecture + Problems
	Lease vs. Buy Decision	3	14-03-2024 to 18-03-2024	Lecture + Problems
	Venture Capital: Concept, Developments in India, Process, and Methods of Financing	3	19-03-2024 to 21-03-2024	Lecture
	Fiscal Incentives	2	22-03-2024 to 25-03-2024	Lecture
Unit V: Financial Re-Engineering	Meaning and Interpretation of Financial Re-Engineering	2	26-03-2024 to 27-03-2024	Lecture

	Stakeholder's Approach to Innovative Financial Engineering	2	28-03-2024 to 29-03-2024	Lecture
	Funding Structure and Fund-Raising Instruments	2	01-04-2024 to 02-04-2024	Lecture
	Programs and Policies to Reward Shareholders	2	03-04-2024 to 04-04-2024	Lecture
	Revision and Problem Solving Sessions	10	05-04-2024 to 01-05-2024	Review + Problem Solving

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THIRD SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Financial Markets and Service
Course Code: 22C3F2
Term Period: 16/01/2024 – 07/05/2024
Hrs/week: 4 Hrs
Total Hrs.: 56 Hrs

Curriculum as prescribed by the Institution	Topics	No. of Hours required	Date	Method of Deployment
Unit-I Overview of Indian Financial System	Indian Capital Market, Money Market, FIIs, Portfolio Management	3	16-01-2024 to 18-01-2024	Lecture
	Hedge Funds, Private Equity, Global Capital Flows	3	22-01-2024 to 24-01-2024	Lecture
	ADR, GDR, Global Capital Flows	3	29-01-2024 to 31-01-2024	Lecture
	Summary and Discussions on Indian Financial System	3	05-02-2024 to 07-02-2024	Lecture
Unit-II Overview of Indian Financial System	Indian Capital Market, Money Market, FIIs, Portfolio Management	3	16-01-2024 to 18-01-2024	Lecture
	Hedge Funds, Private Equity, Global Capital Flows	3	22-01-2024 to 24-01-2024	Lecture
	ADR, GDR, Global Capital Flows	3	29-01-2024 to 31-01-2024	Lecture
	Summary and Discussions on Indian Financial System	3	05-02-2024 to 07-02-2024	Lecture

Indian Capital Market	Primary and Secondary Capital Markets, Market for Stocks and Bonds	3	08-02-2024 to 12-02-2024	Lecture
	Derivative Instruments (Financial and Commodities)	3	13-02-2024 to 15-02-2024	Lecture
	NCDEX, MCX, Over the Counter Markets	3	19-02-2024 to 21-02-2024	Lecture
	Government Securities, Mock Exercises in Stock Market Operations	1	22-02-2024	Lecture
Unit-III Banking in India	Meaning of Bank, Types of Banks, Current Problems of Public Sector Banks	3	26-02-2024 to 28-02-2024	Lecture
	Capital Adequacy Norms, Basel Norms	3	04-03-2024 to 06-03-2024	Lecture
	NPA Problem, Corporate Debt Restructuring	3	11-03-2024 to 13-03-2024	Lecture
	Insolvency and Bankruptcy Code	1	14-03-2024	Lecture
Unit-IV Merchant Banking	Introduction to Merchant Banking, Lead Managers, Registration Process	3	18-03-2024 to 20-03-2024	Lecture
	Underwriters, Bankers to an Issue, Brokers to an Issue	3	25-03-2024 to 27-03-2024	Lecture
	Issue Management, Pricing of Issue, Issue of Debt Instruments	3	01-04-2024 to 03-04-2024	Lecture
	Book Building, Green Shoe Option, Services of Merchant Banks	3	08-04-2024 to 10-04-2024	Lecture
Unit-V Regulatory Mechanisms	Role of SEBI in Regulating Capital Market and Stock Exchanges	3	15-04-2024 to 17-04-2024	Lecture

	SEBI Act and Powers of SEBI, Important SEBI Cases	3	22-04-2024 to 24-04-2024	Lecture
	Corporate Frauds, Investigation under Companies Act 2013	3	29-04-2024 to 30-04-2024	Lecture
	NFRA, IBBI, Investigation of Corporate Frauds	3	02-05-2024 to 07-05-2024	Lecture

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THIRD SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Investment Analysis and Portfolio Management
Course Code: 22C3F3
Term Period: 16/01/2024 – 07/05/2024
Hrs/week: 4 Hrs
Total Hrs.: 56 Hrs

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Dates	Method of Deployment
Unit I: Investment Background	Concepts of Investment, Investment Avenues, Objectives of Investment	4 Hours	16-01-2024 to 19-01-2024	Lecture
	Investment, Speculation & Gambling, Trading vs Investing	4 Hours	22-01-2024 to 25-01-2024	Lecture
	Portfolio Management Process, Sources of Investment Information, Investing Internationally	3 Hours	29-01-2024 to 31-01-2024	Lecture
	Asset Allocation Decision, Securities Market Organization	2 Hours	01-02-2024 to 02-02-2024	Lecture
Unit II: Analysis of Risk & Return	Measuring Return, Measuring Risk	5 Hours	05-02-2024 to 09-02-2024	Lecture
	Standard Deviation & Variance, Risk of a Single Security	5 Hours	12-02-2024 to 16-02-2024	Lecture
	Risk of a Portfolio, Diversification	5 Hours	19-02-2024 to 23-02-2024	Lecture

	Systematic & Unsystematic Risk, Beta and its Computation	4 Hours	26-02-2024 to 29-02-2024	Lecture
Unit III: Valuation of Securities	Bond Features, Types of Bonds	4 Hours	01-03-2024 to 05-03-2024	Lecture
	Determinants of Interest Rates, Bond Management Strategies	3 Hours	06-03-2024 to 08-03-2024	Lecture
	Bond Valuation, Bond Duration	5 Hours	11-03-2024 to 15-03-2024	Lecture
	Preference Shares, Equity Shares	4 Hours	18-03-2024 to 21-03-2024	Lecture
Unit IV: Fundamental & Technical Analysis	Dividend Valuation Models (Theory & Problems)	4 Hours	25-03-2024 to 28-03-2024	Lecture
	Economy-Industry-Company Framework, Economic Analysis	5 Hours	02-04-2024 to 05-04-2024	Lecture
	Technical Analysis, Dow Theory, Market Efficiency	3 Hours	08-04-2024 to 12-04-2024	Lecture
	Behavioral Finance	3 Hours	15-04-2024 to 18-04-2024	Lecture
Unit V: Active Portfolio Management	Markowitz MPT, Sharpe, Treynor	4 Hours	22-04-2024 to 26-04-2024	Lecture
	Jensen's Alpha, Mutual Fund Performance Measures	4 Hours	29-04-2024 to 03-05-2024	Lecture
	Active Portfolio Construction (Treynor-Black Model, Sharpe Optimal Portfolio)	2 Hours	06-05-2024 to 07-05-2024	Lecture

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THIRD SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Personal Growth & Interpersonal Effectiveness
Course Code: 22C3H1
Term Period: 16/01/2024 – 07/05/2024
Hrs/week: 4 Hrs
Total Hrs.: 56 Hrs

Unit	Topics	Hours	Date	Mode of Deployment
Unit I: Personal Growth	Meaning and Concepts of Personal Growth	2	16th & 17th January 2024	Lecture
	Self-esteem: Know Yourself, Accept Yourself	1	18th January 2024	Lecture/Group Activity
	Self-improvement: Plan to Improve, Actively Working to Improve Yourself	1	19th January 2024	Lecture/Discussion
	Life Positions, Personal Life Style Choices	2	23rd & 24th January 2024	Lecture/Case Study
Unit II: Individuals and Organizations	Values - Meaning, Types of Values: Societal, Organizational, Work	2	25th & 30th January 2024	Lecture/Case Study
	Attitudes: Nature, Dimensions, Components, Functions	1	31st January 2024	Lecture

	Changing Attitudes, Antecedents of Work-Related Attitudes	1	1st February 2024	Lecture/Discussion
	Job Satisfaction: Meaning, Influences, Outcomes	2	6th & 7th February 2024	Lecture/Case Study
	Job Involvement, Organizational Commitment: Meaning, Outcomes, Enhancing Organizational Commitment	2	8th & 13th February 2024	Lecture/Discussion
Unit III: Learning and Personality Theories	Learning: Meaning, Learning Principles	1	14th February 2024	Lecture
	Learning Theories: Classical Conditioning, Operant Conditioning, Cognitive Theories	2	15th & 20th February 2024	Lecture/Discussion
	Social Learning Theory, Learning Styles	1	21st February 2024	Lecture
	Personality Theories: The Big Five Personality Traits	1	22nd February 2024	Lecture/Group Activity
	Myers Briggs Type Indicator (MBTI)	1	27th February 2024	Lecture/Discussion
	Carl Jung's Theory of Personality Types	1	28th February 2024	Lecture/Discussion
Unit IV: Interpersonal Behavior and Conflicts	Nature of Conflict, Levels of Conflict	1	29th February 2024	Lecture
	Sources and Effects of Conflict	1	5th March 2024	Lecture

	Intraindividual Conflict: Frustration, Goal Conflict, Role Conflict, Ambiguity	2	6th & 7th March 2024	Lecture/Case Study
	Interactive Conflict: Interpersonal Conflict, Intergroup Conflict	1	12th March 2024	Lecture/Discussion
	Assertive Behavior, Transactional Analysis	1	13th March 2024	Lecture
	Types of Transactions, Life Positions	1	14th March 2024	Lecture/Role Play
Unit V: Stress Management and Emotional Intelligence	The Emergence of Stress, Causes of Stress	2	19th & 20th March 2024	Lecture
	Extra-Organizational, Organizational, Group, and Individual Stressors	2	21st & 26th March 2024	Lecture/Discussion
	Consequences of Stress: Physiological, Psychological, Behavioral Symptoms	2	27th & 28th March 2024	Lecture/Case Study
	Coping Strategies for Stress: Individual and Organizational Approaches	2	2nd & 3rd April 2024	Lecture/Discussion
	Emotional Intelligence: Role and Types of Emotions	2	9th & 10th April 2024	Lecture/Case Study
	Meaning and Components of Emotional Intelligence	2	11th & 16th April 2024	Lecture/Group Activity

Review and Revision	Review of All Units	4	17th, 18th, 23rd & 24th April 2024	Discussion/Interactive Sessions
Final Q&A and Exam Preparation	Course Recap, Q&A Session	2	30th April & 1st May 2024	Q&A/Interactive Session
Course Conclusion	Final Review & Feedback	2	6th & 7th May 2024	Interactive/Feedback Session

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THIRD SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Organizational Change & Development
Course Code: 22C3H2
Term Period: 16/01/2024 – 07/05/2024
Hrs/week: 4 Hrs
Total Hrs.: 56 Hrs

Unit 1: Organizational Change (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit 1 Organizational Change	Introduction to change, Nature of Change, Types of change	3	16 January 2024 - 19 January 2024	Lecture
	Reasons for change, Resistance to change, Overcoming resistance	3	22 January 2024 - 26 January 2024	Lecture
	Planned vs unplanned organizational change, Change agents, Skills and competencies of change agents	4	29 January 2024 - 2 February 2024	Lecture
Unit 2: Organization Development (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit 2 Organization Development	Introduction and concepts of Organization Development, Characteristics of OD	3	5 February 2024 - 9 February 2024	Lecture
	History of OD: Laboratory Training Stem, Survey Research and Feedback Stem, Action Research Stem, Socio-technical and Socio-clinical Stem	3	12 February 2024 - 16 February 2024	Lecture
Unit 3: Theory and Management of Organization Development (12 Hours)				

Curriculum as Prescribed	Topics	No. of Hours Required	Date	Method of Deployment
Unit 3 Theory and Management of Organization Development	Models and Theories of planned change: Lewin's Three stage model, Force Field Analysis, Burke Litwin Model, Systems Theory	4	26 February 2024 - 1 March 2024	Lecture
	Participation and Empowerment, Teams and Teamwork, Parallel Learning Structure, Normative Re-educative strategy of Change	3	4 March 2024 - 8 March 2024	Lecture
	Managing the OD process: Diagnosis, Six box model, Action Component, Program management component	3	11 March 2024 - 15 March 2024	Lecture
	Action research and organization development	2	18 March 2024 - 19 March 2024	Lecture
Unit 4: Organization Development Intervention (14 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit 4 Organization Development Intervention	Team interventions: Teams and work Groups, Strategic Units, Group Diagnostic Meeting	3	20 March 2024 - 25 March 2024	Lecture
	Inter-group and third-party peace-making intervention	3	26 March 2024 - 29 March 2024	Lecture
	Comprehensive intervention: Beckhard's Confrontation meeting, Strategic Management activities, Real time strategic change	3	1 April 2024 - 5 April 2024	Lecture
	Structural interventions: Socio-technical systems, Self-managed teams	3	8 April 2024 - 12 April 2024	Lecture
	Training experiences: T Groups, Behavioural modelling, Coaching and mentoring	2	15 April 2024 - 16 April 2024	Lecture

Unit 5: Key Considerations and Issues (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit 5 Key Considerations and Issues	Issues in consultant-client relationships: Entry and Contracting, defining the client system, Trust issues, Consultant's expertise	3	17 April 2024 - 19 April 2024	Lecture
	Depth of intervention, the consultant as a model, Terminating relationships, Role of HR specialist in OD	3	22 April 2024 - 26 April 2024	Lecture
	Power, politics and organization development: Theories of social power, Frameworks for analysing power and politics, Role of power in OD	4	29 April 2024 - 3 May 2024	Lecture

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THIRD SEMESTER LESSON PLAN FOR THE ACADEMIC YEAR 2022-24

Course Name: Training & Development
Course Code: 22C3H3
Term Period: 16/01/2024 – 07/05/2024
Hrs/week: 4 Hrs
Total Hrs.: 56 Hrs

Unit I: Introduction (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Module 1	Introduction to Training, Importance, Advantages, Challenges, Changing workplace and workforce	3	16 January 2024 - 19 January 2024	Lecture
	Training as a sub-system of HRD, Learning principles and environment	4	22 January 2024 - 26 January 2024	Lecture
	Instructional design, Learning outcomes, Feedback, Training objectives to plan	3	29 January 2024 - 2 February 2024	Lecture
Unit II: Training Needs Assessment (TNA) (12 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Module 2	Introduction to Needs Assessment, Importance of TNA, When to conduct TNA	4	5 February 2024 - 9 February 2024	Lecture

	TNA Process: Organizational, Requirement, Task, KSA, Person Analysis	4	12 February 2024 - 16 February 2024	Lecture
	Needs Assessment Techniques – Advantages and Disadvantages	2	19 February 2024 - 20 February 2024	Lecture
	Training enhancement, Trainee characteristics – Trainee Readiness and Trainee motivation	2	22 February 2024 - 23 February 2024	
Unit III: Trainer's Skills (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Module 3	Communication, Questioning, Body Language, handling difficult situation, Creativity, Technical Skills, Designing skills	5	26 February 2024 - 1 March 2024	Lecture
	Interpersonal Skills, Self-development, Managerial skills, Confidence, Humour, Integrity, Credibility, Transparency, Rapport building	5	4 March 2024 - 8 March 2024	Lecture
Unit IV: Training Delivery (12 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Module 4	Differences between Traditional and Modern methods	3	11 March 2024 - 13 March 2024	Lecture
	Traditional Approaches: Classroom, Lecture, Case study, Role play, SDLP	4	14 March 2024 - 18 March 2024	Lecture

	Modern Approaches: DLP, CD ROM, Interactive Multimedia, Web-based, ITS, VRT	5	19 March 2024 - 22 March 2024	Lecture
Unit V: Training Evaluation (12 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Module 5	Need for evaluation, Evaluation criteria, objectives, Instruments (Surveys, Interviews)	4	25 March 2024 - 29 March 2024	Lecture
	Kirk Patrick's Model, Philip's Model, CIRO Model of Training Evaluation	4	1 April 2024 - 4 April 2024	Lecture
	Application and Case Studies in Training Evaluation	4	5 April 2024 - 9 April 2024	Lecture/Discussion

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Lesson Plan – 4th Semester 2023-24

Course Name: EVENT MANAGEMENT
Course Code: 22C401
Term Period: 18th June 2024 - 21st September, 2024
Hrs/week: 4hrs/week
Total Hrs.: 56hrs

Unit	Topics	Hours	Date	Mode of Deployment
Unit I: Introduction	Nature, scope, significance, and components of event management	2	18th & 19th June 2024	Lecture/Discussion
	Relationship between business and events, Responsibility of event planners, Identifying suitable venues, Layout	2	20th & 21st June 2024	Lecture/Discussion
	Types of events and skills for event management: Seminars & Conferences, Trade Shows, Sporting events, Product launch, Press conference	2	24th & 25th June 2024	Case Study/Workshop
	Skills for Event Management	2	26th & 27th June 2024	Group Discussion

Unit II: Planning	Concept, Nature, and Practices in Event Management: Organizing and planning events, Customer relationship management	2	1st & 2nd July 2024	Lecture/Group Discussion
	Starting and managing events business, Event coordination	2	3rd & 4th July 2024	Lecture/Case Study
	Crisis planning - prevention, preparation, provision, action phase	2	8th & 9th July 2024	Lecture/Case Study
	Handling negative publicity, Different types of sponsorship - definition, objectives, target market, budget	2	10th & 11th July 2024	Discussion/Group Activity
Unit III: Preparing a Proposal	Conducting market research, SWOT analysis, Estimating attendance	2	15th & 16th July 2024	Lecture/Workshop
	Media coverage, Advertising, Budget	2	17th & 18th July 2024	Lecture/Discussion
	Organizing the event: Purpose, Venue, Timing, Guest list, Invitations, Food & beverages, Room dressing	2	22nd & 23rd July 2024	Lecture/Workshop
	Equipment, Guest of honor, Speakers, Media, Photographers, Podium, Exhibition, and Checklists	2	24th & 25th July 2024	Group Activity/Workshop

Unit IV: Introduction to Event Marketing	Nature, Need, and Importance of Event Marketing	2	29th & 30th July 2024	Lecture
	Special features of Event Marketing, Event Marketing Mix: Product, Price, Promotion, Distribution	2	31st July & 1st August 2024	Discussion/Case Study
	Partnership, Segmentation, and Targeting of the market for events	2	5th & 6th August 2024	Lecture/Group Discussion
	Types of advertising, promotions, website and text messaging, Social media platform, and other digital media promotions used to market an event	2	7th & 8th August 2024	Workshop/Group Discussion
	Media invitations, photo-calls, press releases, TV opportunities, radio interviews	2	12th & 13th August 2024	Case Study/Workshop
	Special emphasis on 5 W's of event marketing	2	14th & 16th August 2024	Group Activity
Unit V: Preparing Human Resources for Event	Manpower planning, Training of employees, Training needs identification	2	19th & 20th August 2024	Lecture/Workshop
	Training methods, Evaluation	2	21st & 22nd August 2024	Group Activity
	Budget - cost of event, Return on investment	2	26th & 27th August 2024	Lecture/Workshop

	Media coverage, Attendance, Feedback	2	28th & 29th August 2024	Group Discussion
	Practical application of event management planning, marketing, and budgeting	4	2nd to 5th September 2024	Group Project
Comprehensive Review (All Units)	Review of key concepts and case studies	4	9th to 12th September 2024	Discussion/Case Study
Final Practical Project	Full event planning, execution, and post-event feedback analysis	4	16th to 19th September 2024	Group Activity/Workshop

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Lesson Plan – 4th Semester 2023-24

Course Name: **INDUSTRIALMARKETING**
Course Code: **22C4M5**
Term Period: **18th June 2024 - 21st September, 2024**
Hrs/week: **4hrs/week**

Unit 1: Introduction (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit I: Introduction	The Nature and uniqueness of Industrial Marketing	3	18-06-2024 to 20-06-2024	Lecture
	Classification of Industrial Products	2	21-06-2024 to 25-06-2024	Lecture
	Classification of e-commerce and m-commerce	2	26-06-2024 to 28-06-2024	Lecture
	Difference between Business and Consumer Marketing	1	01-07-2024	Lecture
	Insights into Business Consumers	2	02-07-2024 to 03-07-2024	Lecture
Unit 2: Business Buying Behavior (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit II: Business Buying Behavior	Identifying Buying Behavior of Industrial Products	3	04-07-2024 to 08-07-2024	Lecture
	Buying Processes and Stages	2	09-07-2024 to	Lecture

			10-07-2024	
	Procurement Center Roles	2	11-07-2024 to 12-07-2024	Lecture
	Identification and Evaluation of Suppliers	2	15-07-2024 to 16-07-2024	Lecture
	Marketing Information System for Industrial Marketing	1	17-07-2024	Lecture
Unit 3: Segmenting, Targeting, and Positioning (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit III: Segmenting, Targeting, and Positioning	Industrial Marketing Planning Process	2	18-07-2024 to 19-07-2024	Lecture
	Demand and Supply Analysis	2	22-07-2024 to 23-07-2024	Lecture
	Segmenting, Targeting and Positioning	2	24-07-2024 to 25-07-2024	Lecture
	Industrial Product Strategy and Product Policy	2	26-07-2024 to 29-07-2024	Lecture
Unit 4: Key Account Management (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit IV: Key Account Management	E-channels	2	01-08-2024 to 02-08-2024	Lecture
	Concept of Logistics and Supply Chain Management	2	05-08-2024 to 06-08-2024	Lecture
	Pricing strategy for Markets	2	07-08-2024 to	Lecture

			08-08-2024	
	Competitive Bidding Techniques	2	09-08-2024 to 12-08-2024	Lecture
	Types of Leasing, Hire-purchase, Personal Selling Process	2	13-08-2024 to 14-08-2024	Lecture
Unit 5: Data Interpretation (08 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date**	**Method of Deployment**
Unit V: Data Interpretation	ABC and MBA Analysis	3	16-08-2024 to 19-08-2024	Lecture
	Selling using the Internet	2	20-08-2024 to 21-08-2024	Lecture
	Issues and Challenges in transactions using software	3	22-08-2024 to 23-08-2024	Lecture

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Lesson Plan – 4th Semester 2023-24

Course Name: **SERVICES MARKETING**
Course Code: **22C4M6**
Term Period: **18th June 2024 - 21st September, 2024**
Hrs/week: **4hrs/week**
Total Hrs.: **56hrs**

Unit I: Introduction (10 hours)				
Curriculum as Prescribed by the Institution	**Topics**	**No. of Hours Required to Complete**	**Date**	**Method of Deployment**
Unit I Introduction to Services Marketing	**Definition & Uniqueness of Services**: Emerging trends in Service Marketing	3	18-06-2024 to 21-06-2024	Lecture
	Service Marketing Mix: Recent trends, post-liberalization growth in service industry	3	24-06-2024 to 28-06-2024	Lecture
	Potential of Service Industry: Post-liberalization changes and opportunities	4	01-07-2024 to 05-07-2024	Lecture
Unit II: Consumer Behaviours in Services (14 hours)				
Unit II Consumer Behaviours in Services	**Gap Analysis & Consumer Behaviour**: Customer perception, Gap analysis strategies	4	08-07-2024 to 12-07-2024	Lecture
	Customer Expectations: Factors influencing customer expectations	3	15-07-2024 to 19-07-2024	Lecture

	Service Design & Standards: Post-globalization impact, standards in services	3	22-07-2024 to 26-07-2024	Lecture
Unit 3: Management of Service Performance (10 hours)				
Unit III Management of Service Performance	**Service Delivery & Performance**: Employee roles, boundary-spanning roles	3	29-07-2024 to 02-08-2024	Lecture
	Customer Roles in Service Delivery: Service through intermediaries and electronic channels	3	05-08-2024 to 09-08-2024	Lecture
	Managing Service Delivery: Performance measurement in service settings	4	12-08-2024 to 16-08-2024	Lecture
Unit IV Management of Marketing channels (12 hours)				
Unit IV Management of Marketing channels	**Managing Demand**: Service promises, Integrated service, pricing strategies	4	19-08-2024 to 23-08-2024	Lecture
	Gap Models in Service Quality: Integrated communication and pricing	3	26-08-2024 to 30-08-2024	Lecture
Unit V: Marketing of Services (10 hours)				
Unit V Marketing of Services	**Marketing in Health Care & Hospitality**: Overview of key service industries	4	02-09-2024 to 06-09-2024	Lecture
	Marketing in Telecom, Transport, Financial Services: Strategic service marketing	3	09-09-2024 to 13-09-2024	Lecture
	Consultation Services & Financial Services: Special service industries overview	3	16-09-2024 to 20-09-2024	Lecture

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Lesson Plan – 4th Semester 2023-24

Course Name: **INTERNATIONAL MARKETING**
Course Code: **22C4M7**
Term Period: **18th June 2024 - 21st September, 2024**
Hrs/week: **4hrs/week**
Total Hrs.: **56hrs**

Curriculum as Prescribed by the Institution	Topics	No. of Hours Required to Complete	Date	Method of Deployment
Unit 1: Introduction (10 hours)				
Unit I Introduction	**Introduction to International Marketing**: Importance, Concepts in Trade	3	18-06-2024 to 21-06-2024	Lecture
	Theories of International Trade: Overview of various trade theories	3	24-06-2024 to 28-06-2024	Lecture
	Trade Barriers and India's Foreign Trade: Analysis of trade barriers, post-independence growth	4	01-07-2024 to 05-07-2024	Lecture
Unit II Consumer Behaviours in Services (14 hours)				
Unit II Consumer Behaviours in Services	**Economic and Political Environment in International Marketing**: Impact of global economic and political conditions	6	08-07-2024 to 12-07-2024	Lecture
	Legal and Socio-cultural Environment: How these factors affect international markets	4	15-07-2024 to 19-07-2024	Lecture

	Demographic Environment and Market Entry Strategies: MNCs, global marketers	4	22-07-2024 to 26-07-2024	Lecture
Unit III: Management of Service Performance (10 hours)				
Unit III Management of Service Performance	**Factors Affecting International Marketing**: Key global marketing factors	3	29-07-2024 to 02-08-2024	Lecture
	International Marketing Mix Strategy: How to structure the marketing mix globally	4	05-08-2024 to 09-08-2024	Lecture
	Distribution Strategies in International Markets: Types of intermediaries	3	12-08-2024 to 16-08-2024	Lecture
Unit IV: Management of Marketing channels (12 hours)				
Unit IV Management of Marketing channels	**Export Finance and Letter of Credit**: How exports are financed	4	19-08-2024 to 23-08-2024	Lecture
	Export Licensing and Export Risk: Export risk and insurance management	4	26-08-2024 to 30-08-2024	Lecture
	Export Promotion & Government Incentives: Government initiatives in exports	4	02-09-2024 to 06-09-2024	Lecture
Unit V: Marketing of Services (10 hours)				
Unit V Marketing of Services	**International Economic Institutions**: WTO, IMF, World Bank overview	6	09-09-2024 to 13-09-2024	Lecture
	Trading Blocks & Forums: GATT, EU, SAARC, BRICS	4	16-09-2024 to 20-09-2024	Lecture

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Lesson Plan – 4th Semester 2023-24

Course Name: **MERGER AND ACQUISITION**
Course Code: **22C4F4**
Term Period: **18th June 2024 - 21st September, 2024**
Hrs/week: **4hrs/week**
Total Hrs.: **56hrs**

Module	Topics	No. of Hours	Date	Method of Deployment
Module 1: Introduction to M&A	Types of merger, theories of mergers, operating, financial and managerial synergy of mergers	4	18-6-2024 to 21-6-2024	Lecture and Quiz
	Value creation in horizontal, vertical, and conglomerate mergers, internal and external change forces contributing to M&A activities	4	24-6-2024 to 28-6-2024	Lecture,Case discussion and Quiz
Module 2:Merger Process	Procedure for effecting M&A, Five-stage model, Due diligence, Types, process, and challenges of due diligence	5	1-7-2024 to 5-7-2024	Lecture , Case discussion
	HR aspects of M&A, Tips for successful mergers, Process of merger integration	5	8-7-2024 to 12-7-2024	Lecture and case discussion
Module 3:Financial Evaluation of M&A	Merger as capital budgeting, Business valuation approaches (asset-based, market-based, income-based)	5	15-7-2024 to 19-7-2024	Workshop, Lecture and Exercise,

	Exchange Ratio (Swap Ratio)Methods of determining the exchange rate	5	22-7-2024 to 26-7-2024	Lecture , Exercises and Case discussion
Module 4:Accounting Aspects of Amalgamation	Types of amalgamations, Methods of accounting, Pooling of interest method and Purchase method	7	29-7-2024 to 7-8-2024	Lecture , Exercises and Case discussion
	Calculation of purchase consideration, Journal entries in the books of transferor and transferee company, Ledger accounts in the books of transferor & transferee	7	12-8-2024 to 19-8-2024	Lecture and Exercises
Module 5:Takeovers	Takeovers, types, and takeover strategies, Takeover defenses, financial defensive measures, methods of resistance	7	21-8-2024 to 29-8-2024	Lecture ,Case Study,Group discussion and Presentations
	Anti-takeover amendments, Poison pills, Legal aspects of Mergers, Acquisitions, Competition Act, Competition Commission of India, SEBI Substantial Acquisition of Shares and Takeover code	7	2-9-2024 to 12-9-2024	Lecture ,Case Study and Presentations

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Lesson Plan – 4th Semester 2023-24

Course Name: **DERIVATIVES**
Course Code: **22C4F5**
Term Period: **18th June 2024 - 21st September, 2024**
Hrs/week: **4hrs/week**
Total Hrs.: **56hrs**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Dates	Method of Deployment
Introduction to Derivatives	Introduction to Derivatives: Forwards, Futures, Options, Swaps. Trading mechanisms, Exchanges, Clearing house structure	4 Hours	June 18, 2024 - June 21, 2024	Lecture
	Clearing House Operations, Regulatory Framework, Floor Brokers, Initiating Trade, Liquidating Future Positions	4 Hours	June 23, 2024 - June 28, 2024	Lecture
	Margins (Initial & Variation), Marking to Market (MTM), Types of Orders, Future Commission Merchant	4 Hours	June 30, 2024 - July 5, 2024	Lecture
Forward and Future Contracts	Forward Contracts, Futures Contracts: Financial Futures, Valuation of Forward & Future Prices (Index Futures)	4 Hours	July 7, 2024 - July 12, 2024	Lecture
	Valuation of Stock Futures, Hedging using Futures Contracts, Hedging using Stock & Index Futures	4 Hours	July 14, 2024 - July 19, 2024	Lecture
	Adjusting Beta of a Portfolio using Future Contracts, Interest Rate Futures, Currency Futures	4 Hours	July 21, 2024 - July 26, 2024	Lecture

Valuation of Options	Options: Types of Options, Option Pricing, Factors Affecting Pricing (Call & Put on Dividend/Non-Dividend Stocks)	4 Hours	July 28, 2024 - August 2, 2024	Lecture
	Mechanics of Options: Stock Options, Options on Stock Index, Options on Futures, Interest Rate Options	4 Hours	August 4, 2024 - August 9, 2024	Lecture
	Exotic Options: Basic Model, Black-Scholes Model, Option Greeks, Arbitrage Profits in Options	4 Hours	August 11, 2024 - August 16, 2024	Lecture
Options Contracts and Trading Strategies	Options Contracts & Trading Strategies: Put-Call Parity, Butterfly, Bull, Bear, Box, Strangle Strategies	4 Hours	August 18, 2024 - August 23, 2024	Lecture
	Trading Strategies (Continued): Advanced Options Strategies	4 Hours	August 25, 2024 - August 30, 2024	Lecture
Commodity Market in India	Commodity Market in India: Commodity Futures & Options, SEBI Guidelines, NCDEX & MCX Overview	4 Hours	September 1, 2024 - September 6, 2024	Lecture
	Working of Commodity Markets, Trading, and Regulatory Aspects	4 Hours	September 8, 2024 - September 13, 2024	Lecture
	Summary & Review: Major Concepts Across Modules 1-5	4 Hours	September 15, 2024 - September 20, 2024	Lecture

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Lesson Plan – 4th Semester 2023-24

Course Name: **INTERNATIONAL FINANCE**
Course Code: **22C4F6**
Term Period: **18th June 2024 - 21st September, 2024**
Hrs/week: **4hrs/week**
Total Hrs.: **56hrs**

Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit I: International Financial Environment	Role of International Financial Management in Corporate Financial Management	2	18-06-2024 to 19-06-2024	Lecture
	Dynamics of Global Capital Flows	2	20-06-2024 to 21-06-2024	Lecture

	India's Balance of Payment: Trends, Direction, and Composition	2	24-06-2024 to 25-06-2024	Lecture
	Current Account Deficit (CAD) Problems	1	26-06-2024	Lecture
	Economic and Monetary Union	1	27-06-2024	Lecture
Unit II: Foreign Exchange Market	Function and Structure of the Forex Markets	2	28-06-2024 to 01-07-2024	Lecture
	Foreign Exchange Market Participants	2	02-07-2024 to 03-07-2024	Lecture
	Types of Transactions and Settlements Dates	2	04-07-2024 to 05-07-2024	Lecture
	Exchange Rate Quotations	2	08-07-2024 to 09-07-2024	Lecture

	Determination of Exchange Rates in Spot Markets	2	10-07-2024 to 11-07-2024	Lecture
	Determination of Exchange Rates in Forward Markets	2	12-07-2024 to 15-07-2024	Lecture
	Exchange Rate Behavior and Cross Rates	2	16-07-2024 to 17-07-2024	Lecture
	Bid-Ask Spread (Theory & Problems)	2	18-07-2024 to 19-07-2024	Lecture
Unit III: Foreign Exchange Risk Management	Hedging against Foreign Exchange Exposure – Forward Market	3	22-07-2024 to 24-07-2024	Lecture
	Futures Market	2	25-07-2024 to 26-07-2024	Lecture

	Options Market	2	29-07-2024 to 30-07-2024	Lecture
	Currency Swaps	2	31-07-2024 to 01-08-2024	Lecture
	Interest Rate Swaps (Two-Way and Three-Way)	3	02-08-2024 to 06-08-2024	Lecture
Unit IV: International Parity Relationships & Forecasting Forex	Measuring Exchange Rate Movements	2	07-08-2024 to 08-08-2024	Lecture

	Exchange Rate Equilibrium	2	09-08-2024 to 12-08-2024	Lecture
	Factors Affecting Foreign Exchange Rate	2	13-08-2024 to 14-08-2024	Lecture
	Forecasting Foreign Exchange Rates	2	16-08-2024 to 19-08-2024	Lecture
	Interest Rate Parity	2	20-08-2024 to 21-08-2024	Lecture
	Purchasing Power Parity & International Fisher Effects	2	22-08-2024 to 23-08-2024	Lecture
	Arbitrage – Locational, Triangular, and Covered Interest Arbitrage (Theory & Problems)	4	26-08-2024 to 29-08-2024	Lecture

Unit V: International Investment Decision	Risk Factors and Country Risk	2	30-08-2024 to 02-09-2024	Lecture
	Cost and Benefits of International Capital Budgeting	2	03-09-2024 to 04-09-2024	Lecture
	Evaluation Criteria in International Capital Budgeting	4	05-09-2024 to 10-09-2024	Lecture
	Final Review and Revision	2	11-09-2024 to 13-09-2024	Revision and Discussion

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Lesson Plan – 4th Semester 2023-24

Course Name: **TAXATION**
Course Code: **22C4F7**
Term Period: **18th June 2024 - 21st September, 2024**
Hrs/week: **4hrs/week**
Total Hrs.: **56hrs**
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Curriculum as prescribed by the Institution	Topics	No. of Hours required to complete	Date	Method of Deployment
Unit I: Introduction to Direct Tax	Basic concepts: assessment year, previous year, person, assessee, income, charges on income, gross total income, capital and revenue receipts	3 hours	18-06-2024 to 20-06-2024	Lecture
	Residential status, receipt and accrual of income, connotation of income deemed to accrue or arise in India	3 hours	21-06-2024 to 25-06-2024	Lecture
	Tax Planning, Tax Evasion and Tax Management (Problems on residential status of individual assessee)	3 hours	26-06-2024 to 28-06-2024	Lecture
Unit II: Heads of Income	Income from salary (Basic problems)	3 hours	01-07-2024 to 03-07-2024	Lecture
	Income from house property (Theory only)	2 hours	04-07-2024 to 05-	Lecture

			07-2024	
	Income under the head Profit and Gains of Business or Profession and computation scheme	3 hours	08-07-2024 to 10-07-2024	Lecture
	Business deductions (Problems on computation of income from business/profession of individual assessee)	2 hours	11-07-2024 to 12-07-2024	Lecture
Unit III: Income under Capital Gain	Basis of charge, transfer of capital asset, inclusion & exclusion from capital asset, computation of capital gain	3 hours	15-07-2024 to 17-07-2024	Lecture
	Computation of capital gain (Theory & problems)	3 hours	18-07-2024 to 22-07-2024	Lecture
	Income from other sources (Theory only), deductions under section 80C to 80U	3 hours	23-07-2024 to 25-07-2024	Lecture
	Setoff and carry forward of losses	2 hours	26-07-2024 to 29-07-2024	Lecture
Unit IV: Computation of Tax Liability	Computation of tax liability of a firm and partners	3 hours	30-07-2024 to 01-08-2024	Lecture
	Computation of taxable income of a company with special reference to MAT	3 hours	02-08-2024 to 06-	Lecture

			08-2024	
	Corporate dividend tax	2 hours	07-08-2024 to 08-08-2024	Lecture
Unit V: Goods and Service Tax	Overview and evolution of GST, indirect tax structure in India	3 hours	09-08-2024 to 13-08-2024	Lecture
	Introduction to GST, key concepts, phases of GST, GST council	3 hours	14-08-2024 to 16-08-2024	Lecture
	Taxes under GST, cess, registration under GST, registration number format	3 hours	19-08-2024 to 21-08-2024	Lecture
	Types of GST returns and their due dates	3 hours	22-08-2024 to 26-08-2024	Lecture
	Late filing, late fee, and interest	2hours	27-08-2024 to 28-08-2024	Lecture
Revision and Problem Solving	Review of key topics and problem solving	2 hours	29-08-2024 to 02-09-2024	Lecture/Discussion

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Lesson Plan – 4th Semester 2023-24

Course Name: **STRATEGIC HUMAN RESOURCE MANAGEMENT**
Course Code: **22C4H4**
Term Period: **18th June 2024 - 21st September, 2024**
Hrs/week: **4hrs/week**
Total Hrs.: **56hrs**

Curriculum as Prescribed by the Institution	Topics	No. of Hours Required to Complete	Date	Method of Deployment
Module 1	**Introduction to SHRM**: An investment perspective of HRM, Valuation of assets, Human capital	3	18-06-2024 to 21-06-2024	Lecture
	HR Metrics and Technology Impact: Workforce demographics, Telecommuting, e-HR	3	24-06-2024 to 28-06-2024	Lecture
	Diversity and HRM: Generational diversity, Sexual orientation, Disabilities	3	01-07-2024 to 05-07-2024	Lecture
Module 2	**Strategic vs Traditional HR**: HR roles, SHRM critical competencies	3	08-07-2024 to 12-07-2024	Lecture

	Strategic HR Planning: Objectives and types (aggregate & succession planning)	3	15-07-2024 to 19-07-2024	Lecture
Module 3	**Recruitment Strategies**: Temporary vs Permanent, Internal vs External recruitment	3	22-07-2024 to 26-07-2024	Lecture
	Selection Methods: Interviewing, Testing, References	3	29-07-2024 to 02-08-2024	Lecture
	Training & Development: Needs assessment, Objectives, Design, Delivery	3	05-08-2024 to 09-08-2024	Lecture
Module 4	**Performance Management**: Feedback, Compensation, Evaluation	3	12-08-2024 to 16-08-2024	Lecture
	Evaluation Techniques: Measures of evaluation, Internal/External equity	3	19-08-2024 to 23-08-2024	Lecture
Module 5	**Employee Separation**: Turnover, Reduction in force, Retirement	3	26-08-2024 to 30-08-2024	Lecture
	Global HRM: Strategic HR issues in international assignments, Repatriation	3	02-09-2024 to 06-09-2024	Lecture

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Lesson Plan – 4th Semester 2023-24

Course Name: **INDUSTRIAL LABOUR LEGISLATION**
Course Code: **22C4H5**
Term Period: **18th June 2024 - 21st September, 2024**
Hrs/week: **4hrs/week**
Total Hrs.: **56hrs**

Unit	Topics	Hours	Date	Mode of Deployment
Unit I: Industrial Disputes Act 1947	Sec 2 (Definitions)	2	18th & 19th June 2024	Lecture/Discussion
	Sections 9A, 10, 12, 17, 18	2	20th June 2024	Lecture
	Sections 22, 23, 24, 25	2	25th & 26th June 2024	Lecture/Case Study
	Chapter V B, Section 25(S) and Section 33	2	27th June 2024	Lecture
	Karnataka ID Rules, Industrial Employment (Standing Orders) Act	2	2nd July 2024	Lecture
Unit II: Indian Factories Act 1948	Karnataka Standing Orders Rules	2	3rd July 2024	Lecture/Discussion
	Karnataka Factory Rules	2	4th & 9th July 2024	Lecture
	Contract Labour (Regulation and Abolition) Act 1971	2	10th July 2024	Case Study/Discussion
	Karnataka Contract Labour Rules	2	11th July 2024	Lecture

	Practical Application of Indian Factories Act	2	16th & 17th July 2024	Group Exercise/Workshop
Unit III: Payment of Gratuity Act 1982	Payment of Gratuity Act	2	18th & 23rd July 2024	Lecture/Case Study
	Payment of Bonus Act 1965	2	24th & 25th July 2024	Lecture
	Karnataka Industrial Establishments (National Festival Holidays) Act	2	30th & 31st July 2024	Discussion/Workshop
Unit IV: ESI Act 1948	ESI Act 1948	2	1st & 6th August 2024	Lecture
	Employees' Provident Fund and Miscellaneous Provisions Act 1952	2	7th & 8th August 2024	Lecture/Case Study
	Workmen's Compensation Act 1932	2	13th & 14th August 2024	Discussion
	Payment of Wages Act 1936	2	20th & 21st August 2024	Lecture
Unit V: Code of Discipline in Industries	Code of Discipline in Industries	2	22nd & 27th August 2024	Lecture
	Report of the Second National Labour Commission 2002	2	28th & 29th August 2024	Case Study/Discussion
	Latest ILO Deliberations on Labour Legislation in Developing Countries	2	3rd & 4th September 2024	Lecture
Review & Assessment	Review of Key Concepts	2	5th & 10th September 2024	Group Discussion
	Final Problem-Solving Session	2	11th & 12th September 2024	Case Study

Concluding Session	Final Review and Recap	2	17th & 18th September 2024	Interactive Q&A

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Lesson Plan – 4th Semester 2023-24

Course Name: **INDUSTRIAL RELATIONS**
Course Code: **22C4H6**
Term Period: **18th June 2024 - 21st September, 2024**
Hrs/week: **4hrs/week**
Total Hrs.: **56hrs**

Unit 1: Industrial Relations (12 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date Range**	**Method of Deployment**
Unit 1 Industrial Relations	Historical background, concept, meaning, and scope of Industrial Relations	3	18-06-2024 to 21-06-2024	Lecture
	Stakeholders of IR, various factors influencing IR, Perspectives/Approaches to IR	3	24-06-2024 to 26-06-2024	Lecture
	Essentials of sound IR policy, IR strategies, Legal framework: Industrial Disputes Act 1947	3	27-06-2024 to 01-07-2024	Lecture
	Industrial Conflict: Causes and Consequences, Conflict resolution	3	02-07-2024 to 05-07-2024	Lecture
Unit 2: Trade Unions and Related Aspects (10 Hours)				
Unit 2: Trade Unions and Related Aspects	**Topics**	**No. of Hours Required**	**Date Range**	**Method of Deployment**
	Trade union movement and growth of TU in India, National level federations	3	08-07-2024 to 10-07-2024	Lecture

	Trade union problems, organization, leadership, management, Trade Union Act 1926	3	11-07-2024 to 15-07-2024	Lecture
	Registration of trade unions, Employers' Association: Objectives, Origin, Growth	2	16-07-2024 to 17-07-2024	Lecture
	Problems of Trade Unions	2	18-07-2024 to 19-07-2024	Lecture
Unit III: Grievances and Discipline (12 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date Range**	**Method of Deployment**
Unit 3 Grievances and Discipline	Grievances, redressal, discipline, standing orders, acts of misconduct	3	22-07-2024 to 24-07-2024	Lecture
	Show cause notice, suspension, enquiry procedure, principles of natural justice	3	25-07-2024 to 29-07-2024	Lecture
	Punishments: Demotion, suspension, termination, removal, dismissals	3	30-07-2024 to 02-08-2024	Lecture
	Conflicts: Industrial disputes, Lay off, termination simplicitor, retrenchment, closures, VRS	3	05-08-2024 to 07-08-2024	Lecture
Unit IV: Collective Bargaining (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date Range**	**Method of Deployment**
Unit IV: Collective Bargaining	Concept, its relevance in IR, CB as an institution, ILO perception of Collective Bargaining	3	08-08-2024 to 12-08-2024	Lecture
	Objectives, Structure, Functions, Process of Collective Bargaining	3	13-08-2024 to 16-08-2024	Lecture

	Negotiations, Bargaining approaches & techniques, Patterns of bargaining	4	19-08-2024 to 22-08-2024	Lecture
Unit V: Settlements (12 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date Range**	**Method of Deployment**
Unit V: Settlements	Types of settlement: Wage settlement, bonus settlement, productivity settlement	4	23-08-2024 to 27-08-2024	Lecture
	VRS settlement, Union issues settlement, Reorganization settlement	4	28-08-2024 to 30-08-2024	Lecture
	Transfer, layoff, retrenchment, and closure settlements	4	02-09-2024 to 04-09-2024	Lecture

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Lesson Plan – 4th Semester 2023-24

Course Name: **MANAGING KNOWLEDGE WORKERS**
Course Code: **22C4H7**
Term Period: **18th June 2024 - 21st September, 2024**
Hrs/week: **4hrs/week**
Total Hrs.: **56hrs**

Curriculum as Prescribed	Topics	No. of Hours Required	Date Range	Method of Deployment
Unit 1	The changing nature of organizations – Workforce composition, evolving work roles and responsibilities	3	18-06-2024 to 21-06-2024	Lecture
	Teamwork, Relationship building, Communication, Leadership, Decision making, Change management, Worker motivation	3	24-06-2024 to 26-06-2024	Lecture
	Concept of Knowledge management, Drivers of knowledge management, Knowledge as an asset, Explicit and Tacit knowledge	3	27-06-2024 to 01-07-2024	Lecture
	Developing a knowledge culture, Applying knowledge to work practices, Knowledge Systems	3	02-07-2024 to 05-07-2024	Lecture
Unit II: Strategic Knowledge Management (12 Hours)				
Unit 3	**Topics**	**No. of Hours Required**	**Date Range**	**Method of Deployment**
	Models of knowledge management, Knowledge management life cycle	3	08-07-2024 to	Lecture

			10-07-2024	
	Knowledge workers, Skills and competencies of knowledge workers, Phases of knowledge development	3	11-07-2024 to 15-07-2024	Lecture
	Knowledge management infrastructure – Managerial, Technological, Social infrastructure	3	16-07-2024 to 18-07-2024	Lecture
	Enabling Knowledge Transference, The five P's of strategic management	3	19-07-2024 to 22-07-2024	Lecture
Unit III: Knowledge Leader (10 Hours)				
Curriculum as Prescribed	**Topics**	**No. of Hours Required**	**Date Range**	**Method of Deployment**
Unit 3	Contributory Disciplines to Knowledge Leadership – Librarianship, IT, HRM, Business management	3	23-07-2024 to 25-07-2024	Lecture
	Attributes of a knowledge leader – Visionary, Motivator, Communicator, Change agent	3	26-07-2024 to 29-07-2024	Lecture
	Leading Knowledge Teams – Self-managed teams, Virtual knowledge teams	4	30-07-2024 to 02-08-2024	Lecture
Unit IV: Developing and Sustaining a Knowledge Culture (10 Hours)				
	Topics	**No. of Hours Required**	**Date Range**	**Method of Deployment**
Unit 4 **Developing and Sustaining a Knowledge Culture**	Knowledge Culture Enablers – Core values, Structural support, Enacted values	3	05-08-2024 to 07-08-2024	Lecture
	Implementing knowledge culture enhancement programs	3	08-08-2024 to 12-08-2024	Lecture
	Maintaining Knowledge Culture during Change	4	13-08-2024 to 16-08-2024	Lecture
Unit V: Knowledge Management & HRM Practices (12 Hours)				

Curriculum as Prescribed	Topics	No. of Hours Required	Date Range	Method of Deployment
Unit 5 **: Knowledge Management & HRM Practices**	Impact of Organizational Structure on Knowledge Management – Functional, Divisional, Matrix model	3	19-08-2024 to 21-08-2024	Lecture
	Staffing – Workforce planning, Core competencies, Selection, Recruitment	3	22-08-2024 to 26-08-2024	Lecture
	Performance Management – Standards, Process, Feedback	3	27-08-2024 to 30-08-2024	Lecture
	Learning & Development – Individual learning, Succession planning, Organizational Evaluation	3	02-09-2024 to 04-09-2024	Lecture