YEAR PLAN FOR THE ACADEMIC YEAR 2023-24			
	ENGLISH CORE STD XII		
MONTH	**TOPIC/SUBTOPIC**		**WRITING**
	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 (23 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 12-16)			
JULY (22 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 4)			
AUGUST (19 DAYS)	P4. A ROADSIDE STAND P5. AUNT JENNIFER'S TIGERS	4. THE ENEMY	3. REPORT WRITING (NEWSPAPER AND MAGAZINE)
SEPTEMBER (19 DAYS)	5. INDIGO 6. POETS AND PANCAKES(NOT TO BE INCLUDE FOR TERM END 1)		4.INVITATION - FORMAL & INFORMAL REPLY TO INVITATION
OCTOBER (21 DAYS)	7. THE INTERVIEW (NOT TO BE INCLUDED FOR TERM END 1)	5.ON THE FACE OF IT (NOT TO BE INCLUDED FOR TERM END 1)	5. ARTICLE 6. JOB APPLICATION LETTER
TERM END EVALUATION 1 (OCT 5 - 13)			
NOVEMBER (24 DAYS)	8. GOING PLACES	6. MEMORIES OF CHILDHOOD	

BHARATIYA VIDYA BHAVAN ,KOCHI			
YEAR PLAN FOR THE ACADEMIC YEAR 2023-24			
SUBJECT: HOME SCIENCE			CLASS:XII
MONTH	TOPIC	SUB-TOPICS	CONCEPTS
MARCH	Chapter 1 - Work, livelihood and Career	1. Work, careers and livelihood 2. Traditional occupation in India 3. Work ,Age and Gender 4. Life skills for livelihood 5. Ergonomics 6. Entrepreneurship	1. Agriculture, Handicraft, Indian cuisine, Visual arts 2. KGBV, BBPY 3. Soft skills at work place 4. Four pillars - Anthropometry, Biomechanics, Industrial psychology, Physiology 5. Entrepreneurs and social entrepreneurs
APRIL	Chapter 2 - Clinical Nutrition and Dietetics	1. Basic concepts 2. Diet therapy 3. Types of diet 4. Feeding routes 5. Scope	1. Nutrition and clinical nutrition 2. Diet therapy - Objectives 3. Regular and modified diets 4. Intravenous and tube feeding
JUNE	FIRST UNIT TEST - CHAPTERS 1,2&3		
JUNE	Chapter 3 Public Nutrition and Health	1. Basic concept 2. Nutritional Problems of India 3. Strategies/Intervention to tackle Nutritional problems 4. Health Care 5. Scope	1. Public health nutrition 2. PEM and micronutrient deficiencies 3. Nutrient based and diet based strategies, ICDS, Food supplementation and food security programme, NDCP 4. Primary, secondary and tertiary health care
	Chapter 4 Food Processing and Technology	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. 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
JULY	Chapter 5 - Food Quality and Food Safety	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 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	1. Significance 2. Basic concepts 3. Scope	1. Toddler, Creche, Montessori, 2. Objectives and guiding principles of ECCE
	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 - CHAPTERS 4,5&6		
AUGUST	Chapter 8 - Design for Fabric and Apparel	1. Basic concepts 2. Elements of design 3. Principles of Design 4. Scope	1. Design: Structural & Applied 2. Colour, Texture, Line, Shapes or form 3. Proportion, Balance, Emphasis, Rhythm, Harmony
SEPTEMBER	Chapter 9 - Fashion Design and Merchandising	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 merchandising, export house merchandising 4. Market segmentation - Demographic, geographic, psychographic, behavioural 5. Small single unit store, department store, chain store 6. forecasting ability, analyticalability and communication skill
	Chapter 10 - Care and Maintenance of Fabrics in Institutions	1. Basic concepts 2. Institutions 3. Scope	1. Washing equipment, Drying equipment, Ironing/pressing equipment
OCTOBER	TERM END EXAMINATION - CHAPTERS 1, 2, 3, 4, 5, 6, 7 & 8		
OCTOBER	Chapter 11 - Hospitality Management	1. Basic concepts 2. Departments involved in hospitality management of an organization 3. Scope	1. Hospitality, Guest cycle, 2. Front office, House keeping department, Food and beverage department - Kitchen stewarding

NOVEMBER	**Chapter 12 - Consumer Education and Protection**	1. Significance of consumer education and protection 2. Basic concepts 3. Standardized marks 4. Protection Councils 5. Consumer Responsibilities 6. Scope	1. Consumer product, Consumer behaviour, Consumer forum, Consumer footfalls, Consumer problems, Consumer rights 2. ISI, Wool Mark, Hall Mark, Silk Mark 3. COPRA
	Chapter 13: Development communication and Journalism	1. Significance 2. Basic concepts 3. Methods of communication 4. Scope and career avenues in development communication	1. Development, Development journalism, Development Communication 2. Campaign 3. Radio and television 4. Print media - Project village Chhatera 5. Information and communication technologies - SEWA, SARI,CLCs, E-Governance, E-Choupal
DECEMBER	**FIRST MODEL EXAMINATION**		
JANUARY	**SECOND MODEL EXAMINATION**		

Physical Education Year plan-class XI & XII -2023-2024

MONTH	TOPIC	SUB-TOPIC	CONCEPT
June	Physical Fitness	Introduction of HPE tests, KHELO-India Fitness test, Fitness awareness, Training of physical fitness, General Discipline, Training of Sports and games.	IMPORTANCE OF GENERAL FITNESS AND TEST BATTERIES
July	Selection For Competitions, HPE Test And Khelo India Fitness Test.	HPE tests, KHELO-India Fitness test, Selection of External competition, Intramural competitions, Training of physical fitness and various sports and games, Health education and sports injuries, Doping.	It Provides students with the knowledge and skills that will enable them to achieve and maintain a physically active and healthful life.
August	Selection For Annual Sports Meet.	March past training, KHELO-India test, Selection for Annual sports meet, Planning for organizing sports and games events, Training for external competitions, March past Training.	Planning For Organizing Sports And Games.
September	Selections For Different Competitions.	Selections for annual sports Meet, HPE fitness tests, KHELO -India fitness	Children Learn Best Through Play- Through

		tests, Selection and training for external competitions, Health education and sports injuries, Importance of physical education and sports related courses, Intramural competitions.	activity and doing.
October	HPE Test And Types of Training.	Selections for annual sports Meet, HPE Test, KHELO - India - fitness test, Selection and training for external competitions, Body fitness components, Intramural competitions, Type of Training(Fartlek training, interval training.	Children Develop a Fit and flexible Body.
November	Body posture,Health Education	HPE Test, KHELO - India - fitness test, Body posture, Preparation for annual spots meet, Intramural extramural competitions, Health education.	It Develops Strength And Endurance.
December	Health Education and First Aid	HPE test, KHELO-India-fitness tests, Health education and first aid, Maintenance of Physical fitness.	Students learn about the connection between physical activity with health.

| January | Personality Development. | HPE tests, KHELO-India fitness tests, Personality development, Maintenance of physical fitness, Assessment of grading continue. | Students learn to assess their body, its needs and its relationship with physical activity.

To make students understand Personality

*To make students understand motivation and its techniques. *To make students about Exercise Adherence and Strategies for enhancing Adherence to Exercise. *To make them aware of Aggression in sports and types. *To make students |
|---|---|---|---|

			understand Psychological Attributes in Sports.
February	Assessment Of Grading.	Assessment of grading continue, Personal hygiene, HPE Test	Assesses Their Progress in terms of Efforts , Processes and Outcomes.
March	Assessment	Physical Test assessment	Assesses Their Overall Performance.

BHARATIYA VIDYA BHAVAN, KOCHI KENDRA

YEAR PLAN MATHEMATICS(041) STANDARD XII 2023-2024

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 mattrices	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			

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	Applications of derivatives: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).
SECOND UNIT TEST			
AUGUST	7.INTEGRALS (Not for the Term end evaluation)	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	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.

		Fundamental Theorem of Calculus Evaluation of Definite Integrals by Substitution Some Properties of Definite Integrals	$\int \frac{dx}{x^2 \pm a^2}, \int \frac{dx}{\sqrt{x^2 \pm a2}} \quad \int \frac{dx}{\sqrt{a^{2-} -x2}}$ $\int \frac{dx}{ax^2 + bx + c}, \int \frac{dx}{\sqrt{ax^2 + bx + c}} \quad \int \frac{px + q}{ax^2 + bx + c} \int \frac{px + q}{\sqrt{ax^2 + bx + c}}$ $\int \sqrt{a^2 \pm x^2}\, dx, \int \sqrt{x^2 - a^2} \ , \int \sqrt{ax2 + bx + c}$ Fundamental Theorem of Calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals.
SEPTEMBER	8.APPLICATION OF INTEGRATION(Not for the Term end evaluation)	Introduction Area under Simple Curves	Applications in finding the area under simple curves, especially lines, circles/ parabolas/ellipses; (in standard form only)
SEPTEMBER	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+ $P\ y = Q$, 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 EVALUATION(Chapters 1,2,3,4,5,6,12)			

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 EXAMINATION		

BHARATIYA VIDYA BHAVAN, KOCHI KENDRA
YEAR PLAN FOR THE ACADEMIC YEAR 2023-24
STD -XII APPLIED MATHEMATICS(241)

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
MARCH	ALGEBRA -MATRICES	**Matrices and types of matrices, Equality of matrices, Transpose of a matrix, Symmetric and Skew symmetric matrix, Algebra of Matrices**	The entries, rows and columns of matrices, Present a set of data in a matrix form, Examples of transpose of matrix, A square matrix as a sum of symmetric and skew symmetric matrix, Observe that diagonal elements of skew symmetric matrices are always zero, Addition and Subtraction of matrices, Multiplication of matrices (It can be shown to the students that Matrix multiplication is similar to multiplication of two polynomials) Multiplication of a matrix with a real number
APRIL	ALGEBRA-DETERMINANTS	**Determinants, Inverse of a matrix, Solving system of simultaneous equations using matrix method, Cramer's rule**	Singular matrix, Non-singular matrix, $|AB|=|A||B|$, Simple problems to find determinant value Inverse of a matrix using: a) cofactors If A and B are invertible square matrices of same size, i) $(AB)^{-1}=B^{-1} A^{-1}$ ii) $(A^{-1})^{-1} =A$ iii) $(A^{T})^{-1} = (A^{-1})^{T}$ Solution of system of simultaneous equations up to three variables only (non- homogeneous equations)
JUNE	CALCULUS - DIFFERENTIATION AND ITS APPLICATIONS	Higher Order Derivatives, Application of Derivatives, Marginal Cost and Marginal Revenue using derivatives Increasing /Decreasing Functions	Simple problems based on higher order derivatives Differentiation of parametric functions and implicit functions (up to 2nd order), To find the rate of change of quantities such as area and volume with respect to time or its dimension Gradient / Slope of tangent and normal to the curve The equation of the tangent and normal to the curve (simple problems only) ,

		Maxima and Minima	Examples related to marginal cost, marginal revenue, etc. Simple problems related to increasing and decreasing behaviour of a function in the given interval A point x= c is called the critical point of f: if f is defined at c and $f'(c)=0$ or f is not differentiable at c To find local maxima and local minima by: i)First Derivative Test ii) Second Derivative Test Contextualized real life problems
FIRST UNIT TEST- MATRICES , DETERMINANTS (DIFFERENTIATION AND ITS APPLICATIONS NOT INCLUDED)			
JULY	CALCULUS - DIFFERENTIATION AND ITS APPLICATIONS- CONTINUED, PROBABILITY DISTRIBUTIONS	Probability Distribution Mathematical Expectation Variance Binomial Distribution Poison Distribution Normal Distribution	Definition and example of discrete and continuous random variable and their distribution The expected value of discrete random variable as summation of product of discrete random variable by the probability of its occurrence Questions based on variance and standard deviation Characteristics of the binomial distribution Binomial formula: $P(r) = {}^nC_r\, p^r\, q^{n-r}$ Where n = number of trials P = probability of success

			q = probability of failure Mean =np Variance = npq Standard Deviation = $\sqrt{npq}$ Characteristics of Poisson Probability distribution Poisson formula: P(x) = $\frac{\lambda^x e^{-\lambda}}{x!}$ Mean = Variance = λ Characteristics of a normal probability distribution Total area under the curve = total probability = 1 Standard Normal Variate: Z = $x - \mu/\sigma$ where x = value of the random variable μ = mean σ = S.D.
SECOND UNIT TEST - DIFFERENTIATION AND ITS APPLICATIONS (PROBABILITY DISTRIBUTIONS NOT INCLUDED FOR EXAM)			
AUGUST	PROBABILITY DISTRIBUTIONS-CONTD….		
SEPTEMBER	NUMBERS, QUANTIFICATIONS AND NUMERICAL APPLICATIONS	Modulo Arithmetic Congruence Modulo Alligation and Mixture Numerical Problems Boats and Streams (upstream and downstream) Pipes and Cisterns Races and Games Numerical Inequalities	Definition and meaning Introduction to modulo operator Modular addition and subtraction Definition and meaning Solution using congruence modulo Equivalence class Meaning and Application of rule of alligation Mean price of a mixture Problems based on speed of stream and the speed of boat in still water

			Calculation of the portion of the tank filled or drained by the pipe(s) in unit time Calculation of the time taken/ distance covered / speed of each player Comparison between two statements/situations which can be compared numerically Application of the techniques of numerical solution of algebraic inequations

	TIME BASED DATA,	Time Series
		Components of Time Series
		Time Series analysis for univariate data
		Secular Trend
		Methods of Measuring trend
			Meaning and Definition
			Secular trend
			 Seasonal variation
			Cyclical variation
			 Irregular variation
			 Fitting a straight-line trend and estimating the value
			The tendency of the variable to increase or decrease over a long period of time
			  Moving Average method
			  Method of Least Squares

	CALCULUS-INTEGRATION AND ITS APPLICATIONS,	Integration Indefinite Integrals as family of curves Definite Integrals as area under the curve Application of Integration	Integration as a reverse process of differentiation Vocabulary and Notations related to Integration Simple integrals based on each method (non-trigonometric function) Evaluation of definite integrals using properties Problems based on finding Total cost when Marginal Cost is given Total Revenue when Marginal Revenue is given Equilibrium price and equilibrium quantity and hence consumer and producer surplus

OCTOBER	DIFFERENTIAL EQUATIONS	Differential Equations Formulating and Solving Differential Equations Application of Differential Equations	Definition, order, degree and examples Formation of differential equation by eliminating arbitrary constants Solution of simple differential equations (direct integration only) Growth and Decay Model in Biological sciences, Economics and business, etc
TERM END EVALUATION (INTEGRALS AND DIFFERENTIAL EQUATIONS NOT INCLUDED FOR EXAM)			
NOVEMBER	INFERENTIAL STATISTICS	Population and Sample Parameter and Statistics and Statistical Interferences t-Test (one sample t-test and two independent groups t-test)	⊓ Population data from census, economic surveys and other contexts from practical life ⊓ Examples of drawing more than one sample set from the same population ⊓ Examples of representative and non-representative sample ⊓ Unbiased and biased sampling ⊓ Problems based on random sampling using simple random sampling and systematic random sampling (sample size less than 100) ⊓ Conceptual understanding of Parameter and Statistics ⊓ Examples of Parameter and Statistic limited to Mean and Standard deviation only ⊓ Examples to highlight limitations of generalizing results from sample to population ⊓ Only conceptual understanding of Statistical Significance/Statistical Inferences ⊓ Only conceptual understanding of Sampling Distribution through simulation and graphs ● Examples and non-examples of Null and Alternate hypothesis (only non-directional alternate hypothesis) ● Framing of Null and Alternate hypothesis ● Testing a Null Hypothesis to make Statistical Inferences for small sample size

			● *(for small sample size: t- test for one group and two independent groups* ● Use of t-table

	FINANCIAL MATHEMATICS	Perpetuity, Sinking Funds
		  Calculation of EMI
		  Calculation of Returns, Nominal Rate of Return
		
		  Compound Annual Growth Rate
		Linear method of Depreciation
			Meaning of Perpetuity and Sinking Fund
			 Real life examples of sinking fund
			 Advantages of Sinking Fund
			 Sinking Fund vs. Savings account
			⌐ Methods to calculate EMI:
			i) Flat-Rate Method
			ii) Reducing-Balance Method
			⌐ Real life examples to calculate EMI of various types of loans, purchase of assets, etc.
			
			⌐ Formula for calculation of Rate of Return, Nominal Rate of Return
			
			⌐ Meaning and use of Compound Annual Growth Rate
			⌐ Formula for Compound Annual Growth Rate
			
			⌐ Meaning and formula for Linear Method of Depreciation
			⌐ Advantages and disadvantages of Linear Method
			
			● Need for framing linear programming problem

	LINEAR PROGRAMMING	Introduction and related terminology Mathematical formulation of Linear Programming Problem Different types of Linear Programming Problems Graphical method of solution for problems in two variables Feasible and Infeasible Regions Feasible and infeasible solutions, optimal feasible solution	● Definition of Decision Variable, Constraints, Objective function, Optimization and Non- Negative conditions ● Set the problem in terms of decision variables, identify the objective function, identify the set of problem constraints, express the problem in terms of inequations ● Formulate various types of LPP's like Manufacturing Problem, Diet Problem, Transportation Problem, etc. ● Corner Point Method for the Optimal solution of LPP ● Iso-cost/ Iso-profit Method ● Definition and Examples to explain the terms ● Problems based on optimization ● Examples of finding the solutions by graphical method
MODEL EXAMINATION			

BHARATIYA VIDYA BHAVAN , KOCHI KENDRA
YEAR PLAN FOR THE ACADEMIC YEAR 2023-24

SUBJECT : COMPUTER SCIENCE

STD: XII

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
MARCH/ APRIL	~ Computational Thinking and Programming ~ Database Management	~ Revision of Python topics covered in Class XI. ~ Functions ~ Database Management	~ Revision of Python topics covered in Class XI. ~ Functions - Built in functions, functions defined in module, user defined functions ~ Database Management - Database concepts, Relational data model, Structured Query Language (Group By , having and joins not included)
JUNE	~ Computational Thinking and Programming ~ Database Management	~ Database Management ~ Exception Handling	~ Structured Query Language (Group By, having and joins) ~ Exception Handling
FIRST UNIT TEST - 12/06/2023 to 16/06/2023			
JULY	~ Computational Thinking and Programming	~ Interface of python with an SQL database ~ Data Structure	~ Interface of python with an SQL database ~ Data Structure - Stack
SECOND UNIT TEST - 31/07/2023 to 04/08/2023			
AUGUST	~ Computational Thinking and Programming	~ Introduction to files	~ Types of files & File paths ~ Text files, Binary files
SEPTEMBER	~ Computational Thinking and Programming	~ Introduction to files	~ CSV files
TERM END EVALUATION - 05/10/2023 to 13/10/2023			

OCTOBER	~ Computer Networks	~ Computer Networks	~ Evolution of networking ~ Data communication terminologies ~ Switching techniques ~ Transmission media ~ Network devices ~ Network topologies and Network types
NOVEMBER	~ Computer Networks	~ Computer Networks	~ Network protocol ~ Introduction to web services
DECEMBER			**FIRST MODEL EXAM - 05/12/2023 to 18/12/2023**
JANUARY			**SECOND MODEL EXAM - 04/01/2024 to 17/01/2024**

BHARATIYA VIDYA BHAVAN .KOCHI
SCHEME OF WORK FOR THE YEAR 2023-24

CLASS	XII
SUBJECT	INFORMATICS PRACTICES
	YEAR PLAN

MONTH	TOPIC	SUB TOPICS	CONCEPTS
MARCH	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, WWW, 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
APRIL	UNIT 1 :Data Handling using Pandas and Data Visualization	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; Head and Tail functions; Selection, Indexing and Slicing	Data analysis using Python libraries,Concepts of data structures,Series creation and its operations.
JUNE	UNIT 1 :Data Handling using Pandas and Data Visualization	Data Frames: creation - from dictionary of Series, list of dictionaries.	Creation of 2D data sstructure: Dataframe
		First unit test begins on 12/06/2023	
JULY	UNIT 1 :Data Handling using Pandas and Data Visualization	Dataframe- display; iteration; Operations on rows and columns: add, select, delete, rename; Head and Tail functions; Indexing using Labels, Boolean Indexing; creation of Dataframes from Text/CSV files; Importing/Exporting Data between CSV files and Data Frames.	Operations on dataframes and built in functions,concept of importing and exporting data using csv
		Second Unit test begins on 31/07/2023	
AUGUST	UNIT 1 :Data Handling using Pandas and Data Visualization	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.	Visualizing data using matplotlib library
SEPTEMBER	Unit 2:Database Query using SQL	Revision of database concepts and SQL commands covered in class XI Math functions: POWER (), ROUND (), MOD (). Text functions: UCASE ()/UPPER (), LCASE ()/LOWER (), MID ()/SUBSTRING ()/SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM (). Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME ().	Data Base Concepts and SQL single row functions

			Data Base Concepts and SQL Aggregate functions
OCTOBER	Unit 2:Database Query using SQL	Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*). Querying and manipulating data using Group by, Having, Order by	
	Term End begins on 05/10/2023		
NOVEMBER	Unit 2:Database Query using SQL Unit4: Societal Impacts	Working with two tables using equi-join Societal Impacts:- Digital footprint, net and communication etiquettes, data protection, intellectual property rights (IPR), plagiarism, licensing and copyright, 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.	Data Base Concepts and SQL Joins Digital Footprints, IPR, FOSS, CyberCrime, Ewaste, Health Concerns
DECEMBER	**First Model: 05/12/2023 to 15/12 /2023** **Second Model : 04/01/2024 to 17/01/2024**		

BHARATIYA VIDYA BHAVAN, KOCHI

YEAR PLAN FOR THE ACADEMIC YEAR 2023- 2024
STD XII - PHYSICS

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
APRIL	**Chapter–1: Electric Charges and Fields** **Chapter–2: Electrostatic Potential and Capacitance**	**Electric charges, Electric Field, Electric Flux, Gauss's law** **Electric potential & potential energy, equipotential surfaces, Conductors and insulators,** **Dielectrics and electric polarization** **Capacitors and capacitance**	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). 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).

JUNE	**Chapter–3: Current Electricity** **Chapter–4: Moving Charges and Magnetism**	**Electric current, drift velocity, Ohm's law, temperature dependence of resistance, Internal resistance and emf of acell, Kirchhoff's Wheatstone bridge.** **Biot - Savart law and its applications, Ampere's law and its applications, force on a moving charge in uniform magnetic and electric fields.**	Electric current, flow of electric charges in a metallic conductor, drift 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. Concept of magnetic field, Oersted's experiment. Biot - Savart law and its application to current carrying circular loop. Ampere's law and its applications to infinitely long straight wire. Straight solenoid (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields.
	FIRST UNIT TEST **Electric Charges and Fields -17 MARKS,** **Electrostatic Potential and Capacitance** **(upto conductors & insulators) - 8 MARKS**		

JULY	**Chapter–4:** **Moving Charges and Magnetism(con** **Chapter–5:** **Magnetism and Ma**	**Force on a current-carrying conductor in a unifo 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. Magnetic properties of materials, Magnetization of materials, effect of temperature on magnetic properties.**	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.
SECOND UNIT TEST **Electrostatic Potential and Capacitance (from capacitors and capacitance) - 5 MARKS,** **Current Electricity -12 MARKS,** **Moving Charges and Magnetism** **(upto force on a moving charge in uniform** **magnetic and electric fields.) - 8 MARKS**			
AUGUST	**Chapter–6:** **Electromagnetic Ind** **Chapter–7:** **Alternating Curren**	**Electromagnetic induction; Lenz's Law, Self and mutual induction.** **Alternating currents, LCR series circuit (phasor AC generator, Transformer.**	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.

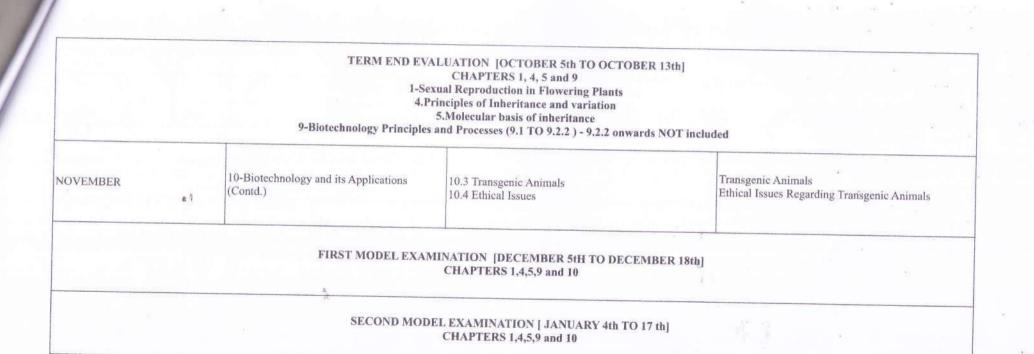|			
JULY	**Chapter–4:** **Moving Charges** **and Magnetism(con** **Chapter–5:** **Magnetism and Ma**	**Force on a current-carrying conductor in a unifo** **magnetic field, force between two parallel** **current-carrying conductors,** **torque experienced by a current loop in** **uniform magnetic field, moving coil** **galvanometer** **Bar magnet, magnetic field intensity due to** **a magnetic dipole (bar magnet),** **torque on a** **magnetic dipole.** **Magnetic properties of materials, Magnetization** **of materials, effect of temperature on** **magnetic properties.**	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.
SECOND UNIT TEST **Electrostatic Potential and Capacitance (from capacitors and capacitance) - 5 MARKS,** **Current Electricity -12 MARKS,** **Moving Charges and Magnetism** **(upto force on a moving charge in uniform** **magnetic and electric fields.) - 8 MARKS**			
AUGUST	**Chapter–6:** **Electromagnetic Ind** **Chapter–7:** **Alternating Curren**	**Electromagnetic induction;** **Lenz's Law, Self and mutual induction.** **Alternating currents, LCR series circuit (phasor** **AC generator, Transformer.**	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.

SEPTEMBER	**Chapter–8: Electromagnetic Wa** **Chapter–9:** **Ray Optics and Opt** **Instruments** **Chapter–10:** **Wave Optics**	**Basic idea of displacement current, Electromagn** **waves,** **Electromagnetic spectrum** **Reflection of light, spherical mirrors, refraction of light, refraction at spherical surfaces, lenses, , lens maker's formula, refractio** **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 Rad and Matter** **Chapter–12: Atoms** **Chapter–13: Nuclei**	**Dual nature of radiation, Photoelectric effect, Ei 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 **Electric Charges and Fields & Electrostatic** **potential and capacitance - 15 MARKS, Current Electricity - 8 MARKS,** **Moving Charges and Magnetism & Magnetism and Matter - 15 MARKS,** **EMI & AC - 15 MARKS, EM Waves- 5 MARKS,** **Ray Optics (upto Optical instruments)- 12 MARKS**	
NOVEMBER	**Chapter–14: iconductor Electron aterials, Devices and Simple Circuits**	**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)**	

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STD XII – BOTANY – YEAR PLAN

2023-2024

MONTH	TOPIC	SUB TOPICS	CONCEPTS
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	Hybridization experiments-Monohybrid cross and Dihybrid cross Law of segregation,Law of Dominance,Independent assortment Deviations from Mendelian pattern of inheritance Chromosomal theory of inheritance Sex determination mechanisms
JUNE	4.Principles of Inheritance and variation (Contd.)	4.5 Mutation 4.6 Genetic Disorders	Pedigree analysis Mendelian disorders Chromosomal disorders

FIRST UNIT TEST [JUNE 12th TO 16 th]
CHAPTER 4: Principles of Inheritance and variation -Upto 4.6.2 (included)

MONTH	TOPIC	SUB TOPICS	CONCEPTS
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	Structure of Polynucleotide Chain Packaging of DNA Helix Transforming Principle,Biochemical Characterisation of Transforming Principle The Genetic Material is DNA Properties of Genetic Material (DNA versus RNA) The Experimental Proof for Replication The Machinery and the Enzymes Transcription Unit Mutations and Genetic Code tRNA– the Adapter Molecule The Lac operon

AUGUST	5.Molecular basis of inheritance(Contd.)	5.9 Human Genome Project,Rice Genome Proect 5.10 DNA Fingerprinting	Goals of HGP,Methodologies,Salient Features of Human Genome and Rice Genome Project Applications and Future Challenges Repetitive DNA,Satellite DNA,Polymorphism; Variable Number of Tandem Repeats
	SECOND UNIT TEST [JULY 31st TO AUGUST 4th] **CHAPTERS 4 and 5** **4. Principles of Inheritance and variation-4.7 to 4.8.3** **5. Molecular basis of Inheritance -5.1 to 5.3 (Included)**		
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.	Stamen, Microsporangium, and Pollen Grain The Pistil, Megasporangium, and Embryo Sac Pollination Double Fertilization Post-Fertilization: Structures and Events 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	Genetic engineering,Bioprocess engineering, recombinant DNA ,gene cloning and gene transfer, restriction endonuclease Gel electrophoresis Cloning Vectors Competent Host (For Transformation with Recombinant DNA) Processes of Recombinant DNA Technology
OCTOBER	10-Biotechnology and its Applications	10.1 Biotechnological Applications in Agriculture 10.2 Biotechnological Applications in Medicine	Green Revolution,tissue culture,somatic hybridisationPest Resistant Plants Genetically Engineered Insulin Gene Therapy Molecular Diagnosis

TERM END EVALUATION [OCTOBER 5th TO OCTOBER 13th]
CHAPTERS 1, 4, 5 and 9
1-Sexual Reproduction in Flowering Plants
4.Principles of Inheritance and variation
5.Molecular basis of inheritance
9-Biotechnology Principles and Processes (9.1 TO 9.2.2) - 9.2.2 onwards NOT included

NOVEMBER	10-Biotechnology and its Applications (Contd.)	10.3 Transgenic Animals 10.4 Ethical Issues	Transgenic Animals Ethical Issues Regarding Transgenic Animals

FIRST MODEL EXAMINATION [DECEMBER 5tH TO DECEMBER 18th]
CHAPTERS 1,4,5,9 and 10

SECOND MODEL EXAMINATION [JANUARY 4th TO 17 th]
CHAPTERS 1,4,5,9 and 10

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	STD XII – ZOOLOGY – YEAR PLAN		
	2023-2024		
MONTH	**TOPIC**	**SUB TOPICS**	**CONCEPTS**
MARCH - APRIL	CHAPTER 2 HUMAN REPRODUCTION	2.1 Male reproductive system 2.2 Female reproductive system	Structure and functions of male reproductive organs Structure and functions of female reproductive organs
JUNE	-HUMAN REPRODUCTION contd..	2.3 Gametogenesis 2.4 Menstrual cycle 2.5 Fertilization and implantation 2.6 Pregnancy and embryonic development 2.7 Parturition and lactation	Spermatogenesis and oogenesis, 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
FIRST UNIT TEST (JUNE 12 - 16) CHAPTER 2. HUMAN REPRODUCTION 2.1 TO 2.5 (EXCLUDING 2.5 FERTILIZATION AND IMPLANTATION)			

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 EVOLUTION	6.1 Origin of life 6.2 Evolution 0f life forms - a theory 6.3 What are the evidences of evolution ? 6.4 What is adaptive radiation ? 6.5 Biological evolution 6.6 Mechanism of evolution 6.7 Hardy-weinberg 6.8 A brief account of evolution principle 6.9 Origin and evolution of man	Big bang theory, formation of universe Different theories on origin of life Paleontology, comparative anatomy, embryology, molecular evidences Darwin's finches , placental mammals and marsupials of australia Branching descent and natural 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 4) 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
SEPTEMBER	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
OCTOBER	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

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YEAR PLAN FOR THE ACADEMIC YEAR 2023-24
CLASS XII   BUSINESS STUDIES (054)

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
MARCH	Nature and Significance of Management	Introduction	Management - concept, objectives, and importance
		Nature of Management	Management as Science, Art and Profession
		Levels of Management	Levels of Management
		Functions of Management	Management functions-planning, organizing, staffing, directing and controlling
		Co-ordination -The Essence of Management	Coordination- concept and importance
APRIL	Principles of Management	Principles of Management - The Concept	Principles of Management-concept and significance
		Principles of Management	Fayol's principles of management
		Taylor's Scientific Management	Taylor's Scientific management - principles and techniques
JUNE	Business Environment	Introduction	Meaning and importance of Business environment
		Dimensions of Business Environment	Dimensions of Business Environment - Economic, Social, Technological, Political and Legal
		Demonetisation	Demonetization - concept and features
UNIT TEST I (25 MARKS)		
JUNE/JULY	Marketing	Introduction	Marketing – Concept, functions and philosophies
		Marketing Mix	Marketing Mix – Concept and elements
		Product	Product – branding, labelling and packaging – Concept
		Pricing	Price - Concept, Factors determining price
		Physical Distribution	Physical Distribution – concept, components and channels of distribution
		Promotion	Promotion – Concept and elements; Advertising, Personal Selling, Sales Promotion and Public Relations
JULY	Planning	Introduction	Planning: Concept, importance and limitation
		Planning Process	Planning process
		Types of Plans	Single use and Standing Plans. Objectives, Strategy, Policy, Procedure, Method, Rule, Budget and Programme
UNIT TEST II (25 MARKS)		
AUGUST	Organizing	Introduction	Organising: Concept and importance
		Steps in the process of Organising	Organising Process
		Organisation Structure	Structure of organisation- functional and divisional concept.
			Formal and informal organization - concept
		Delegation	Delegation: concept, elements and importance
		Decentralisation	Decentralization: concept and importance
AUGUST /SEPTEMBER	Staffing	Introduction	Concept and importance of staffing
		Staffing as a Part of Human Resource Management	Staffing as a part of Human Resource Management concept
		Staffing Process	Staffing process
		Recruitment	Recruitment process
		Selection	Selection – process

		Training and Development	Training and Development - Concept and importance, Methods of training - on the job and off the job - vestibule training, apprenticeship training and internship training
SEPTEMBER	Directing	Introduction	Directing: Concept and importance
		Elements of Direction	Elements of Directing
		Motivation	Motivation - concept, Maslow's hierarchy of needs, Financial and non-financial incentives
		Leadership	Leadership - concept, styles - authoritative, democratic and laissez faire
		Communication	Communication - concept, formal and informal communication; barriers to effective communication, How to overcome the barriers?
SEPTEMBER	Controlling	Controlling	Controlling - Concept and importance
		Relationship between Planning and Controlling	Relationship between planning and controlling
		Controlling Process	Steps in process of control

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TERM END EVALUATION (80 +20 MARKS)

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		Introduction	Financial Markets: Concept
OCTOBER	Financial Markets	Money Market	Money Market: Concept
		Capital Market	Capital market and its types (primary and secondary)
		Stock Exchange	Stock Exchange - Functions and trading procedure
		Securities and Exchange Board of India(SEBI)	Securities and Exchange Board of India (SEBI) - objectives and functions
OCTOBER	Consumer Protection	Introduction	Consumer Protection: Concept and importance
		The Consumer Protection Act,2019	The Consumer Protection Act, 2019
		Who is a Consumer?	Meaning of consumer
		Rights and Responsibilities of a Consumer	Rights and responsibilities of consumers
		Who can file a complaint?	Who can file a complaint?
		Redressal Agencies uner Consumer Protection Act	Redressal machinery
		Reliefs Available	Remedies available
		Role of Consumer Organisations and NGOS	Consumer Awareness- Role of Consumer Organisations and Non-Governmental Organisations(NGOs)
NOVEMBER	Financial Management	Introduction	Financial Management: Concept, role and objectives
		Financial Decisions	Financial decisions: investment, financing and dividend - Meaning and factors affecting
		Financial Planning	Financial Planning - concept and importance
		Capital Structure	Capital Structure – concept and factors affecting capital structure
		Fixed and Working Capital	Fixed and Working Capital - Concept and factors affecting their requirements

NOVEMBER	PROJECT	Students are supposed to select one unit out of four and are required to make only ONE project from the selected unit. 1. Elements of Business Environment 2. Principles of Management 3. Stock Exchange 4. Marketing
DECEMBER	FIRST MODEL EXAMINATION	
JANUARY	SECOND MODEL EXAMINATION	
JANUARY	PRACTICAL EXAMINATION	

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YEAR PLAN FOR THE ACADEMIC YEAR 2023-24   STD: XII - SUBJECT: ECONOMICS (030)

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
March/April	Unit 1: Development Experience (1947-90)Indian economy on the eve of IndependenceIndian economy 1950-90	The state of Indian economy on the eve of independence.Indian economic system and common goals of Five Year Plans	Agricultural stagnation, IPR, SSI, Land reforms, Land ceiling, Marketed surplus, Tariff , Quota
March/April	Unit 2: Money &Banking	Money – meaning and functions, - Currency held by the public and net demand deposits held by commercial banks. Money creation by the commercial banking system. Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Govt. Bank, Banker's Bank, Control of Credit	supply of money, Money creation , Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.
June	Unit 2: Economic Reforms since 1991 (LPG) Unit 3 : Current Challenges 5: HCF Unit 1 National Income : Basic concepts	Features and appraisals of liberalisation, globalisation and privatisation (LPG policy); Concepts of demonetization and GST. How people become resource; Role of human capital in economic development; Growth of Education Sector in India Basic concepts in macroeconomics: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation. Circular flow of income (two sector model)	Demonetization and GST , LPG policy , Appraisals of liberalisation Circular flow of income, stocks and flows , final goods, intermediate goods. Role of human capital in economic development Growth of Education Sector in India
July	National Income and related agg	Aggregates related to National Income: Gross National Product (GNP), Net National Product (NNP), Gross Domestic Product (GDP) and Net Domestic Product (NDP) - at market price, at factor cost; Real and Nominal GDP. GDP and Welfare	Gross National Product (GNP), Net National Product (NNP), Gross Domestic Product (GDP) and Net Domestic Product (NDP) GDP and Welfare, Externalities

Month	Unit	Content	Key Concepts
August	Unit 4: Government budget and the economy 6: Rural development 7: Employment	Government budget - meaning, objectives and components. Classification of receipts - revenue receipts and capital receipts; Classification of expenditure – revenue expenditure and capital expenditure. Balanced, Surplus and Deficit Budget – measures of government deficit. Rural development: Key issues - credit and marketing - role of cooperatives; agricultural diversification; alternative farming - organic farming Employment: Growth and changes in work force participation rate in formal and informal sectors; problems and policies	Revenue receipts and capital receipts , revenue expenditure and capital expenditure. Balanced, Surplus and Deficit Budget Credit and marketing - role of cooperatives Growth and changes in work force participation rate in formal and informal sectors
September	Unit 5: Balance of Payments & Foreign Exchange Unit 3: Current challenges 9: Environment and Sustainable Development	Balance of payments account - meaning and components; Balance of payments – Surplus and Deficit Foreign exchange rate - meaning of fixed and flexible rates and managed floating. Determination of exchange rate in a free market, Merits and demerits of flexible and fixed exchange rate. Managed Floating exchange rate system. Sustainable Economic Development: Meaning, Effects of Economic	Balance of payments account, Surplus and Deficit Foreign exchange rate - meaning of fixed and flexible rates and managed floating , Sustainable Economic Development
October	Unit 3: Determination of income and employment	Aggregate demand and its components. Propensity to consume and propensity to save (average and marginal). Short-run equilibrium output; investment multiplier and its mechanism. Meaning of full employment and involuntary unemployment. Problems of excess demand and deficient demand; measures to correct them - changes in government spending, taxes and money supply.	Aggregate demand , Propensity to consume and propensity to save , Excess demand and deficient demand
November	Unit 4: Comparative Development Experiences of India and its neighbours	A comparison with neighbours India and Pakistan India and China Issues: economic growth, population, sectoral development and other Human Development Indicators	Economic growth, population, sectoral development

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YEAR PLAN FOR THE ACADEMIC YEAR 2023-24

CLASS XII CHEMISTRY

MONTH	TOPIC	SUB-TOPIC	CONCEPTS
MARCH/APRIL	1. SOLUTIONS 6. HALOALKANES AND HALOARENES	**SOLUTIONS** - Types of solutions, expression of concentration of 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 and chemical properties, mechanism of substitution reactions, optical rotation. Nature of C–X bond, substitution reactions (Directive influence of halogen in mono substituted compounds only).	**SOLUTIONS**- Concentration terma and units , Henry's and Roults law, Ideal and non-ideal solution , colligative properties , osmosis and reverse osmosis , abnormal molar mass and vant Hoff's factor. **Haloalkanes and halo arenes** - IUPAC nomenclature, preparation, properties , reaction mechanisms of haloalkanes and haloarenes
JUNE	6.HALOALKANES AND HALOARENES 7.ALCOHOLS,PHENOLS AND ETHERRS	**Haloalkanes and halo arenes** :Uses and environmental effects of dichloromethane , trichloromethane , tetrachloromethane , iodoform , freons , DDT. **Alcohlols , 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 (12/6/2023-16/6/2023) PORTIONS - SOLUTIONS (13) HALOALKANES AND HALOARENES (12)			

JULY	8. ALDEHYDES,KETONES AND 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 chemical characteristics of carboxylic acids. Application of aldehydes , ketones and acids.
SECOND UNIT - TEST(31/07/2023 - 4/8/2023) PORTIONS- 7. ALCOHOS , PHENOLS AND ETHERS (14) 8.ALDEHYDES , KETONES AND CARBOXYLIC ACIDS - UPTO REDUCTION. (REDUCTION NOT INCLUDED(12)			
AUGUST	2. ELECTROCHEMISTRY	Redox reactions, conductance in electrolytic solutions, specific and molar conductivity, variationsof 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.
	TERM END EXAMINATION (5/10/23 - 13/10/23) PORIONS - 1. SOLUTIONS (8) 6. HALOALKANES AND HALOARENES (10) 7. ALCOHOLS , PHENOLS AND ETHERS (10) 8. ALDEHYDES , KETONES AND CARBOXYLIC ACIDS (15) 2. ELECTROCHEMISTRY (15) 3. CHEMICAL KINETICS (12)		
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 KENDRA

YEAR PLAN FOR THE ACADEMIC YEAR 2023-24			
CLASS	XII		
SUBJECT	ACCOUNTANCY		
MONTH	**TOPIC**	**SUB-TOPICS**	**CONCEPTS**
MARCH-APRIL	**ACCOUNTING FOR PARTNERSHIP FIRMS -BASIC CONCEPTS**	1.1 Nature of Partnership 1.2 Partnership Deed 1.3 Special Aspects of Partnership Accounts 1.4 Maintenance of Capital Accounts of Partners 1.5 Distribution of Profit among Partners 1.6 Guarantee of Profit to a Partner 1.7 Past Adjustments	Meaning nature and definition Contents of Partnership Deed. Provisions of the Indian Partnership Act 1932 in the absence of partnership deed. Fixed v/s fluctuating capital accounts. Preparation of Profit and Loss Appropriation account- division of profit among partners Guarantee of profits to the partners and partner to the firm. Past adjustments (relating to interest on capital, interest on drawing, salary and profit sharing ratio).
JUNE	**GOODWILL: NATURE AND VALUATION**	2.1 Nature of Goodwill 2.2 Factors affecting Goodwill 2.3 Types of Goodwill 2.4 Methods of valuation of Goodwill	Meaning and Nature Factors affecting goodwill Self generated and Purchased Methods of valuation - average profit, super profit and capitalization.
UNIT TEST 1 - 25 MARKS			
JUNE	**RECONSTITUTION OF A PARTNERSHIP FIRM - ADMISSION OF PARNTERS**	3.1 Modes of Reconstitution of a Partnership Firm 3.2 Admission of a New Partner 3.3 New Profit Sharing Ratio 3.4 Sacrificing Ratio 3.5 Goodwill 3.6 Adjustment for Accumulated Profits and Losses 3.7 Revaluation of Assets and Reassessment of Liabilities 3.8 Adjustment of Capitals	Cases of Reconstitution Effect of admission of a partner on change in the profit sharing ratio Old Ratio - New Ratio Treatment of goodwill (as per AS 26) Treatment of reserves, accumulated profits and losses Treatment for revaluation of assets and re-assessment of liabilities Adjustment of capital accounts and preparation of capital, current account and Balance Sheet..

JULY	**RECONSTITUTION OF A PARTNERSHIP FIRM - CHANGE IN PROFIT SHARING RATIO AMONG THE EXISTING PARTNERS**	4.1 New Profit Sharing Ratio 4.2 Sacrificing Ratio/Gaining Ratio 4.3 Goodwill 4.4 Adjustment for Accumulated Profits and Losses 4.5 Revaluation of Assets and Reassessment of Liabilities 4.6 Adjustment of Capitals	Calculation of New Profit sharing Ratio. Sacrificing ratio, gaining ratio- Calculation. Accounting Treatment of Goodwill. Treatment of reserves and accumulated profits. Accounting for revaluation of assets and reassessment of liabilities Preparation of revaluation account and Balance Sheet.
UNIT TEST I1 - 25 MARKS			
JULY	**RECONSTITUTION OF A PARTNERSHIP FIRM - RETIREMENT OF PARTNER**	5.1 Ascertaining the Amount Due to Retiring Partner 5.2 New Profit Sharing Ratio 5.3 Gaining Ratio 5.4 Treatment of Goodwill 5.5 Adjustment for Revaluation of Assets and Liabilities 5.6 Adjustment of Accumulated Profits and Losses 5.7 Disposal of Amount Due to Retiring Partner 5.8 Adjustment of Partners' Capitals 5.9 Retiring Partners Loan a/c	Effect of retirement of a partner on change in profit sharing ratio, Calculation New Ratio. New Ratio - Old Ratio Treatment of goodwill (as per AS 26), Treatment for revaluation of assets and reassessment of liabilities, Preparation of capital, current account and Balance Sheet. Adjustment of accumulated profits, losses and reserves, adjustment of capital accounts and Preparation of loan account of the retiring partner.

AUGUST	**RECONSTITUTION OF A PARTNERSHIP FIRM - DEATH OF A PARTNER**	6.1 Ascertaining the Amount Due to Deceased Partner 6.2 New Profit Sharing Ratio 6.3 Gaining Ratio 6.4 Treatment of Goodwill 6.5 Adjustment for Revaluation of Assets and Liabilities 6.6 Adjustment of Accumulated Profits and Losses 6.7 Disposal of Amount Due to Deceased Partner 6.8 Executors a/c	Calculation of amount to be transferred to Executor's A/c Calculation New Ratio. New Ratio - Old Ratio Treatment of goodwill (as per AS 26), Treatment for revaluation of assets and reassessment of liabilities, Preparation of capital, current account and Balance Sheet. Adjustment of accumulated profits, losses and reserves, adjustment of capital account Calculation of deceased partner's share of profit till the date of death. Preparation of deceased partner's capital account and his executor's account.
AUGUST	DISSOLUTION OF PARTNERSHIP FIRM	7.1 Dissolution of Partnership 7.2 Dissolution of a Firm 7.3 Settlement of Accounts 7.4 Accounting Treatment	Dissolution of partnership and partnership firm, Types of dissolution of a firm. Settlement of accounts - preparation of realization account, and other related accounts: capital accounts of partners and cash/bank a/c
SEPTEMBER	ACCOUNTING FOR SHARE CAPITAL	8.1 Features of a Company 8.2 Kinds of Companies 8.3 Share Capital of a Company 8.4 Nature and Classes of Shares 8.5 Issue of Shares 8.6 Accounting Treatment 8.7 Forfeiture of Shares	Company and Share Capital Features of a Company Kind of Companies. Share Capital of a Company and its Categories. Nature and Classes of Shares. Issue of Shares. Accounting Treatment,Calls in Arrears and Calls in Advance,Over Subscription and Under Subscription,Issue of Shares at a Premium and at a Discount,Issue of Shares for Consideration other than Cash. Forfeiture of Shares. Reissue of Forfeited Shares.

SEPTEMBER	ISSUE OF DEBENTURES	9.1 Meaning of Debentures 9.2 Distinction between Shares and Debentures 9.3 Types of Debentures 9.4 Terms of Issue of Debentures 9.5 Over Subscription 9.6 Issue of Debentures for Consideration other than Cash 9.7 Issue of Debentures as a Collateral Security 9.8 Issue of Debentures 9.9 Interest on Debentures 9.10 Writing off Discount/Loss on Issue of Debentures	Meaning of Debentures. Distinction between Shares and Debentures. Types of Debentures. Issue of Debentures- Par, Premium & Discount Pro Rata & Rejection. Issue of Debentures other than cash- Par, Premium & Discount. With & Without Journal Entries & effect in Balance Sheet. Accounting Treatment for different cases. Journal Entries Sources to write off & Preparation of ledger accounts.
TERM END EVALUATION - 80 MARKS			
OCTOBER	**FINANCIAL STATEMENTS OF A COMPANY**	10.1 Meaning of Financial Statements 10.2 Nature of Financial Statements 10.3 Objectives of Financial Statements 10.4 Types of Financial Statements 10.5 Uses and Importance of Financial Statements 10.6 Limitations of Financial Statements	Meaning, Nature, Uses and importance of financial Statements. Statement of Profit and Loss and Balance Sheet in prescribed form with major headings and sub headings (as per Schedule III to the Companies Act, 2013)
	FINANCIAL STATEMENT ANALYSIS	11.1 Meaning of Analysis of Financial Statements 11.2 Significance of Analysis of Financial Statements 11.3 Objectives of Analysis of Financial Statements 11.4 Tools of Analysis of Financial Statements 11.54.7 Limitations of Financial Analysis	Meaning of Analysisof financial statements. Significance of Analysisof financial statements. Objectives of Analysisof financial statements. Comparative, Common Size, Ratio Analysis and Cash Flow Statement. Limitations of Financial Analysis

OCTOBER	TOOLS OF FINANCIAL STATEMENT ANALYSIS-COMPARATIVE, COMMON SIZE STATEMENTS. ACCOUNTING RATIOS	12.4 Tools of Analysis of Financial Statements 12.5 Comparative Statements 12.6 Common Size Statement 13.1 Meaning of Accounting Ratios 13.2 Objectives of Ratio Analysis 13.3 Advantages of Ratio Analysis 13.4 Limitations of Ratio Analysis 13.5 Types of Ratios 13.6 Liquidity Ratios 13.7 Solvency Ratios 13.8 Activity (or Turnover) Ratio 13.9 Profitability Ratios	Preparation of comparative and common size statement, Accounting Ratios: Meaning, Objectives Advantages, Classification and computation-.Liquidity Ratios: ,Solvency Ratios:Activity Ratios:Profitability Ratios:
NOVEMBER	CASH FLOW STATEMENT	14.1 Objectives of Cash Flow Statement 14.2 Benefits of Cash Flow Statement 14.3 Cash and Cash Equivalents 14.4 Cash Flows 14.5 Classification of Activities for the Preparation of Cash Flow Statement 14.6 Ascertaining Cash Flow from Operating Activities 14.7 Ascertainment of Cash Flow from Investing and Financing Activities 14.8 Preparation of Cash Flow Statement	Meaning, objectives Benefits of Cash Flow Statement Cash and Cash Equivalents, Classification of Activities and preparation (as per AS 3 (Revised)
NOVEMBER	**PROJECT WORK**	ONE SPECIFIC PROJECT	One specific project based on financial statement analysis of a company covering any two aspects from the following:　　　1. Comparative and common size financial statements　　　2. Accounting Ratios 3. Segment Reports　　　4. Cash Flow Statements
DECEMBER	**FIRST MODEL EXAMINATION**		
JANUARY	**SECOND MODEL EXAMINATION**		
JANUARY	**PROJECT- PRACTICAL EXAMINATION**		