BHARATIYA VIDYA BHAVAN, KOCHI KENDRA YEAR PLAN MATHEMATICS(041) CLASS XII 2024-2025

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
MARCH	3.MATRICES	Introduction Matrix Types of matrices Operations on matrices Transpose of a matrix symmetric and skew symmetric matrices. Invertible matrices	Concept, notation, order, equality, types of matrices, zero and identity matrix, transpose of a matrix, symmetric and skew symmetric matrices. Operation on matrices: Addition and multiplication and multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. Non- commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restricted to square matrices of order 2). Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries).
APRIL	4.DETERMINANTS	Introduction Determinant Area of a Triangle Minors and Cofactors Adjoint and Inverse of a Matrix Applications of Determinants and Matrices	Determinant of a square matrix (up to 3 x 3 matrices),, minors, cofactors and applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of systems of linear equations by examples, solving systems of linear equations in two or three variables (having unique solution) using inverse of a matrix.
JUNE	1.RELATIONS AND FUNCTIONS (Not for first Unit Test)	Introduction Types of Relations Types of Functions	Types of relations: reflexive, symmetric, transitive and equivalence relations. One to one and onto functions.

		FIRST UNIT TEST(10/06/24	- 15/06/24)
JUNE	2 .INVERSE TRIGONOMETRIC FUNCTIONS	Introduction Basic Concepts	Definition, range, domain, principal value branch. Graphs of inverse trigonometric functions
JUNE	12.LINEAR PROGRAMMING	Introduction Linear Programming Problem	Introduction, related terminology such as constraints, objective function, optimization, . Graphical method of solution for problems in two variables, feasible and infeasible regions (bounded OR unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).
JULY	5.CONTINUITY & DIFFERENTIABILITY	Introduction Continuity Differentiability Exponential and Logarithmic Functions Logarithmic Differentiation Derivatives of Functions in Parametric Forms Second Order Derivative	Continuity and differentiability, chain rule, derivative of inverse trigonometric functions like sin -1 x cos -1 x ,tan -1 x, derivative of implicit functions. Concept of exponential and logarithmic functions. Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second order derivatives.
JULY	6 .APPLICATION OF DERIVATIVES (Not for the second Unit Test)	Introduction Rate of Change of Quantities Increasing and Decreasing Functions Maxima and Minima	Rate of change of quantities, increasing/decreasing functions, maxima and minima (first derivative test motivated geometrically and second derivative test given as a provable tool). Simple problems (that illustrate basic principles and understanding of the subject as well as real life situations).

AUGUST	7.INTEGRALS (Definite integrals not included for term end exam)	Introduction Integration as an Inverse Process of Differentiation Methods of Integration Integrals of Some Particular Functions Integration by Partial Fractions Integration by Parts Definite Integral Fundamental Theorem of Calculus Evaluation of Definite Integrals by Substitution Some Properties of Definite Integrals	Integration as an inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, Evaluation of simple integrals of the following types and problems based on them. $ \int_{$
SEPTEMBER	8.APPLICATION OF INTEGRATION(Not for the Term end	Introduction Area under Simple Curves	integrals. Applications in finding the area under simple curves, especially lines, circles/ parabolas/ellipses; (in standard form only)
SEPTEMBER	evaluation) 9.DIFFERENTIAL EQUATIONS (Not for the Term end evaluation)	Introduction Basic Concepts General and Particular Solutions of a Differential Equation Methods of Solving First Order, First Degree Differential Equations	Definition, order and degree, general and particular solutions of a differential equation. Solution of differential equations by method of separation of variables, solutions of homogeneous differential equations of first order and first degree.

			Solutions of linear differential equation of $dY/dx + Py = Q$, where P and Q are functions of x or constants . $dx/dy + Px = Q$ where P and Q are functions of y or constants
	TERM END EVALUATI	ON[Chapters 1,2,3,4,5,6,12,7(sections	7.1,7.2,7.3,7.4,7.5,7.6)](18/10/24 - 30/10/24)
OCTOBER	10.VECTOR ALGEBRA	Introduction Some Basic Concepts Types of Vectors Addition of Vectors Multiplication of a Vector by a Scalar Product of Two Vectors	Vectors and scalars, magnitude and direction of a vector , direction cosines and direction ratios of a vector , types of vectors, (equal, unit, zero , parallel and collinear vectors) position vector of a point , negative of a vector , components of a vector , addition of vectors , multiplication of vectors by a scalar , position vector of a point dividing a line segment in a given ratio , definition , geometrical interpretation , properties and application of scalar product of vectors , vector product of vectors.
OCTOBER	11.THREE- DIMENSIONAL GEOMETRY	Introduction Direction Cosines and Direction Ratios of a Line Equation of a Line in Space Angle between Two Lines Shortest Distance between Two Lines	Direction cosines and direction ratios of a line joining two points. Cartesian equation and vector equation of a line, skew lines, shortest distance between two lines. Angle between 2 lines.
NOVEMBER	13.PROBABILITY	Introduction Conditional Probability Multiplication Theorem on Probability Independent Events Bayes' Theorem	Conditional probability, multiplication theorem on probability, independent events, total probability, Bayes' theorem, Random variable and its probability distribution, Mean of the random variable.
DECEMBER		FIRST MODEL EXAMINA	ATION(02/12/24 -13/12/24)

	YEAR PLAN FOR THE ACADI		
	ENGLISH CORE ST		
MONTH	TOPIC/SUBTOR	PIC	WRITING
The state of the s	FLAMINGO	VISTAS	
MARCH/ APRIL	1.THE LAST LESSON 2. LOST SPRING P1. MY MOTHER AT SIXTY SIX	1.THE THIRD LEVEL 2. THE TIGER KING (NOT TO BE INCLUDED FOR UT 1)	
JUNE (21 DAYS)	P2. KEEPING QUIET (NOT TO BE INCLUDED FOR UT1) 3. DEEP WATER (NOT TO BE INCLUDED FOR UT1)	3. JOURNEY TO THE END OF THE EARTH (NOT TO BE INCLUDED FOR UT 1)	1. NOTICE
	UNIT TEST 1 (JUNE 1	0 -15)	
JULY (24 DAYS)	4. THE RATTRAP (NOT TO BE INCLUDED FOR UT 2) P3. A THING OF BEAUTY (NOT TO BE INCLUDED FOR UT 2)		2. LETTER TO THE EDITOR
	UNIT TEST 2 (JULY 31 -	AUG 7)	
AUGUST (20 DAYS)	P4. A ROADSIDE STAND P5. AUNT JENNIFER'S TIGERS	4. THE ENEMY	3. REPORT WRITING (NEWSPAPER AND MAGAZINE)
SEPTEMBER (16 DAYS)	5. INDIGO 6. POETS AND PANCAKES (NOT TO BE INCLUDED FOR TERM END 1)		4.INVITATION - FORMAL & INFORMAL REPLY TO INVITATION

OCTOBER (22 DAYS)	INCLUDED FOR TERM END 1) (NOT		5. ARTICLE 6. JOB APPLICATION LETTER
	TERM END EVALUATIO	N 1 (OCT 18 - 30)	
NOVEMBER (24 DAYS)	EMBER (24 8. GOING PLACES 6. MEMORIES OF		
	FIRST MODEL EXAMINATI SECOND MODEL EXAMINAT BOARD ASL – 20 MARKS (TO BE DON	TION (3 JAN -15 JAN)	

BHARATIYA VIDYA BHAVAN, KOCHI KENDRA **INFORMATICS PRACTICES(065)**

		YEAR PLAN FOR THE ACADEMIC YEAR 2024-25				
MONTH	CLASS: XII MONTH TOPIC SUB-TOPICS CONCEPTS					
APRIL	Unit 1: Data Handling using Pandas –I	Introduction to Python libraries- Pandas, Matplotlib Data structures in Pandas - Series and Data Frames Series: Creation of Series from – ndarray, dictionary, scalar value, Mathematical operations on series – addition, subtraction, multiplication, division, Head and Tail functions Selection, Indexing and Slicing Attributes of Series – name, index.name, values, size, emptyDataFrames: creation - from dictionary of Series, list of dictionaries, displaying dataframe Attributes of DataFrames – index, columns, dtypes, values, shape, size, T, ndim, head(), tail()				
JUNE	Unit 1: Data Handling using Pandas –I	Data Frames: Operations on rows and columns: add, select, delete, rename; Head and Tail functions;	Operations on dataframes and built in functions, concept of importing and exporting data using csv			
		UNIT TEST I -10/06/2024 TO 15/06/2024				

UNIT TEST I -10/06/2024 TO 15/06/2024

	Pandas –I	Data Frames: creation - from Text/CSV files; Indexing using Labels, Boolean Indexing; Importing/Exporting Data between CSV files and Data Frames. iteration; Data Frame Creation using Text/CSV files	Dataframes indexing ,concept of importing and exporting data using csv			
1	LINIT TEST II. 21/07/2024 TO 07/09/2024					

UNIT TEST II -31/07/2024 TO 07/08/2024

AUGUST	Unit 1: Data Visualization Unit 4: Societal Impacts	Data Visualization: Purpose of plotting; drawing and saving following types of plots using Matplotlib –line plot, bar graph, histogram Customizing plots: adding label, title, and legend in plots. Societal Impacts Digital footprint, net and communication etiquettes, data protection, intellectual property rights (IPR), plagiarism, licensing and copyright	Visualizing data using matplotlib library,Societal Impacts-Digital footprint,IPR
SEPTEMBER	Unit 4: Societal Impacts Unit 2: Database Query using SQL	Societal Impacts Free and Open Source Software (FOSS), cybercrime and cyber laws, hacking, phishing, cyber bullying, overview of Indian IT Act. E-waste: hazards and management. Awareness about health concerns related to the usage of technology Database Query using SQL Revision of database concepts and SQL commands covered in class XI Math functions: POWER (), ROUND (), MOD (). Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME ().	Societal Impacts- cybercrime and cyber laws, E-waste: hazards and management. Data Base Concepts and SQL single row functions
OCTOBER	Unit 2: Database Query using SQL	Text functions: UCASE ()/ UPPER (), LCASE ()/ LOWER (), MID ()/ SUBSTRING () /SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*). Querying and manipulating data using Group by, Having, Order by. Working with two tables using equi-join	Data Base Concepts and SQL Aggregate functions

NOVEMBER	Unit 3: Introduction to Computer Networks	Introduction to networks, Types of network: PAN, LAN, MAN, WAN. Network Devices: modem, hub, switch, repeater, router, gateway Network Topologies: Star, Bus, Tree, Mesh. Introduction to Internet, URL, W W W, and its applications- Web, email, Chat, VoIP. Website: Introduction, difference between a website and webpage, static vs dynamic web page, web server and hosting of a website. Web Browsers: Introduction, commonly used browsers, browser settings, add-ons and plug-ins, cookies.	Network and types of Network,Network Devices,Network Topology, Internet and web fundementals		
DECEMBER	FIRST MODEL EXAMINATION -02/12/2024 TO 13/12/2024				
JANUARY		SECOND MODEL EXAMINATION -03/01/2025 TO 15/01/2025			

	BHARATIYA VIDYA BHAVAN, KOCHI					
	YEAR PLAN FOR THE ACADEMIC YEAR 2024-25					
SUBJECT: 1	HOME SCIENCE		CLASS:XII			
MONTH	TOPIC	SUB-TOPICS	CONCEPTS			
MARCH	Chapter 1 - Work, livelihood and Career	 Work, careers and livelihood Traditional occupation in India Work ,Age and Gender Life skills for livelihood Ergonomics Entrepreneurship 	 Agriculture, Handicraft, Indian cuisine, Visual arts KGBV, BBPY Soft skills at work place Four pillars - Anthropometry, Biomechanics, Industrial psychology, Physiology Entrepreneurs and social entrepreneurs 			
APRIL	Chapter 2 - Clinical Nutrition and	 Basic concepts Diet therapy Types of diet Feeding routes Scope 	 Nutrition and clinical nutrition Diet therapy - Objectives Regular and modified diets Intravenous and tube feeding 			
JUNE	Chapter 3 Public Nutrition and Health	 Basic concept Nutritional Problems of India Strategies/Intervention to tackle Nutritional problems Health Care Scope 	 Public health nutrition PEM and micronutrient deficiencies Nutrient based and diet based strategies, ICDS, Food supplementation and food security programme, NDCP Primary, secondary and tertiary health care 			
JUNE		FIRST UNIT TEST - CHAPT	ERS 1 & 2			

JUNE	Chapter 4 Food Processing and Technology Chapter 5 - Food Quality and Food Safety	1. Basic concepts 2. Importance of Food processing and Preservation 3. Classification of food on the basis of extent and type of processing 4. Scope 1. Basic concepts 2. Food standards regulation in India-FSSA (2006) 3. International Organization and agreements in the area of Food Standards, Quality, Research and Trade 4. Food Safety Management Systems 5. Scope	1. Food science, food processing, food technology and food manufacturing 2. Perishable, semi-perishable and non- perishable foods 3. Preserved foods, manufactured foods, formulated foods, food derivatives, functional foods, medical foods 1. Food safety (Toxicity & Hazard), Hazards (Physical, chemical and biological), Food infection, Food poisoning, Food quality, food adulteration and contamination 2. National, Company, Regional and international standards 3. Codex Alimentarius Commission, International Organization for Standardisation & World Trade Organization 4. Good manufacturing practices (GMP), Good handling practices (GHP), Hazard Analysis Critical Control Points (HACCP)
	Chapter 6 - Early Childhood Care and Education	Significance Basic concepts Scope	1. Toddler, Creche, Montessori, 2. Objectives and guiding principles of ECCE
JULY	Chapter 7 - Management of Support Services, Institutions and Programmes for Children, Youth and Elderly	1. Basic Concepts 2. Why are children vulnerable? 3. Institutions, programmes and initiatives for children 4. Why are Youth vulnerable? 5. Youth programmes in India 6. Why are the elderly vulnerable? 7. Some programmes for the elderly 8.Scope	1. ICDS, SOS Children"s Village, Children"s Homes run by the Government, Adoption 2. NSS, NSVS, Prmotion of adventure, Scouts and guides, CYP, PNI 3. Oldage home, respite home, NOAPS, mobile medicare unit 4. People skill and administrative skill
JULY		SECOND UNIT TEST - CHAPTE	RS 3,4, & 5

	Chapter 8 - Design for Fabric and Apparel	 Basic concepts Elements of design Principles of Design Scope 	 Design: Structural & Applied Colour, Texture, Line, Shapes or form Proportion, Balance, Emphasis, Rhythm, Harmony 	
AUGUST		1. Basic Concepts 2. Fashion terminology – 3. Fashion Development 4. Fashion Merchandising 5. Fashion Retail Organization 6. Scope	1. Fashion ,fads, style, classic 2. France-The centre of fashion, Fashion Evolution, Fashion cycle 3. Retail organisation merchandising, buying agency merchendising, export house merchendising 4. Market segmentation - Demographic, geographic, psychographic, behavioural 5. Small single unit store, department store, chain store 6. forecasting ability, analyticalability and communication skill	
SEPTEMBER	Chapter 10 - Care and Maintenance of Fabrics in Institutions	 Basic concepts Institutions Scope 	1. Washing equipment, Drying equipment, Ironing/pressing equipment 2. Laundry in hospitals and hotels	
	Chapter 11 - Hospitality Management	Basic concepts Departments involved in hospitality management of an organization Scope	1. Hospitality, Guest cycle, 2. Front office, House keeping department, Food and beverage department - Kitchen stewarding	
OCTOBER	Chapter 12 - Consumer Education and	 Significance of consumer education and protection Basic concepts Standardized marks Protection Councils Consumer Responsibilities Scope 	1. Consumer product, Consumer behaviour, Consumer forum, Consumer footfalls, Consumer problems, Consumer rights 2. ISI, Wool Mark, Hall Mark, Silk Mark 3. COPRA	
OCTOBER	TERM END EXAMINATION - CHAPTERS 1, 2, 3, 4, 5, 6, 7 & 8			

NOVEMBER	Chapter 13: Development communication and Journalism	 Significance Basic concepts Methods of communication Scope and career avenues in development communication 	 Development, Development journalism, Development Communication Campaign Radio and television Print media - Project village Chhatera Information and communication technologies - SEWA, SARI,CLCs, E-Governance, E-Choupal 		
DECEMBER	FIRST MODEL EXAMINATION				
JANUARY	SECOND MODEL EXAMINATION				

BHARATIYA VIDYA BHAVAN, KOCHI KENDRA ARTIFICIAL INTELLIGENCE YEAR PLAN FOR THE ACADEMIC YEAR 2024-2025

CLASS: XII

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
MARCH/ APRIL	PART A: Unit 2: Self- management Skills PART A: Unit 3: Information and Communication Technology Skills	PART A: Unit 2: Self-management Skills	Technology Skills spreadsheet application presentation application

JUNE	PART A:Unit 1 : Communication Skills- IV PART B: Unit 1: Capstone Project	Unit 1 : Communication Skills-IV: • Session 1 Active Listening • Session 2 Parts of Speech • Session 3 Writing Sentences Unit 1: Capstone Project • Understanding the problem • Decomposing the problem through DT framework • Analytic Approach • Data Requirements • Data Collection • Modelling approach	Unit 1 : Communication Skills-III: Importance of active listening Steps to active listening Unit 1: Capstone Project: Al Project Cycle Unit Test I Starts: 10/06/2024
JULY	PART B: Unit 1:Capstone Project	Unit 1: Capstone Project • How to validate model quality • Metrics of model quality by simple Maths and examples from small datasets • Introduction to commonly used algorithms and the science behind them • Showcase through a compelling story	Unit 1: Capstone Project: • Model validation , RMSE , MSE , MAPE
	PART A: Unit 4: Entrepreneurial Skills	PART A: Unit 4: Entrepreneurship Skills Session 1 Entrepreneurship and Entrepreneur Session 2 Barriers to Entrepreneurship Session 3 Entrepreneurial Attitudes Session 4 Entrepreneurial Competencies	PART A: Unit 4: Entrepreneurship Skills Behavioral and entrepreneurial competencies

			Unit Test II Starts: 31 /07/2024
AUGUST	PART B: Unit 2: Model Life Cycle	PART B: Unit 2: Model Life Cycle • Different aspects of Model (Train, test, validate, hyper parameters, Commonly used platforms to build and runmodels) • Lifecycle of an Al model (Build, Deploy, Retrain)	PART B: Unit 2: Model Life Cycle AI Project Cycle, Model validation, AI deployment, IBM Watson
SEPTEMBER	PART A: Unit 5: Green Skills	PART A: Unit 5: Green Skills Session 1 Green Jobs Session 2 Importance of Green Jobs	PART A: Unit 5: Green Skills Role of green jobs
OCTOBER	PART B: Unit 3: Story- telling through data	PART B: Unit 3: Story- telling through data • The Need for Storytelling • How to create stories? • Ethics of storytelling	PART B: Unit 3: Story- telling through data • story telling

End Term Evaluation Starts: 18/10/2024

NOVEMBER	PART B: Unit 3: Story- telling through data	PART B: Unit 3: Story- telling through data • Types of Data and Suitable Charts • Stories During the Steps of Predictive Modeling • Best Practices of Storytelling	PART B: Unit 3: Story- telling through data • power of data story telling		
DECEMBER	First Model Examination Starts: 02/12/2024				
JANUARY	Second Model Examination starts: 03/01/2025				
FEBRUARY					
MARCH					

BHARATIYA VIDYA BHAVAN, KOCHI KENDRA COMPUTER SCIENCE

YEAR PLAN FOR THE ACADEMIC YEAR 2024-25

CLASS: XII				
MONTH	TOPIC	SUB-TOPICS	CONCEPTS	
MARCH/ APRIL	Computational Thinking and Programming-2 Database Management	Revision of python topics in class XI Functions Database concepts Relational data model	Basic concepts of Python programming Creating reusable and modular code, promoting good programming practices such as code reusability, readability, and maintainability. Concepts of RDBMS.	
UNIT	TEST 1(10/6/2024)TOPICS	:REVISION STD XI,FUNCTION	S,DATABASE CONCEPTS,RELATIONAL DATA MODEL	
JUNE	Database Management	Structured Query Language	The use of RDBMS to store, organize, and retrieve large amounts of data efficiently. Understand and use MySQL commands to store and manage data. Grouping and filtering of records to get cumulative data. Extracting data from multiple tables.	
JULY	Computational Thinking and Programming-2 Database Management	Interface of Python with an SQL Database,Excepton Handling	Client Server architecture -to transfer and manage data between a front end and back end. Handle errors raised by programs using try, except and finally.	
	UNIT TEST	2(31/7/2024)TOPICS :SQL,CONN	ECTIVITY, EXCEPTION HANDLING	
AUGUST	Computational Thinking and Programming-2	Introduction to Files,Text Files	Files as a medium for permanent storage. Types of Files and paths.Text File Handling	

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SEPTEMBER	Computational Thinking and Programming-2	Binary Files,CSV Files	Binary and CSV file Handling	
TERM EN			FUNCTIONS,DATABASE CONCEPTS,RELATIONAL DATA	
	MODEL,SQL,CON	NECTIVITY, EXCEPTION HAND	LING,TEXT FILE,BINARY FILE,CSV FILE	
OCTOBER Computer Networks Data Structure, Evolution of Networking, Data communication terminologies, Transmission Media, Network Devices, Network Types, Network Protocol Data Structure, Evolution of Networking, Data communication terminologies, Transmission media used in different types of network various types of transmission media used in different types of network various types of transmission media used in different types of network various types of transmission media used in different types of network various types of transmission media used in different types of networking. Transmission media used in different types of networking various types of transmission media used in different types of networking.				
NOVEMBER Computer Networks Introduction to Web Services		Introduction to Web Services	Introduction to web services.	
FIRST MODEL:2/12/2024 TO 13/12/2024				
SECOND MODEL:3/1/2025 TO 15/1/2025				

BHARATIYA VIDYA BHAVAN, KOCHI YEAR PLAN FOR THE ACADEMIC YEAR 2024-'25 CLASS XII CHEMISTRY

JUNE 6.HAL 7.AI AND	IALOALKANES AND LOARENES IALOALKANES AND LOARENES ALCOHOLS, PHENOLS ID ETHERS	solutions of solids in liquids, solubility of gases in liquids, solid solutions, colligative properties - relative lowering of vapour pressure, Raoult's law, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties, abnormal molecular mass, Van't Hofffactor . Haloalkanes and halo arenes - Nomenclature, nature of C–X bond, physical properties. Haloalkanes and halo arenes : Chemical properties, mechanism of	SOLUTIONS- Concentration terma and units , Henry' and Roults law, Ideal and non- ideal solution , colligative properties , osmosis and reverse osmosis , abnormal molar mass and vant Hoffs factor. Haloalkanes and halo arenes - IUPAC nomenclature preparation, properties , reaction mechanisms of haloalkanes and haloarenes
JULY 8.AL	LOARENES ALCOHOLS,PHENOLS	* *	Holoolkones and halo arenes Application of
		substitution reactions, optical rotation. Nature of C–X bond, substitution reactions (Directive influence of halogen in mono substituted compounds only). Uses and environmental effects of dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT. Alcohols, Phenols and ethers: Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration, uses with special reference to methanol and ethanol. Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophillic substitution reactions, uses of phenols. Ethers: Nomenclature, methods of preparation, physical and chemical properties, uses	Haloalkanes and halo arenes-Application of haloalkanes and haloarenes Alcohols,Phenols and Ethers- IUPAC nomenclature preparation, properties, reaction mechanisms of Alcohols, phenols and Ethers
		FIRST UNIT - TEST (10/6/2024-15/6/2024)	
		PORTIONS - SOLUTIONS	
	HALC	OALKANES AND HALOARENES- Including physical properties	
	ALDEHYDES,KETONES ID CARBOXYLIC ACIDS	Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes: uses. Carboxylic acid-Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses	IUPAC nomenclature of aldehydes, ketones and carboxylic acids, structure of carboxyl groups, preparation of aldehydes and ketones, physical and chemical characterictics of aldehydesa nd ketones, preparation of carboxylic acids, physical and chemica characteristics of carboxylic acids. Application of aldehydes, ketones and acids.
DOD TO STATE OF THE PARTY OF TH		SECOND UNIT - TEST(31/07/2024 - 7/8/2024)	
		& HALOARENES - from chemical properties. 7. ALCOHOLS, F AND CARBOXYLIC ACIDS - upto physical properties(physical pr	

AUGUST	2. ELECTROCHEMISTRY	Redox reactions, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and law of electrolysis (elementary idea), dry cell-electrolytic cells and Galvanic cells, lead accumulator, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relationbetween Gibbs energy change and EMF of a cell, fuel cells, corrosion.	Electrochemical cell, Nernst equation, Electrolytic conductivity and molar conductivity, Kohlarauschs law , electrolysis , fuel cells and batteries, corrosion			
SEPTEMBER	3. CHEMICAL KINETICS 10. BIOMOLECULES	Chemical Kinetics: Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half-life (only for zero and first order reactions), concept of collision theory (elementary idea, no mathematical treatment). Activation energy, Arrhenius equation. BIOMOLECULES: Carbohydrates - Classification (aldoses and ketoses), monosaccahrides (glucose and fructose), D-L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates. Proteins – Elementary idea of – amino acids, peptide bond, polypeptides, proteins, structure of proteins- primary, secondary, tertiary, quarternary structures (qualitative idea only), denaturation of proteins, enzymes. Hormones- Elementary idea excluding structure. Vitamins-Classification and functions. Nucleic acids – DNA and RNA	Chemical kinetics - types of chemical reactions, average rate of reaction, rate equation, order of reaction, rate constant, rate of reaction, rate equation for different orders of reaction, rate constant and order of reaction, collision theory. Biomolecules - Carbohydrates- classification, fructose and glucose, sources of protein, types of protein, denaturation of protein, enzymes, vitamins, structure and chemical composition of nucleic acids, role of biomolecules.			
OCTOBER	4. d and f BLOCK ELEMENTS 5. COORDINATION COMPOUNDS	"d" and "f" Block Elements:General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transition metals - metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation, preparation and properties of K2Cr2O7 and KMnO4. Co-ordination compounds: Coordination compounds - Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT	"d" and "f" Block Elements:Position of transition elements, electronic configuration, physical and chemical characteristics of transition elements, variable oxidation number, electrode4 potantail, oxidation states, magnetic properties, complex copounds, prreparation of metal oxides, properties of f-block elements Co-ordination compounds: Werners theory, co-ordination entity, co-ordination number, polyhedron, oxidation number of central atom, homolectic and heteroleptic complexes, IUPAC nomenclature, isomerism, valence bond theory, magnetic properties oc complexes.			
PORTIONS - SOLUTION	TERM END EXAMINATION (18/10/24 - 30/10/24) PORTIONS - SOLUTIONS - , HALOALKANES AND HALOARENES - , ALCOHOLS , PHENOLS AND ETHERS - , ALDEHYDES KETONES AND CARBOXYLIC ACIDS - , ELECTROCHEMISTRY - , CHEMICAL KINETICS					
NOVEMBER	5. COORDINATION COMPOUNDS 9. AMINES	Coordination compounds: CFT; structure and stereoisomerism, importance of coordination compounds (in qualitative inclusion, extraction of metals and biological system. AMINES:Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines.Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry	Coordination compounds: Crystal field theory, synergic bond, applications of complex copounds. Amines: Structure of amines, classification, IUPAC nomenclature, preparation, physical and chemical properties, diazotisation, preparation of diazinium salts, imporatance of diazonium salts			

BHARATIYA VIDYA BHAVAN, KOCHI

YEAR PLAN FOR THE ACADEMIC YEAR 2024- 2025 Std. XII - PHYSICS

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
APRIL	Chapter-1: Electric Charges and Fields	Electric charges, Electric Field, Electric Flux, Gauss's law	Electric charges, Conservation of charge, Coulomb's law-force between two-point charges, forces between multiple charges; superposition principle and continuous charge distribution. Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field. Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).
JUNE	Chapter-2: Electrostatic Potential and Capacitance Chapter-3: Current Electricity	Electric potential & potential energy, equipotential surfaces, Conductors and insulators, Dielectrics and electric polarization Capacitors and capacitance Electric current, drift velocity, Ohm's law, temperature dependence of resistance, Internal resistance and emf of acell, Kirchhoff's rules, Wheatstone bridge.	Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two-point charges and of electric dipole in an electrostatic field. Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarization, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor (no derivation, formulae only). Electric current, flow of electric charges velocity, mobility and their relation with electric current; Ohm's law, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity, temperature dependence of resistance, Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel, Kirchhoff's rules, Wheatstone bridge.

FIRST UNIT TEST
Electric Charges and Fields ,
Electrostatic Potential and Capacitance (including potential due to a dipole)

JULY	Chapter—4: Moving Charges and Magnetism(continues) Chapter—5: Magnetism and Matter	Biot - Savart law and its applications, Ampere's law and its applications, force on a moving charge in uniform magnetic and electric fields. Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors, torque experienced by a current loop in uniform magnetic field, moving coil galvanometer Bar magnet, magnetic field intensity due to a magnetic dipole (bar magnet), torque on a magnetic dipole.	Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer- its current sensitivity and conversion to ammeter and voltmeter. Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines. Magnetic properties of materials- Para-, dia- and ferro - magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties.				
		torque on a	magnetic substances with examples, Magnetization of materials,				
	SECOND UNIT TEST Electrostatic Potential and Capacitance (from equipotential surface) -, Current Electricity, Moving Charges and Magnetism (including Ampere circuital law and its applications.)						
	Chapter-6: Electromagnetic Induction	Electromagnetic induction; Lenz's Law, Self and mutual induction.	Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction.				

Alternating currents, peak and RMS value of alternating current/voltage;

reactance and impedance; LCR series circuit (phasors only), resonance, power in AC circuits, power factor, wattless current.
AC generator, Transformer.

Alternating currents, LCR series circuit (phasors only),

AC generator, Transformer.

Chapter-7:

Alternating Current

AUGUST

SEPTEMBER		Basic idea of displacement current, Electromagnetic waves, Electromagnetic spectrum Reflection of light, spherical mirrors, refraction of light, refraction at spherical surfaces, lenses, , lens maker's formula, refraction of light through a prism. Optical instruments Wave front and Huygen's principle, Interference, diffraction due to a single slit.	Basic idea of displacement current, Electromagnetic waves, their characteristics, their transverse nature (qualitative idea only). Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses. Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism. Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers. Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width (No derivation final expression only), coherent sources and sustained interference of light, diffraction due to a single slit, width of central maxima (qualitative treatment only).	
OCTOBER	Chapter-11: Dual Nature of Radiation and Matter Chapter-12: Atoms Chapter-13: Nuclei	Dual nature of radiation, Photoelectric effect, Einstein's photoelectric equation, de-Broglie relation. Alpha-particle scattering experiment; Bohr model of hydrogen atom. Composition and size of nucleus, nuclear force, mass defect & binding energy per nucleon, nuclear fission, nuclear fusion	Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light. Experimental study of photoelectric effect Matter waves-wave nature of particles, de-Broglie relation. Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model of hydrogen atom, Expression for radius of nth possible orbit, velocity and energy of electron in nth orbit, hydrogen line spectra (qualitative treatment only). Composition and size of nucleus, nuclear force Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.	
TERM END EVALUATION				

TERM END EVALUATION

Electric Charges and Fields & Electrostatic potential and capacitance, Current Electricity, Moving Charges and Magnetism & Magnetism and Matter ,EMI & AC , EM Waves, Ray Optics (upto Optical instruments)

NOVEMBER	Materials, Devices and	Energy bands in conductors, Intrinsic and extrinsic semiconductors-, p-n junction, application of junction diode.	Energy bands in conductors, semiconductors and insulators (qualitative ideas only) Intrinsic and extrinsic semiconductors- p and n type, p-n junction Semiconductor diode - I-V characteristics in forward and reverse bias, application of junction diode -diode as a rectifier.
DECEMBER	FIRST MODEL EXAM (ALL CHAPTERS)		
JANUARY	SECOND MODEL EXAMINATION (ALL CHAPTERS)		

	36	
	BHARAT	TYA VIDYA BHAVAN, KOCHI KENDRA
	STD X	III – BOTANY – YEAR PLAN(2024-25)
		2024-2025
MONTH	TOPIC	SUB TOPICS
MARCH/ APRIL	4.Principles of Inheritance and variation	4.1 Mendel's Laws of Inheritance 4.2 Inheritance of One Gene 4.3 Inheritance of Two Genes 4.4 Sex Determination
JUNE	4.Principles of Inheritance and variation (Contd.)	4.5 Mutation 4.6 Genetic Disorders
	FIRE CHAPTER 4: Princi	ST UNIT TEST [JUNE 10th TO 15 th] ples of Inheritance and variation -Upto 4.6.2 (included
JUNE/JULY	5.Molecular basis of inheritance	5.1 The DNA 5.2 The Search for Genetic Material 5.3 RNA World 5.4 Replication 5.5 Transcription 5.6 Genetic Code 5.7 Translation 5.8 Regulation of Gene Expression
AUGUST	5.Molecular basis of inheritance(Contd.)	5.9 Human Genome Project,Rice Genome Procet 5.10 DNA Fingerprinting
	4. Princi	O UNIT TEST [JULY 31st TO AUGUST 7th] CHAPTERS 4 and 5 ples of Inheritance and variation-4.7 to 4.8.3

SEPTEMBER	1-Sexual Reproduction in Flowering Plants	1.1 Flower – A Fascinating Organ of Angiosperms 1.2 Pre-fertilisation: Structures and Events 1.3 Double Fertilisation 1.4 Post-fertilisation: Structures and Events 1.5 Apomixis and Polyembryony
OCTOBER	9-Biotechnology Principles and Processes	9.1 Principles of Biotechnology 9.2 Tools of Recombinant DNA Technology 9.3 Processes of Recombinant DNA Technology
OCTOBER	10-Biotechnology and its Applications	10.1 Biotechnological Applications in Agriculture 10.2 Biotechnological Applications in Medicine
	1-Sexu 4.Pri	LUATION [OCTOBER 18th TO OCTOBER 30th] CHAPTERS 1, 4, 5 and 9 ual Reproduction in Flowering Plants inciples of Inheritance and variation 5.Molecular basis of inheritance and Processes (9.1 TO 9.2.2) - 9.2.2 onwards NOT include
NOVEMBER	10-Biotechnology and its Applications (Contd.)	10.3 Transgenic Animals 10.4 Ethical Issues
Man State	FIRST MODEL EXAM	IINATION [DECEMBER 2nd TO DECEMBER 13th] CHAPTERS 1,4,5,9 and 10
	SECOND MODE	EL EXAMINATION [JANUARY 3rd TO 15 th] CHAPTERS 1,4,5,9 and 10

	BHARATIYA VIDYA BHAVAN, KOCHI KENDRA				
	STD XII – ZOOLOGY – YEAR PLAN				
		2024-2025			
MONTH	TOPIC	SUB TOPICS	CONCEPTS		
MARCH - APRIL	CHAPTER 2 HUMAN REPRODUCTION	2.1 Male reproductive system 2.2 Female reproductive system 2.3 Gametogenesis	Structure and functions of male reproductive organs Structure and functions of female reproductive organs Spermatogenesis and oogenesis,		
JUNE	HUMAN REPRODUCTION contd	2.4 Menstrual cycle 2.5 Fertilization and implantation 2.6 Pregnancy and embryonic development 2.7 Parturition and lactation	Hormonal control, structure of sperm, structure of ovary Various events during menstrual cycle, hormonal control, menstrual hygiene Structure of ovum, sex determination, cleavage Formation of placenta, placental hormones, milestones of embryonic development Foetal ejection reflex, significance of colostrum		
	 EST (JUNE 10-15) CH N AND IMPLANTATI	 APTER 2. HUMAN REPRODUCTION ON)	2.1 TO 2.5 (EXCLUDING 2.5		
JUNE	CHAPTER 3 REPRODUCTIVE HEALTH	3.1 Reproductive health - problems and strategies 3.2 Population explosion and birth control 3.3 Medical termination of pregnancy 3.4 Sexually transmitted diseases 3.5 Infertility	Need for reproductive health IMR, MMR, contraceptive methods Why MTP is legalised? Types of STDs, symptoms and preventive measures ART - IVF, ZIFT, GIFT		

JULY	CHAPTER 6	6.1 Origin of life	Big bang theory, formation of
	EVOLUTION	6.2 Evolution Of life forms - a	universe Different
		theory 6.3 What are	theories on origin of life
		the evidences of evolution?	Paleontology, comparative
		6.4 What is adaptive radiation?	anatomy, embryology, molecular
		6.5 Biological evolution	evidences
		6.6 Mechanism of evolution	Darwin's finches , placental
		6.7 Hardy-weinberg	mammals and marsupials of
		6.8 A brief account of evolution	australia
		principle	Branching descent and natural
		6.9 Origin and evolution of man	selection
			Hugo de Vries theory and
			Darwin's theory on evolution
			Hardy Weinberg equilibrium,
			founder effect, opertional
			techniques of natural selection
			Evolution of plants and animals
			through geological periods
			Different evolutionary stages of
			man

SECOND UNIT TEST (JULY 31 - AUGUST 7) CHAPTER 2 HUMAN REPRODUCTION (FROM 2.5 TILL THE END OF THE CHAPTER) AND CHAPTER 3 REPRODUCTIVE HEALTH

AUGUST	CHAPTER 7 HUMAN HEALTH AND DISEASE	7.1 Common Diseases in Humans 7.2 Immunity 7.3 AIDS 7.4 Cancer 7.5 Drugs and Alcohol Abuse	Source, symptoms, target site and mode of transmission of common diseases in humans Innate and acquired, active and passive, vaccination, allergies, auto immunity and immune system Replication of retro virus, its transmission and prevention Types, causes, detection, diagonosis and treatment Classification of drugs, their source, target site and effect on our body Adolescence and drug abuse, addiction and dependence, effects of drug, alcohol abuse, prevention and control
AUGUST	CHAPTER 8 MICROBES IN HUMAN WELFARE	8.1 Microbes in Household Products 8.2 Microbes in Industrial Products 8.3 Microbes in Sewage Treatment 8.4 Microbes in Production of Biogas 8.5 Microbes as Biocontrol Agents 8.6 Microbes as Biofertilisers	Microbes in food processing Fermented beverages, antibiotics, bioactive molecules Primary and secondary treatment of sewage Study of biogas plant and biogas production Biological control of pests and diseases Organic farming , role of mycorrhizae and cyano bacteria
SEPTEMBER	CHAPTER 11 ORGANISMS AND POPULATIONS	11.1 Populations	Population attributes, growth, growth models, life history variation, population interactions

CHAPTER 12 ECOSYSTEM	12.1 Ecosystem–Structure and Function 12.2. Productivity 12.3 Decomposition 12.4 Energy Flow 12.5 Ecological Pyramids	Stratification NPP, GPP, primary production and secondary production Decomposition cycle PAR, GFC, DFC and standing crop Types of ecological pyramids		
CHAPTER 13 BIODIVERSITY AND ITS CONSERVATION	13.1 Biodiversity 13.2 Biodiversity Conservation	Types of biodiversity, representation of global biodiversity, patterns of biodiversity, loss of biodiversity Why and How should we conserve biodiversity? In situ and Ex-situ		
ALUATION (OCTOB	ER 18-30) CH 2, 3, 6 AND 7			
REVISION				
FIRST MODEL EXAMINATION (DECEMBER 2 - 13) FULL PORTIONS SECOND MODEL EXAMINATION (JANUARY 3 - 15) FULL PORTIONS				
	CHAPTER 13 BIODIVERSITY AND ITS CONSERVATION FALUATION (OCTOB REVISION EXAMINATION (DENS	Function 12.2. Productivity 12.3 Decomposition 12.4 Energy Flow 12.5 Ecological Pyramids CHAPTER 13 BIODIVERSITY AND ITS CONSERVATION TALUATION (OCTOBER 18-30) CH 2, 3, 6 AND 7 REVISION EXAMINATION (DECEMBER 2 - 13) NS DEL EXAMINATION (JANUARY 3 - 15)		

BHARATIYA VIDYA BHAVAN, KOCHI

YEAR PLAN FOR THE ACADEMIC YEAR 2024-25

Subject: PSYCHOLOGY (037)

CLASS: XII

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
MARCH/ APRIL	Variations in Psychological Attributes	Individual differences in human functioning assessment of psychological attributes. Intelligence, theories of intelligence. Individual differences in intelligence. Culture and intelligence. Emotional intelligence. Special abilities. Creativity	Theory of multiple intelligence, Triarchic theory of intelligence, PASS model. Variations in intelligence. Some misuse of intelligence test. Characteristics of emotionally intelligent person Aptitude: Nature and measurement
	Self and personality	Concept of self, cognitive and behavioural aspects of self, culture and self, Concept of personality, Major approaches to the study of personality, Assessment of personality	self esteem, self efficacy, self regulation.type approaches, trait approaches, 5 factor model of personality, psychodynamic approach, behavioural approach, cultural approach, humanistic approach, self report measure, projective techniques, behavioural analysis

	T	T	1
JUNE	Meeting life challenges	Nature, types and sources of stress. Effects of stress on psychological functioning and health. Coping with Stress promoting positive health and wellbeing	A measure of stressful life events, examination anxiety stress and health, GAS, Stress and immune system lifestyle, stress management techniques, lifeskills, resilience and health
	FIRST UNIT TEST	(25 MARKS)	
	10.06.2024		
JUNE/JULY	Psychological disorders	Concepts of abnormality classification of psychological disorder, factors underlying abnormal behaviour, major psychological disorders	Anxiety disorders, somatic symptom disorders, dissociative disorders, mood disorders, schizophrenic disorders and its subtype, OCD, stress related disoders, neurodevelopment al disorders, substance use disorders effects ofcommonly abused substances
	SECOND UNIT TEST 31.07.2024	(25 MARKS)	
	31.07.2024		
AUGUST	Therapeutic Approaches	Nature and process of psychotherapy. Types of therapies. Rehabilitation of the mentally ill	Therapeutic relationship. Steps in the formation of a client's problem, behavioural therapy, relaxation procedures, Cognitive therapy, Humanistic-Existential therapy, Alternative therapy.

SEPTEMBE R	Attitude and Social cognition TERM END EXAMINATION	Explaining Social behaviour nature and components of attitude attitude formation and change prejudice and discrimination, Strategies for handling prejudice (70 MARKS)	Green environment: ABC components of an attitude. Attitude formation, Attitude change, attitude behaviour relationship
	18.10.2023	(70 MARKS)	
NOVEMBE R	Social influence and group processes	Nature and formation of groups. Types of groups. Influence of group on individual behaviour.	Group think, the minimal group paradigm experience social loafing, group polarization.
	FIRST MODEL EXAMINATION- 2.12.2024 (70+30= 100MARKS)		5 SP PO
	SECOND MODEL EXAMINATION - 3.01.2025 (70+30=100 MARKS)		
SEEN AND SIGNED BY:			
BVM, GIRINAGAR		KRISHNA PRIYA S PRABHU	
BAV. KAKKAND		R SRUTHI	

PORTIONS FOR EXAMINATION

FIRST UNIT TEST (10.6.2024)	Chapter 1 and Chapter 2
SECOND UNIT TEST (31.07.2024)	Chapter 2 and Chapter 3
TERM END EVALUATION (18.10.2024)	Chapter 1 to Chapter 5

BLUE PRINT

FOR 25 MARKS

1x5	5 marks
2x2	4 marks
3x3	9 marks
Case study based	7 marks

BLUE PRINT

FOR 70 MARKS

1x15	15 marks
2x6	12 marks
3x3	9 marks
4x4	16 marks
6x2	12 marks
Case study 3+3	6 marks

BHARATIYA VIDYA BHAVAN, KOCHI KENDRA YEAR PLAN - 2024-'25

STD: XII - SUBJECT: ECONOMICS (030)

	PART A-MACROECONOMICS
April/May	Unit 2: Money &Banking
June/ July	Unit 1-National Income and related aggregates
August	Unit 4: Government budget and the economy
September	Unit 5: Balance of Payments & Foreign Exchange
October	Unit 3: Determination of income and employment

PART-B- INDIAN ECONOMIC DEVELOPMENT
Unit 1: Development Experience (1947-90)
Indian economy on the eve of Independence
Indian economy 1950-90
Unit 2: Economic Reforms since 1991 (LPG)
Unit 3: Current challenges
5: HCF
Unit 3: Current challenges
6: Rural development
7: Employment
Unit 3: Current challenges
9: Environment and Sustainable Development
Unit 4: Comparative Development Experiences of
India and its neighbours