

**BHARATIYA VIDYA BHAVAN, KOCHI KENDRA  
COMPUTER SCIENCE  
YEAR PLAN FOR THE ACADEMIC YEAR 2024-25**

**CLASS: XI**

<b>MONTH</b>	<b>TOPIC</b>	<b>SUB-TOPICS</b>	<b>CONCEPTS</b>
<b>JUNE</b>	Unit II: Computational Thinking and Programming - 1 (Getting Started with Python)	Getting Started with Python	Introduction to problem solving and basics of Python programming Different Types of data
<b>JULY</b>	Unit II: Computational Thinking and Programming - 1 (SEQUENTIAL,CONDITIONAL STATEMENTS)	Sequentail Staement and Conditional staements)	Decision making based on boolean values
<b>UNIT TEST 1 -31/07/2024 (GETTING STARTED WITH PYTHON, SEQUENTIAL,CONDITIONAL STATEMENTS)</b>			
<b>AUGUST</b>	Unit II: Computational Thinking and Programming - 1 (WHILE LOOP)	While Loop	Looping / repetition
<b>SEPTEMBER</b>	Unit II: Computational Thinking and Programming - 1 (FOR LOOP,LISTS)	For loop,List	Looping / repetition Introduction to List and List Operations - collection of heterogeneous objects - mutable data type
<b>TERM END EVALUATION -18/10/2024 (GETTING STARTED WITH PYTHON, SEQUENTIAL,CONDITIONAL STATEMENTS,ITERATIVE STATEMENT,LISTS IN PYTHON)</b>			
<b>OCTOBER</b>	Unit II: Computational Thinking and Programming - 1 (TUPLE,DICTIONARY)	Tuple Dictionary	Introduction to tuple and tuple operations - collection of heterogeneous data - immutable data type Introduction to dictionary and dictionary operations - mapping of key-value pair
<b>NOVEMBER</b>	Unit II: Computational Thinking and Programming - 1 (STRINGS)	Strings	String operations

<b>DECEMBER</b>	Unit 1: Computer Systems and Organisation	Boolean Logic, Number System	Components of Computer System, Processor fundamentals, Storage Concept of Boolean logic Concept of Data and Data
<b>UNIT TEST 2 -03/01/2025 (TUPLE,DICTIONARY,STRING,BOOLEAN LOGIC, NUMBER SYSTEM)</b>			
<b>JANUARY</b>	Unit 2: Computational Thinking and Programming - I Unit 3: Society, Law and Ethics	Python Modules Digital Footprint, Data protection, Malware	Digital Society, Etiquettes in digital society, Data Protection
<b>FEBRUARY</b>	Unit 3: Society, Law and Ethics	E-waste management	Environment Protection
<b>FINAL EXAMINATION (17/02/2025)</b>			
<b>MARCH</b>			
<b>S.No</b>	<b>NAME OF SCHOOL</b>	<b>NAME OF TEACHERS</b>	<b>SIGNATURE</b>
1	BVM, ELAMAKKARA	Bindu T C	
2	BVM, EROOR	Anupama Usha	
3	BVV, THRIKKAKARA	Aleyamma Gerge	
4	BVM, GIRINAGAR	Girija Pillai	
5	BAV, KAKKANAD	Seema C	
6	BMV, TRIPUNITHURA	Susmitha S Shenoy	
7	BNV, VELLOOR	Anoop M A	

**BHARATIYA VIDYA BHAVAN, KOCHI KENDRA**

**YEAR PLAN FOR THE ACADEMIC YEAR 2024-'25**

**STD : XI ARTIFICIAL INTELLIGENCE**

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
June	PART B: Unit 1: Introduction: Artificial Intelligence for Everyone PART A: Unit 1 : Communication Skills-III PART B Unit 2: Unlocking your Future in AI:	Unit 1: Introduction To AI: What is AI? History of AI What is Machine Learning What is data? Terminology and Related Concepts What machine learning can and cannot do More examples of what machine learning can and cannot do Jobs in AI Unit 1 : Communication Skills-III: Session 1: Introduction to Communication Session 2: Verbal Communication Session 3: Non-verbal Communication Session 4: Pronunciation Basics Session 5: Communication Styles — Assertiveness Session 6: Saying No — Refusal Skills PART B Unit 2: Unlocking your Future in AI: • The Global Demand • Some Common Job	Unit 1: Introduction To AI: Artificial Intelligence (AI) , Machine Learning (ML) and Deep Learning (DL) Unit 1 : Communication Skills-III: Types of communication, Communication styles Unit 2: Unlocking your Future in AI: • Common Job Roles In AI • AI Careers • Opportunities in AI

July	<p>PART B : UNIT 3 - PYTHON PROGRAMMING ( Level 1 )</p> <p>Level 1 : Basics of python programming, character sets, tokens, modes, operators, datatypes, Control Statements</p> <p>PART A: Unit 1 : Communication Skills-III</p>	<p>PART B Unit 2: AI Applications &amp; Methodologies:</p> <p>Present day AI and Applications</p> <p>Key Fields of Application in AI</p> <p>Characteristics and types of AI</p> <p>Cognitive Computing (Perception, Learning, Reasoning)</p> <p>Recommended deep-dive in NLP, CV</p> <p>AI and Society</p> <p>The Future with AI, and AI in Action</p> <p>Non-technical explanation of deep learning</p> <p>PART A Unit 1 : Communication Skills-III</p> <p>Session 7: Writing Skills — Parts of Speech</p> <p>Session 8: Writing Skills — Sentences</p> <p>Session 9: Greetings and Introduction</p> <p>Session 10: Talking about Self</p> <p>Session 11: Asking Questions</p> <p>Session 12: Talking about Family</p> <p>Session 13: Describing Habits and Routines</p> <p>Session 14: Asking for Directions</p>	<p>Unit 2: AI Applications &amp; Methodologies:</p> <p>AI applications, cognitive computing, Impact of AI on society</p> <p>Unit 1 : Communication Skills-III</p> <p>Writing skills, communication skills.</p> <p>UNIT 3 - PYTHON PROGRAMMING ( Level 1 )</p> <p>Level 1 : Basics of python programming, character sets, tokens, modes, operators, datatypes, Control Statements</p>
<b>Unit Test I: 31/07/2024</b>			

<p>August</p>	<p>PART A: Unit 2 : Self-Management Skills-III  PART B :UNIT 3 - PYTHON PROGRAMMING (Level 2)  PART B: Unit 5: DATA LITERACY – DATA COLLECTION TO DATA ANALYSIS</p>	<p>Unit 2 : Self-Management Skills-III  Session 1: Strength and Weakness Analysis  Session 2: Grooming  Session 3: Personal Hygiene  Session 4: Team Work  Session 5: Networking Skills  Session 6: Self-motivation  Session 7: Goal Setting  Session 8: Time Management</p> <p>Unit 5: Data Literacy – Data Collection to Data Analysis</p> <ul style="list-style-type: none"> <li>• What is Data Literacy?</li> <li>• Data Collection</li> <li>• Exploring Data</li> <li>• Statistical Analysis of data</li> <li>• Representation of data, Python Programs for Statistical Analysis and Data Visualization</li> <li>• Introduction to Matrices</li> <li>• Data Pre-processing</li> </ul>	<p>Unit 2 : Self-Management Skills-III  Self Awareness, Importance of working in team</p> <p>UNIT 3 - PYTHON PROGRAMMING (Level 2)</p> <p>Unit 5: DATA LITERACY – DATA COLLECTION TO DATA ANALYSIS</p>
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September	<p>PART B: UNIT 8 – AI ETHICS AND VALUES</p> <p>PART A: Unit 3: Information and Communication Technology Skills-III</p>	<p>PART B: Unit 8: AI Values (Ethical Decision Making) AI: Issues, Concerns and Ethical Considerations</p> <p>PART A: Unit 3: Information and Communication Technology Skills-III Session 1: Introduction to ICT Session 2: Basic Interface of LibreOffice Writer Session 3: Saving, Closing, Opening and Printing Document Session 4: Formatting Text in a Word Document Session 5: Checking Spelling and Grammar Session 6: Inserting Lists, Tables, Pictures, and Shapes Session 7: Header, Footer and Page Number Session 8: Tracking Changes in LibreOffice Writer</p>	<p>Unit 8: AI Values (Ethical Decision Making) AI applications, Ethics , Bias , Jobs in AI age</p> <p>Unit 3: Information and Communication Technology Skills-III Basic operations in Libre Office Writer</p>
<b>Term End Evaluation I : 18/10/2024</b>			

<p>October</p>	<p>PART B: Unit 5: INTRODUCTION TO CAPSTONE PROJECT(Practical only) - (Theory questions can be asked only for Annual exam) PART A: Unit 4 : : Entrepreneurial Skills-III</p>	<p>PART B: Unit 5: INTRODUCTION TO CAPSTONE PROJECT(Practical only) Design Thinking Empathy Map Sustainable Development Goals Capstone Project</p> <p>PART A: Unit 4 : Entrepreneurial Skills-III</p> <ul style="list-style-type: none"> <li>• Session 1: Introduction to Entrepreneurship</li> <li>• Session 2: Values of an Entrepreneur</li> <li>• Session 3: Attitude of an Entrepreneur</li> <li>• Session 4: Thinking Like an Entrepreneur</li> <li>• Session 5: Coming Up with a Business Idea</li> <li>• Session 6: Understanding the Market</li> <li>• Session 7: Business Planning</li> </ul>	<p>PART B: Unit 5: INTRODUCTION TO CAPSTONE PROJECT(Practical only)</p> <p>Unit 4 : Entrepreneurial Skills-III Functions and qualities of an entrepreneur</p>
<p>November</p>	<p>PART B: UNIT 7 – LEVERAGING LINGUISTICS AND COMPUTER SCIENCE PART A: Unit 5 : Green Skills-III</p>	<p>PART B: UNIT 7 – LEVERAGING LINGUISTICS AND COMPUTER SCIENCE</p> <p>PART A: Unit 5 : Green Skills-III</p> <ul style="list-style-type: none"> <li>• Session 1: Sectors of Green Economy</li> <li>• Session 2: Policies for a Green Economy</li> <li>• Session 3: Stakeholders in Green Economy</li> <li>• Session 4: Government and Private Agencies</li> </ul>	<p>PART B: UNIT 7 – LEVERAGING LINGUISTICS AND COMPUTER SCIENCE</p> <p>Unit 5 : Green Skills-III</p> <ul style="list-style-type: none"> <li>• Green economy initiatives</li> <li>• Importance of green economy</li> </ul>

December	PART B - UNIT 6 – MACHINE LEARNING ALGORITHMS	<p>PART B: UNIT 6 – MACHINE LEARNING ALGORITHMS</p> <ul style="list-style-type: none"> <li>• Machine Learning in a nutshell</li> <li>• Types of Machine Learning</li> <li>• Supervised Learning</li> <li>• Understanding Correlation, Regression, Finding the line, Linear Regression algorithm</li> </ul>	UNIT 6 – MACHINE LEARNING ALGORITHMS
<b>Unit Test II : 03/01/2025</b>			
January	<p>UNIT 6 – MACHINE LEARNING ALGORITHMS</p> <p>Unit 5: CAPSTONE PROJECT</p>	<p>UNIT 6 – MACHINE LEARNING ALGORITHMS</p> <ul style="list-style-type: none"> <li>• Classification – How it works, Types, k – Nearest Neighbour algorithm</li> <li>• Unsupervised Learning</li> <li>• Clustering – How it works, Types, k -means Clustering algorithm</li> </ul> <p>Unit 5: CAPSTONE PROJECT CAPSTONE PROJECT (Project Work)</p>	<p>UNIT 6 – MACHINE LEARNING ALGORITHMS</p> <p>Unit 5: CAPSTONE PROJECT</p>



February	Capstone Project / Practical and Revision Practical Exam ( Before February 15 )	Capstone Project / Practical and Revision Practical Exam ( Before February 15 )	Capstone Project / Practical and Revision Practical Exam ( Before February 15 )
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**Final Examination: 17/02/2025**

S.No	NAME OF SCHOOL	NAME OF TEACHERS	SIGNATURE
1	BVM, ELAMAKKARA	Sangeeta Srinivas	
2	BVM, EROOR	Aneesha M R	
3	BVV, THRIKKAKARA	Anagha Mani	
4	BVM, GIRINAGAR	Vandana .P	
5	BAV, KAKKANAD	Neethesh N Shenoy	
6	BMV, TRIPUNITHURA	Susmitha S Shenoy	
7	BMV, VELLOOR	Shybee Thomas, Anish M N, Anoop M A	

**BHARATIYA VIDYA BHAVAN,KOCHI KENDRA**

**YEAR PLAN -2024-2025**

**Std :XI**

**PHYSICS**

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
<b>JUNE</b>	<p><b>CHAPTER 1- UNITS AND MEASUREMENT</b></p> <p><b>CHAPTER 2- MOTION IN A STRAIGHT LINE</b></p>	<p>Need for measurement: significant figures. Dimensions of physical quantities</p> <p>Describing motion, Relations for uniformly accelerated motion (graphical treatment).</p>	<p>Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. significant figures,Rounding off(Mathematical Operations using significant figures).Dimensions of physical quantities, dimensional analysis and its applications.</p> <p>Frame of reference, Motion in a straight line, uniform and non-uniform motion, Uniformly accelerated motion, velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical treatment).</p>
<b>JULY</b>	<p><b>MOTION IN A STRAIGHT LINE (CONTD....)</b></p> <p><b>CHAPTER 3- MOTION IN A PLANE</b></p> <p><b>CHAPTER 4- LAWS OF MOTION(UPTO FRICTION)</b></p>	<p>Instantaneous velocity Scalar and vector quantities; Vector operations Resolution of vectors Motion in a plane, cases of uniform velocity and uniform acceleration projectile motion uniform circular motion</p> <p>Newtons first law of motion,Newton second law of motion,Newton's third law of motion,conservation of linear momentum ,Equilibrium of concurrent forces</p>	<p>Elementary concepts of differentiation and integration for describing motion, instantaneous velocity. Scalar and vector quantities,position and displacement vectors,general vectors and notations ,equality of vectors,multiplication of vectors by a real number,unit vector,Addition and subtraction of vectors,Resolution of a vector in a plane, rectangular components, Scalar and vector product of vectors, Motion in a plane,cases of uniform velocity and uniform acceleration, Projectile motion,Uniform circular motion.</p> <p>Intuitive concept of force, Inertia, Newton's first law of motion. Momentum and Newton's second law of motion; impulse.Newton's third law of motion. Law of conservation of linear momentum and its applications.Equilibrium of concurrent forces.</p>

**UNIT TEST 1 -  
UNITS AND MEASUREMENT(10 Marks),  
MOTION IN A STRAIGHT LINE (8 Marks),  
MOTION IN A PLANE UPTO PROJECTILE MOTION-  
PROJECTILE MOTION NOT INCLUDED (7 Marks).**

<b>AUGUST</b>	<b>LAWS OF MOTION (CONT..)  CHAPTER 5-WORK ENERGY AND POWER</b>	Friction  Work Energy Collision	Static and kinetic friction,laws of friction, rolling friction, lubrication. Dynamics of uniform circular motion:Centripetal force, examples of circular motion (vehicle on a level circular road, vehicle on a banked road).  Work done by a constant force and a variable force ,kinetic energy, work-energy theorem,power,Notion of potential energy,potential energy of a spring, conservative forces: non-conservative forces, motion in a vertical circle. Elastic and inelastic collisions in one and two dimensions.
<b>SEPTEMBER</b>	<b>CHAPTER 6- SYSTEM OF PARTICLES AND ROTATIONAL MOTION  CHAPTER 7- GRAVITATION</b>	Center of mass Moment of a force and angular momentum Equilibrium of rigid bodies Moment of inertia.  Kepler's laws of planetary motion Universal law of gravitation Gravitational potential energy Escape speed, orbital velocity of a satellite	Centre of mass of a two-particle system, momentum conservation and Centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum,law of conservation of angular momentum and its applications. Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions. Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation).  Kepler's laws of planetary motion universal law of gravitation.Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy and gravitational potential Escape speed, orbital velocity of a satellite.
<b>OCTOBER</b>	<b>CHAPTER 8- MECHANICAL PROPERTIES OF SOLIDS</b>	Elastic behaviour of solids, Modulus of Elasticity Elastic Energy	Elasticity, Stress-strain relationship, Hooke's law,Young's modulus, bulk modulus, shear modulus of rigidity(qualitative idea only), Poisson's ratio; elastic energy

**TERM END EXAMINATION I - UNITS AND MEASUREMENT(9 Marks),  
MOTION IN A STRAIGHT LINE (9 Marks),  
MOTION IN A PLANE (12 Marks), LAWS OF MOTION (12 Marks),  
WORK ENERGY AND POWER (12Marks) & SYSTEM OF PARTICLES AND ROTATIONAL MOTION (16 Marks)**

NOVEMBER	<p style="text-align: center;"><b>CHAPTER 9- MECHANICAL PROPERTIES OF FLUIDS</b></p> <p style="text-align: center;"><b>CHAPTER 10 - THERMAL PROPERTIES OF MATTER</b></p> <p style="text-align: center;"><b>CHAPTER 13 - OSCILLATIONS</b></p>	<p style="text-align: center;">Pressure, Viscosity Surface tension, Capillary rise.</p> <p style="text-align: center;">Heat ,heat transfer, blackbody radiation</p> <p style="text-align: center;">Periodic motion,simple harmonic motion energy in SHM</p>	<p>Pressure due to a fluid column; Pascal's law and its applications, (hydraulic lift and hydraulic brakes), Effect of gravity on fluid pressure. Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its simple applications. Surface energy and surface tension, Angle of contact, excess of pressure across a curved surface, Application of surface tension, Ideas to drops, bubbles, Capillary rise Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; Cp, Cv - calorimetry; change of state - latent heat capacity. Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law . Periodic motion - time period, frequency, displacement as a function of time, periodic functions and their applications. Simple harmonic motion (S.H.M) and its equations of motion; phase; oscillations of a loaded spring- restoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum derivation of expression for its time period.</p>
DECEMBER	CHAPTER 14-WAVES	Wave motion, reflection of waves	<p>Wave motion: Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, Reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats.</p>
<p><b>UNIT TEST II</b> <b>GRAVITATION( 10 Marks),</b> <b>MECHANICAL PROPERTIES OF SOLIDS (5 Marks) &amp; MECHANICAL PROPERTIES OF FLUIDS INCLUDING</b> <b>BERNOULLI'S THEOREM (10 Marks)</b></p>			
JANUARY	<p><b>CHAPTER 11-THERMODYNAMICS</b> <b>CHAPTER 12-KINETIC THEORY</b> <b>OF GASES</b></p>	<p>Zeroth law ,first law, Second law and thermodynamical process.</p> <p>Equation of state of a perfect gas, Kinetic theory of gases, degrees of freedom</p>	<p>Thermal equilibrium and definition of temperature, zeroth law of thermodynamics Heat, work and internal energy. First law of thermodynamics, Second law of thermodynamics: gaseous state of matter, change of condition of gaseous state - isothermal, adiabatic, reversible, irreversible, and cyclic processes. Equation of state of a perfect gas, work done in compressing a gas. Kinetic theory of gases- assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; Degrees of freedom, Law of equipartition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number.</p>

<b>FEBRAURY</b>	<b>REVISION</b> <b>FINAL EXAMINATION</b> <b>UNITS AND MEASUREMENT(5 Marks),</b> <b>MOTION IN A STRAIGHT LINE &amp; MOTION IN A PLANE ( 8 Marks),</b> <b>LAWS OF MOTION (5 Marks),</b> <b>WORK ENERGY AND POWER (4 Marks),</b> <b>SYSTEM OF PARTICLES AND ROTATIONAL MOTION (6 Marks),</b> <b>GRAVITATION( 5 Marks),</b> <b>MECHANICAL PROPERTIES OF SOLIDS &amp; FLUIDS (9 Marks),</b> <b>THERMAL PROPERTIES OF MATTER &amp;THERMODYNAMICS (7 Marks),</b> <b>KINETIC THEORY OF GASES (6 Marks),</b> <b>OSCILLATIONS &amp; WAVES ( 15 Marks).</b>		
	<b>Name of the teacher</b>	<b>School</b>	<b>Signature</b>
	<b>Indira Devi K K</b>	<b>BMV,Thripunithura</b>	
	<b>Gayathri R</b>	<b>BVM,Girinagar</b>	
	<b>Sreejith C K</b>	<b>BVV, Thrikkakara</b>	
	<b>Lovely K N</b>	<b>BNV ,Vellore</b>	
	<b>Kalpana B N</b>	<b>BAV , Kakkanad</b>	
	<b>Bindu S Nair</b>	<b>BVM, Elamakkara</b>	
	<b>Kala S Pillai</b>	<b>BVM, Eroor</b>	

**BHARATIYA VIDYA BHAVAN, KOCHI KENDRA****YEAR PLAN FOR THE ACADEMIC YEAR 2024-25****CLASS XI - ACCOUNTANCY**

<b>MONTH</b>	<b>TOPIC</b>	<b>SUB-TOPICS</b>	<b>CONCEPTS</b>
<b>JUNE</b>	<b>Introduction to Accounting</b>	1.1 Meaning of Accounting	Accounting- concept, meaning, Advantages and limitations, Role of accounting in Business.
		1.2 Accounting as a Source of Information	As a source of information, Types of Accounting information and their needs, Users of accounting information. Qualitative Characteristics of Accounting Information
		1.3 Objectives of Accounting	Maintenance of Records of Business Transaction Calculation of Profit and Loss Depiction of Financial Position Providing Accounting Information to its User
		1.4 Basic Terms in Accounting	Entity, Business Transaction, Capital, Drawings\Liabilities (Non-Current and Current). Assets (Non-Current, Current); Expenditure (Capital and Revenue), Expense, Revenue, Income, Profit, Gain, Loss, Purchase, Sales, Goods, Stock, Debtor, Creditor, Voucher, Discount (Trade discount and Cash Discount)
<b>JUNE -JULY</b>	<b>Theory Base of Accounting</b>	2.1 Generally Accepted Accounting Principles	Fundamental accounting assumptions': Concept
		2.2 Basic Accounting Concepts	Business Entity, Money Measurement, Going Concern, Accounting Period, Cost Concept, Dual Aspect, Revenue Recognition, Matching, Full Disclosure. Consistency, Conservatism, Materiality and Objectivity



		2.3 Systems of Accounting	Meaning
		2.4 Basis of Accounting	Cash basis and Accrual Basis
		2.5 Accounting Standards	Applicability of Accounting Standards (AS) and Indian Accounting Standards (IndAS)
		2.6 Goods and Services Tax (GST)	Characteristics and Advantages.
<b>JULY</b>	<b>Recording of Business Transactions</b>	3.1 Voucher and Transactions	Source documents and Vouchers, Preparation of Vouchers
		3.2 Accounting Equation Approach	Meaning and Analysis.
<b>UNIT TEST I (31 July – 7 August)</b>			
<b>AUGUST</b>	<b>Recording of Business Transactions</b>	3.3 Rules of Debit and Credit.	Traditional and Modern Approach
		3.4 Books of Original Entry	Journal with GST
<b>SEPTEMBER</b>	<b>Recording of Business Transactions</b>	4.1 Cash Book	Simple cash book, cash book with bank column and petty cashbook
		4.2 Special Purpose books	Purchases book, sales book, Purchases return book, sales return book and Journal proper Note: Including trade discount, freight and cartage expenses for simple GST calculation.
<b>OCTOBER</b>	<b>Recording of Business Transactions</b>	4.3 Ledger	Format, posting from journal and subsidiary books, Balancing of accounts
<b>OCTOBER-NOVEMBER</b>	<b>Recording of Business Transactions</b>	5.1 Trial balance	Trial balance: objectives, meaning and preparation (Scope: Trial balance with balance method only)
<b>TERM END EVALUATION (18 October – 30 October)</b>			

<b>NOVEMBER</b>	<b>Recording of Business Transactions</b>	5.2 Rectification of Errors	Errors: classification-errors of omission, commission, principles, and compensating; their effect on Trial Balance. Detection and rectification of errors Preparation of suspense account.
		6.1 Bank reconciliation Statement	Need and preparation, Bank Reconciliation Statement
<b>DECEMBER</b>	<b>Recording of Business Transactions</b>	7.1 Depreciation	Depreciation: Meaning, Features, Need, Causes, factors · Other similar terms: Depletion and Amortisation · Methods of Depreciation: i. Straight Line Method (SLM) ii. Written Down Value Method (WDV) Note: Excluding change of method · Difference between SLM and WDV; Advantages of SLM and WDV · Method of recoding depreciation i. Charging to asset account ii. Creating provision for depreciation/accumulated depreciation account, Treatment of disposal of asset
		7.2 Provisions and Reserves	Meaning, Difference Between Provisions and Reserves. Types of Reserves: i. Revenue reserve ii. Capital reserve iii. General reserve iv. Specific reserve v. Secret Reserve Difference between capital and revenue reserve
<b>UNIT TEST II (3 January – 10 January)</b>			



<b>JANUARY - FEBRUARY</b>	<b>Financial Statements</b>	8.1 Preparation of financial statements without adjustments	Meaning, objectives and importance; Revenue and Capital Receipts; Revenue and Capital Expenditure; Deferred Revenue expenditure. Opening journal entry. Trading and Profit and Loss Account: Gross Profit, Operating profit and Net profit. Preparation. Balance Sheet: need, grouping and marshalling of assets and liabilities. Preparation.
		8.2 Preparation of financial statements with adjustments	Adjustments in preparation of financial statements with respect to closing stock, outstanding expenses, prepaid expenses, accrued income, income received in advance, depreciation, bad debts, provision for doubtful debts, provision for discount on debtors, Abnormal loss, goods taken for personal use/staff welfare, interest on capital and manager's commission. Preparation of Trading and Profit and Loss account and Balance Sheet of a sole proprietorship with adjustments.
<b>FEBRUARY</b>	<b>Accounts of Incomplete Records</b>	9.1 Incomplete Records	Features, reasons and limitations. Ascertainment of Profit/Loss by Statement of Affairs method. (excluding conversion method)
<b>REVISION</b>			
<b>FINAL EXAMINATION (17 February - 28 February)</b>			

YEAR PLAN FOR THE ACADEMIC YEAR 2024-25		STD XI ECONOMICS	
MONTH	TOPIC	SUB-TOPICS	CONCEPTS
JUNE	<b>1. Introduction to Statistics</b>	What is Economics? Meaning, scope and importance of statistics in Economics	Consumer, Producer, Seller, Employer, employee, Economic activity, Consumption, Production and Distribution, Market, Economics, Statistics, Economic policy, Economic data.
	<b>1. Introduction</b>	Meaning of microeconomics and macroeconomics; positive and normative economics What is an economy? Central problems of an economy: what, how and for whom to produce; concepts of Production Possibility Frontier and Opportunity Cost.	Micro & Macroeconomics, Normative & Positive economics, Economy, Central problems, PPC, Opportunity cost
JULY	<b>2. Collection of data</b>	Sources of data - primary and secondary; how basic data is collected, with concepts of Sampling; methods of collecting data; some important sources of secondary data: Census of India and National Sample Survey Organization.	Sources of data, Primary data, Secondary data, Methods of data collection, Questionnaire and preparation, Modes of data collection, Personal interview, Mailing questionnaire, Telephonic interview, Pilot survey, Census, Population & Sample, Random & non-random sampling, Sampling & non-sampling errors, NSO.
	<b>2. Consumer's Equilibrium and Demand</b>	Consumer's equilibrium - meaning of Utility, Marginal Utility, Law of Diminishing Marginal Utility, conditions of consumer's equilibrium using marginal utility analysis	Consumers equilibrium, Utility, MU, DMU
AUGUST	<b>3. Organization of data</b>	Meaning and types of variables; Frequency Distribution. frequency array, exclusive and inclusive series.	Raw data, classification of data, Types of classification, Variables & attributes, Continuous & Discrete variables, Frequency distribution, Equal & Unequal classes, Inclusive & Exclusive classes, Adjustments in class intervals, Loss of information, Frequency distribution with unequal classes, Frequency array, Bivariate frequency distribution.

	<b>2. Consumer's Equilibrium and Demand</b>	Indifference curve analysis of consumer's equilibrium-the consumer's budget (budget set and budget line), preferences of the consumer (indifference curve, indifference map) and conditions of consumer's equilibrium.	Indifference curve, IC map, Budget line, Budget set.
<b>SEPTEMBER</b>	<b>4. Presentation of data</b>	Diagrammatic Presentation of Data: (i) Geometric forms (bar diagrams – Simple and Multiple, Pie diagram) (ii) Frequency diagrams (histogram, Polygon and ogive)	Textual presentation of data, tabular presentation, Parts of a table, Diagrammatic presentation, Bar diagrams & Pie diagrams, Frequency diagrams-Histogram, Polygon, Ogives, Arithmetic line graphs
	<b>2. Consumer's Equilibrium and Demand</b>	Demand, market demand, determinants of demand, demand schedule, demand curve and its slope, movement along and shifts in the demand curve; price elasticity of demand - factors affecting price elasticity of demand; measurement	Demand, Market demand, Demand schedule, Demand curve, Price elasticity
<b>OCTOBER/ NOVEMBER</b>	<b>5. Measures of central tendency: mean (simple), median and mode</b>	Mean, Median & Mode	Mean (simple), Median and Mode
	<b>3. Producer Behaviour and Supply</b>	Meaning of Production Function – Short-Run and Long-Run Total Product, Average Product and Marginal Product. Returns to a Factor Cost – Short run costs - Total Cost, Total Fixed Cost, Total Variable Cost; Average Cost; Average Fixed Cost, Average Variable Cost and Marginal Cost - meaning and their relationships. Revenue – Total Revenue, Average Revenue and Marginal Revenue - meaning and their relationship. Producer's Equilibrium - meaning and its conditions in terms of Marginal Revenue Marginal Cost. Supply, market supply, determinants of supply, supply schedule, supply curve and its slope, movements along and shifts in supply curve, price	Production function, TP, AP, MP, TR, AR, MR, TC, AC, MC, Price elasticity, Supply

		elasticity of supply; measurement of price elasticity of supply - percentage-change method.	
<b>NOVEMBER/ DECEMBER</b>	<b>6. Correlation</b>	meaning and properties, scatter diagram; measures of correlation - Karl Pearson's method (two variables ungrouped data) Spearman's rank correlation (Non-Repeated Ranks and Repeated Ranks).	Correlation, Scatter diagram, Ungrouped data, Repeated and non-repeated ranks
<b>JANUARY</b>	<b>7. Introduction to Index numbers</b>	meaning, types - Wholesale Price Index, Consumer Price Index and index of industrial production, uses of index numbers; Inflation and Index Numbers, Simple Aggregative Method.	Wholesale Price Index, Consumer Price Index and index of industrial production, uses of index numbers; Inflation and Index Numbers, Simple Aggregative Method.
	<b>4. Perfect Competition - Price Determination and simple applications.</b>	Perfect competition - Features; Determination of market equilibrium and effects of shifts in demand and supply. (Short Run Only) Simple Applications of Demand and Supply: Price ceiling, Price floor.	Perfect competition, Price ceiling, Price floor.
<b>FEBRUARY</b>	<b>REVISION/FINAL EXAM</b>		

**BHARATIYA VIDYA BHAVAN, KOCHI KENDRA****YEAR PLAN FOR THE ACADEMIC YEAR 2024-2025****STD XI - MATHEMATICS (041)**

<b>MONTH</b>	<b>UNIT</b>	<b>TOPIC</b>	<b>SUB TOPICS</b>	<b>CONCEPTS</b>
JUNE	1	<b>SETS</b>	Introduction Sets and their representations Empty set Finite and Infinite sets Equal Sets Subsets Intervals as subsets of R Universal set Operations on sets Complement of a set	Sets and their representations. Empty set, Finite and Infinite sets, Equal sets, Subsets, Subsets of a set of real numbers especially intervals (with notations), Universal set, Venn diagrams, Union and Intersection of sets, difference of sets, complement of sets, properties of complement.
	2	<b>RELATIONS AND FUNCTIONS</b>	Introduction Cartesian product of sets Relations Functions	Ordered pairs , Cartesian product of the sets, Number of elements in the cartesian product of two finite sets, Cartesian product of the set of reals with itself ( $\mathbb{R} \times \mathbb{R}$ ). Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function as a special type of relation. Pictorial representation of a function, domain, co-domain and range of a function. Real valued functions, domain and range of these functions, constant, identity, polynomial, rational, modulus, signum, exponential, logarithmic and greatest integer functions with their graphs. Sum, difference, product and quotient of functions.

JULY	4	<b>COMPLEX NUMBERS &amp; QUADRATIC EQUATIONS</b>	Introduction Complex numbers Algebra of complex numbers Argand plane	Need for complex numbers, especially $\sqrt{-1}$ to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers. Argand plane.
<b>MID TERM EVALUATION I (Chapters - 1, 2 &amp; 4)</b>				
AUGUST	8	<b>SEQUENCES AND SERIES</b>	Introduction Sequences Series Arithmetic Mean Geometric progression Relationship between AM and GM	Sequences & Series, Arithmetic Mean (A.M.) Geometric Progression (GP), general term of a G.P, sum of first n terms of a G.P., infinite G.P. and its sum, geometric mean (G.M.), relation between A.M. and G.M.
SEPTEMBER	3	<b>TRIGONOMETRIC FUNCTIONS</b>	Introduction Angles Trigonometric functions Trigonometric functions of sum and diffence of some angles	Positive and negative angles. Measuring angles in radians and in degrees and conversion from one measure to another. Definition of trigonometric functions with the help of unit circle. Truth of the trigonometric identity $\sin^2x + \cos^2x = 1$ , for all x. Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing $\sin(x \pm y)$ and $\cos(x \pm y)$ in terms of $\sin x$ , $\sin y$ , $\cos x$ & $\cos y$ and their simple applications. Deducing the identities of $\tan(x+y)$ , $\tan(x-y)$ $\cot(x+y)$ , $\cot(x-y)$ , $\sin x + \sin y$ , $\sin x - \sin y$ , $\cos x + \cos y$ , $\cos x - \cos y$ . Identities related to $\sin 2x, \cos 2x, \tan 2x, \sin 3x, \cos 3x$ and $\tan 3x$ .

	13	<b>STATISTICS (NOT FOR TERM END EVALUATION)</b>	Introduction Measures of dispersion Range Mean deviation Variance and Standard deviation	Measures of dispersion: Range, mean deviation, variance and standard deviation of ungrouped/grouped data
<b>TERM END EVALUATION (Chapters - 1, 2, 4, 8 &amp; 3)</b>				
OCTOBER	9	<b>STRAIGHT LINES</b>	Introduction Slope of a Line	Brief recall of two dimensional geometry from earlier classes, Slope of a line and angle between two lines.
NOVEMBER	9	<b>STRAIGHT LINES (CONTD)</b>	Various forms of the equation of a line Distance of a point from a line	Various forms of equations of a line: parallel to axis, point-slope form, slope intercept form, two-point form, intercept form. Distance of a point from a line.
	11	<b>INTRODUCTION TO THREE DIMENSIONAL GEOMETRY</b>	Introduction Coordinate axes and coordinate planes in 3-dimensional space Coordinates of a point in space Distance between two points Section formula	Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points
DECEMBER	6	<b>PERMUTATIONS &amp; COMBINATIONS</b>	Introduction Fundamental principle of counting Permutations Combinations	Fundamental principle of counting. Factorial n. (n!) Permutations and combinations, derivation of formula for npr and ncr and their connections, simple applications.
	7	<b>BINOMIAL THEOREM</b>	Introduction Binomial theorem for positive integral indices	Historical perspective, statement and proof of the binomial theorem for positive integral indices., Pascal's triangle, simple applications.

	10	<b>CONIC SECTIONS</b> <b>(NOT FOR MID TERM EVALUATION II)</b>	Introduction Sections of a cone Circle Parabola Ellipse Hyperbola	Sections of a cone: circle, ellipse, parabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.
<b>MID TERM EVALUATION II</b> <b>(Chapters - 13, 9, 11, 6 &amp; 7)</b>				
JANUARY	12	<b>LIMITS AND DERIVATIVES</b>	Introduction Intuitive idea of derivatives Limits Limits of Trigonometric functions Derivatives	Derivative introduced as rate of change both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions trigonometric, exponential and logarithmic functions. Definition of derivative, relate it to slope of tangent of the curve, derivative of sum, difference, product and quotient of functions. Derivatives of polynomial and trigonometric functions.
	5	<b>LINEAR INEQUALITIES</b>	Introduction Inequalities Algebraic solutions of linear inequalities in one variable	Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line.
FEBRUARY	14	<b>PROBABILITY</b>	Introduction Random experiments Event Axiomatic approach to probability	Events, occurrence of events, 'not', 'and' and 'or' events, exhaustive events, mutually exclusive events, Axiomatic (set theoretic) probability, connections with other theories of earlier classes, probability of an event, probability of 'not', 'and' and 'or' events.
<b>FINAL EXAMINATION</b>				



BAV KAKKANAD	VARSHA R, PRIYA S
BVM ELAMAKKARA	BINDHU VISHAL, SMISHA C S
BVM GIRINAGAR	BEENA V NAIR, DINI CHANDRAN
BVV THRIKKAKARA	SINDHU AYYAPPAN, ANUJA R
BVM EROOR	MINI S NAIR, RENUKA GOPINATH
BMV TRIPUNITHURA	REKHA R NAICK, MINU K JOY
BNV VELLOOR	LALITHA K, ABHILASH G NAIR

**YEAR PLAN FOR THE ACADEMIC YEAR 2024-25****CLASS XI CHEMISTRY 043**

<b>MONTH</b>	<b>TOPIC</b>	<b>SUB-TOPICS</b>	<b>CONCEPTS</b>
<b>JUNE</b>	<b>Some Basic Concepts of Chemistry</b>	General Introduction: Importance and scope of Chemistry. Nature of matter, laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules. Atomic and molecular masses, mole concept and molar mass, percentage composition, empirical and molecular formula, chemical reactions, stoichiometry and calculations based on stoichiometry	Laws of chemical combination- law of conservation of mass,law of definite proportion,law of multiple proportion Avogadro's law,gay Lussac's law of gaseous volumes Dalton's atomic theory: concept of elements, atoms and molecules. Atomic and molecular masses, average atomic massmole concept and molar mass, percentage composition, empirical and molecular formula, chemical reactions, stoichiometry and calculations based on stoichiometry - concentration terms
<b>JULY</b>	<b>Structure of atom</b>	Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbitals, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals - Aufbau principle, Pauli's exclusion principle and Hund's rule, electronic configuration of atoms, stability of half-filled and completely filled orbitals.	Subatomic particles, atomic number,mass number,isotopes,isobars, Nucleus,Electromagnetic theory of radiations,particle nature of radiation,black body radiations,photo electric effect,spectra,Bohr's postulates for hydrogen atom,negative energy of electron Dual nature of matter,orbits,orbitals,principal quantum number,azimuthal quantum number,magnetic quantum number,spin quantum number, n + 1 rule, nodes, nodal planes,electronic configuration of atoms,ions,stable configurations

<p style="text-align: center;"><b>JULY</b></p>	<p style="text-align: center;"><b>Classification of Elements and Periodicity in Properties</b></p>	<p>Significance of classification, brief history of the development of periodic table, modern periodic law and the present form of periodic table, periodic trends in properties of elements -atomic radii, ionic radii, inert gas radii, Ionization enthalpy, electron gain enthalpy, electronegativity, valency. Nomenclature of elements with atomic number greater than 100.</p>	<p>Dobererier's triads, Law of octaves, Medeleev's law, Mendeleev's periodic table, Modern periodic law. Nomenclature of elements with atomic number greater than 100, Electronic configurations and types of elements-s,p,d,f blocks, Periodic trends in properties -Physical properties-atomic radii, ionic radii, inert gas radii, Ionization enthalpy, electron gain enthalpy, electronegativity, valency. Periodic trends in chemical properties -Periodicity in valence or oxidation state, Anomalous properties of second period elements, Periodic trends in chemical reactivity</p>
<p><b>UNIT TEST - I</b>  <b>31/07/2024 TO 07/08/2024</b>  <b>PORTIONS- Some Basic Concepts of Chemistry(13), Structure of atom [Upto 2.6 - Quantum mechanical model of atom excluded.](12) Numericals(5)</b></p>			
<p style="text-align: center;"><b>AUGUST</b></p>	<p style="text-align: center;"><b>Chemical Bonding and Molecular Structure</b></p>	<p>Valence electrons, ionic bond, covalent bond, bond parameters, Lewis structure, polar character of covalent bond, covalent character of ionic bond, valence bond theory, resonance, geometry of covalent molecules,</p>	<p>Valence bond, Lewis structure, Octet rule, limitations of octet rule, formal charge, ionic bond, factors affecting ionic bond, lattice enthalpy, bond parameters- bond length, bond angle, bond energy, bond enthalpy, bond order, Resonance, canonical structures, resonance energy, resonance hybrid</p>

<b>SEPTEMBER</b>	<b>Chemical Bonding and Molecular Structure</b>	VSEPR theory, concept of hybridization, involving s, p and d orbitals and shapes of some simple molecules, molecular orbital theory of homonuclear diatomic molecules(qualitative idea only), Hydrogen bond.	Repulsion between electron pairs, shapes-linear, trigonal planar, tetrahedral, trigonal bipyramid, octahedral, bent, seesaw, square pyramidal, square planar, PE curve for the H <sub>2</sub> molecule formation, Nonexistence of He <sub>2</sub> molecule, Types of hybridization sp, sp <sup>2</sup> , sp <sup>3</sup> , dsp <sup>2</sup> , d <sup>2</sup> sp <sup>3</sup> , atomic and molecular orbitals MO energy level diagram, Hydrogen bonding- definition, reason, consequences
<b>SEPTEMBER</b>	<b>Chemical Thermodynamics</b>	Concepts of System and types of systems, surroundings, work, heat, energy, extensive and intensive properties, state functions. First law of thermodynamics -internal energy and enthalpy, heat capacity and specific heat, measurement of $\Delta U$ and $\Delta H$ , Hess's law of constant heat summation,	System, Surrounding, Open, Closed, Isolated system, surroundings, work, heat, energy, extensive and intensive properties, state functions, Reversible, Irreversible process, Isothermal, adiabatic, isobaric, isochoric processes, First law of thermodynamics -internal energy and enthalpy, heat capacity and specific heat, measurement of $\Delta U$ and $\Delta H$ , Hess's law of constant heat summation
<b>OCTOBER</b>	<b>Chemical Thermodynamics</b>	Enthalpy of bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization, solution and dilution. Second law of Thermodynamics (brief introduction) Introduction of entropy as a state function, Gibb's energy change for spontaneous and nonspontaneous processes, criteria for equilibrium. Third law of thermodynamics (brief introduction).	Enthalpy of bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization, solution and dilution. Entropy, Second law of Thermodynamics, Gibb's energy change for spontaneous and non-spontaneous processes, criteria for equilibrium. Third law of thermodynamics

**TERM END EVALUATION****18/10/2024 TO 30/10/2024****Portions - Some Basic Concepts of Chemistry(15),Structure of atom(18),Classification of Elements and Periodicity in Properties(17),Chemical Bonding and Molecular Structure(20)Numericals(7)**

<b>NOVEMBER</b>	<b>Equilibrium</b>	Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of mass action, equilibrium constant, factors affecting equilibrium - Le Chatelier's principle, ionic equilibrium- ionization of acids and bases, strong and weak electrolytes, degree of ionization,ionization of poly basic acids, acid strength, concept of pH, hydrolysis of salts (elementary idea), buffer solution, Henderson Equation, solubility product, common ion effect (with illustrative examples).	Reversible process,physical and chemical equilibrium,law of mass action,law of equilibrium,expression of equilibrium constant,characteristics of equilibrium constant,factors affecting equilibrium constant - pressure,temperature,concentration,presence of catalyst.Lechatelier's principle Electrolyte,strong and weak electrolyte,Ostwald's dilution law,degree of ionisation,poly basic acids,ka value acid strength,pH,pOH,Pkw,hydrolysis of salts,buffer solution,buffer action,Henderson equation,solubility, solubility product,common ion effect
<b>DECEMBER</b>	<b>Redox reactions</b>	Concept of oxidation and reduction, redox reactions, oxidation number, balancing redox reactions, in terms of loss and gain of electrons and change in oxidation number, applications of redox reactions.	Concept of oxidation and reduction, redox reactions, oxidation number, types of redox reaction,layer test,balancing redox reactions, in terms of loss and gain of electrons and change in oxidation number,applications of redox reactions.

<b>JANUARY</b>	<b>Organic Chemistry -Some Basic Principles and Techniques</b>	<p>General introduction, methods of purification, qualitative and quantitative analysis, classification and IUPAC nomenclature of organic compounds.</p> <p>Electronic displacements in a covalent bond: inductive effect, electromeric effect, resonance and hyper conjugation. Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carbanions, electrophiles and nucleophiles, types of organic reactions.</p>	<p>Tetravalency of carbon,classification of organic compounds,IUPAC naming, functional group,homologous series,inductive effect, electromeric effect, resonance and hyper conjugation or no bond resonance,Stability of carbocations,free radicals,classification of intermediates into electrophiles and nucleophiles,Purification methods - crystallisation,sublimation,distillation,fractional distillation,distillation under reduced pressure,steam distillation,Lassaigne's test,Dumas method,Kjeldahl's method</p>
<p><b>UNIT TEST -II</b>  <b>3/01/2025 TO 10/01/2025</b>  <b>Portions - Chemical Thermodynamics(10),Equilibrium(13)</b></p>			

<p style="text-align: center;"><b>FEBRUARY</b></p>	<p style="text-align: center;"><b>Hydrocarbons</b></p>	<p>Classification of Hydrocarbons  Aliphatic Hydrocarbons:  Alkanes - Nomenclature, isomerism, conformation (ethane only), physical properties, chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis. Alkenes - Nomenclature, structure of double bond (ethene), geometrical isomerism, physical properties, methods of preparation, chemical reactions: addition of hydrogen, halogen, water, hydrogen halides (Markovnikov's addition and peroxide effect), ozonolysis, oxidation, mechanism of electrophilic addition.  Alkynes - Nomenclature, structure of triple bond (ethyne), physical properties, methods of preparation, chemical reactions: acidic character of alkynes, addition reaction of - hydrogen, halogens, hydrogen halides and water.  Aromatic Hydrocarbons:  Introduction, IUPAC nomenclature, benzene: resonance, aromaticity, chemical properties: mechanism of electrophilic substitution. Nitration, sulphonation, halogenation, Friedel Craft's alkylation and acylation, directive influence of functional group in monosubstituted benzene. Carcinogenicity and toxicity.</p>	<p>Hydrocarbons, classification of hydrocarbons, IUPAC nomenclature, physical and chemical properties, catalytic reduction, free radical halogenation, combustion, reforming, aromatisations, pyrolysis, Markovnikov's law, peroxide effect, ozonolysis, polymerisation, acidic character of alkynes, addition reactions, resonance, aromaticity, Huckel's rule, electrophilic substitution, Arenium ion, addition reactions by benzene, directing influence, Carcinogenicity and toxicity</p>
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**FINAL EXAMINATION**

**17/02/2025 TO 28/02/2025 ( ALL PORTIONS :40% of TERM I & 60% of TERM II)**

**Some basic concepts of chemistry - 6 marks, Structure of atom - 7 marks, Classification of elements and periodicity in properties- 7 marks, UNIT Chemical bonding and molecular structure - 8 marks, Chemical thermodynamics - 5 marks, Equilibrium- 6 marks, Redox reactions- 7 marks, Organic chemistry - Some basic principles and techniques - 11 marks & Hydrocarbons- 13 marks**

**BHARATIYA VIDYA BHAVAN, KOCHI**  
**STD XI ZOOLOGY YEAR PLAN FOR THE ACADEMIC YEAR 2024-25**

<b>MONTH</b>	<b>TOPIC</b>
JUNE	CHAPTER 4 ANIMAL KINGDOM
JULY	CHAPTER 4 ANIMAL KINGDOM CONTD.. CHAPTER 7 STRUCTURAL ORGANISATION IN ANIMALS <b>UNIT TEST -I (JULY 31<sup>st</sup>-AUGUST 7<sup>th</sup>)</b> <b>CHAPTER 4 ANIMAL KINGDOM AND CHAPTER 7 STRUCTURAL ORGANIZATION IN ANIMALS</b>
AUGUST	CHAPTER 8 CELL- THE UNIT OF LIFE
SEPTEMBER	CHAPTER 9 BIOMOLECULES
OCTOBER	CHAPTER 14 BREATHING AND EXCHANGE OF GASES <b>TERM END EVALUATION 1 (OCT 18<sup>th</sup>-30<sup>th</sup>) CHAPTER 4,7 AND 8</b>
NOVEMBER	CHAPTER 15-BODY FLUIDS AND CIRCULATION CHAPTER -16-EXCRETORY PRODUCTS AND THEIR ELIMINATION
DECEMBER	CHAPTER 16-EXCRETORY PRODUCTS AND THEIR ELIMINATION CONTINUED.. CHAPTER 17-LOCOMOTION AND MOVEMENT



JANUARY	<p>UNIT TEST II -JANUARY (3<sup>rd</sup>-10<sup>th</sup>) (CHAPTER 9 - BIOMOLECULES, CHAPTER- 14 BREATHING AND EXCHANGE OF GASES</p> <p>CHAPTER 18 - NEURAL CONTROL AND COORDINATION CHAPTER-19 CHEMICAL COORDINATION AND INTEGRATION</p>
FEBRUARY	<p>REVISION</p> <p>FINAL EXAMINATION FEB 17<sup>th</sup> - 28<sup>th</sup> , FULL PORTIONS</p>

NAME OF THE SCHOOL	NAME OF THE TEACHER AND SIGNATURE
BVM, ELAMAKKARA	GEETHA SHYAMSUNDER <i>Geetha</i>
BVM, GIRINAGAR	INDU P <i>Indy</i>
BVM, EROOR	SINI MOL P <i>Sini</i>
BAV, KAKKANAD	SOUMYA K S <i>Soumya</i>
BVV, THRIKKAKARA	SREEKALA KRISHNADAS <i>Sreekala</i>
BNV, VELLOR	DHANYA K C <i>Dhanya</i>
BMV, TRIPUNITHURA	NIVYA MOL <i>Nivya</i>

BHARATIYA VIDYA BHAVAN, KOCHI KENDRA


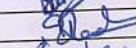
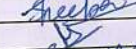




STD XI – BOTANY – YEAR PLAN

2024-2025

MONTH	TOPIC	SUB TOPICS	CONCEPTS
JUNE	1.DIVERSITY IN THE LIVING WORLD  2.BIOLOGICAL CLASSIFICATION	1.1 What is 'Living'? 1.2 Diversity in the Living World 1.3 Taxonomic Categories [ Taxonomical Aids not included ]  2.1 Kingdom Monera 2.2 Kingdom Protista 2.3 Kingdom Fungi	Characteristics of Living things. Taxonomic Hierarchy Binomial nomenclature. * Salient features of five kingdom classification *Salient features of five major kindom with examples.
JULY	2.BIOLOGICAL CLASSIFICATION CONTD .....  3. PLANT KINGDOM	2.4 Kingdom Plantae 2.5 Kingdom Animalia 2.6 Viruses, Viroids and Lichens  3.1 Algae 3.2 Bryophytes 3.3 Pteridophytes	*Salient features of plant kingdom. *Salient features of various divisions of plant kingdom with examples.
AUGUST	3. PLANT KINGDOM CONTD.... (Angiosperms, Plant life cycle, Alternation of generation NOT included)  5.MORHOLOGY OF FLOWERING PLANTS. Description of one family Solanaceae (To be dealt along with the relevant experiments of the practical syllabus	3.4 Gymnosperm 3.5 Angiosperm [upto Dicotyledons and Monocotyledons]  5.1 The Root 5.2 The Stem 5.3 The Leaf 5.4 The Inflorescence 5.5 The Flower	Taproot and fibrous root system. Parts of root.
UNIT TEST I (JULY 31st TO AUGUST 7th) Portions Living world , Biological classification , Plant Kingdom CHAPTERS 1,2 & 3			



SEPTEMBER	5.MORHOLOGY OF FLOWERING PLANTS. CONTD.....  6.ANATOMY OF FLOWERING PLANTS.	5.6 The Fruit 5.7 The Seed 5.8 Semi-technical Description of a Typical Flowering Plant. 5.9 Description of Some Important Families.5.9.2 SOLANACEAE Included [ 5.9.1 & 5.9.3 not included ]  6.1 The Tissues 6.2 The Tissue System	Parts of fruits Drupe Parthenocarpic fruits  Monocotyledonous and Dicotyledonous seed Floral symbols , diagram and Floral formula "Description of Vegetative and floral features of Plant Family  SOLANACEAE " "Meristematic tissues Permanent tissues Simple tissues Complex tissues "
OCTOBER	6.ANATOMY OF FLOWERING PLANTS.CONTD..  10.CELL CYCLE AND CELL DIVISION.	6.3 Anatomy of Dicotyledonous and Monocotyledonous Plants. [ 6.4 Secondary Growth not included]  10.1 Cell Cycle 10.2 M Phase 10.3 Significance of Mitosis	Epidermal tissue system Ground tissue system Vascular tissue system  Various stages of mitosis and its significance.
<b>TERM END EVALUATION I [OCTOBER 18th TO OCTOBER 30th] Portions Living world , Biological classification , Plant Kingdom, Morphology of flowering plants. CHAPTERS 1,2,3 &amp; 5</b>			
NOVEMBER	10.CELL CYCLE AND CELL DIVISION.CONTD...  11. PHOTOSYNTHESIS IN HIGHER PLANTS.	10.4 Meiosis 10.5 Significance of Meiosis  11.1 What do we Know? 11.2 Early Experiments 11.3 Where does Photosynthesis take place? 11.4 How many Pigments are involved in Photosynthesis? 11.5 What is Light Reaction? 11.6 The Electron Transport	Various stages of meiosis and its significance.  *Early experiments in Photosynthesis. Structure of chloroplast. Action and Absorption spectrum in Photosynthesis. Light Reaction-Cyclic and Non cyclic photophosphorylation. Chemiosmotic hypothesis.
DECEMBER	11.PHOTOSYNTHESIS IN HIGHER PLANTS. CONTD...  12..RESPIRATION IN PLANTS	11.7 Where are the ATP and NADPH Used? 11.8 The C4 Pathway 11.9 Photorespiration 11.10 Factors affecting Photosynthesis  12.1 Do Plants Breathe? 12.2 Glycolysis 12.3 Fermentation 12.4 Aerobic Respiration	Kranz Anatomy-C4Pathway Photorespiration Factors affecting Photosynthesis-Law of limiting factors  Cellular respiration Steps of glycolysis. Major pathways of anaerobic respiration The citric acid cycle.

JANUARY	12..RESPIRATION IN PLANTS. CONTD...	12.5 The Respiratory Balance Sheet 12.6 Amphibolic Pathway 12.7 Respiratory Quotient	The Respiratory Balance Sheet Amphibolic Pathway Respiratory Quotient
	13. PLANT GROWTH AND DEVELOPMENT.	13.1 Growth 13.2 Differentiation, Dedifferentiation and Redifferentiation 13.3 Development  [ 13.5 & 13.6 Photoperiodism & Vernalisation not included]	Characteristics of growth. Phases of growth. Growth Rates. Conditions of Growth Plant Growth Regulators.
JANUARY	<b>UNIT TEST II [JANUARY 3rd TO JANUARY 10 th]</b> <b>PORTIONS CHAPTERS 6 &amp;10 Anatomy of flowering plants and Cell cycle and Cell division</b>		
FEBRUARY	13. PLANT GROWTH AND DEVELOPMENT.	13.4 Plant Growth Regulators	Role of various Growth Regulators -Auxin,Gibberlin, Cytokinin,Ethylene and Abscissic acid
<b>FINAL EXAMINATION [FEBRUARY 17 th TO FEBRUARY 28 th]</b> <b>FULL PORTIONS CHAPTERS 1,2,3,5,6,10,11,12&amp;13</b>			
<b>NAME OF THE SCHOOL</b>	<b>NAME OF THE TEACHER</b>	<b>SIGNATURE</b>	
BVM, ELAMAKKARA	SUMI U MENON		
BVM, GIRINAGAR	SAVITRI VISWAKUMAR		
BVM, EROOR	RADHIKA R		
BAV, KAKKANAD	SHEEBA GEORGE		
BVV, THRIKKAKARA	MAYA DEVI		
BNV, VELLOOR	SEEMA C		
BMV, TRILPUNITHURA	MEERA VENUGOPAL		



**BHARATIYA VIDYA BHAVAN, KOCHI**

**STD XI ENGLISH - YEAR PLAN FOR THE ACADEMIC YEAR 2024-25**

MONTH	TOPIC / SUB-TOPIC		GRAMMAR	WRITING
	HORNBILL	SNAPSHOTS		
JUNE (21 days)	L1. The Portrait of a Lady P1. A Photograph	L1. The Summer of the Beautiful White Horse	G1 Tenses	W1 Poster
JULY (24 days)	P2. The Laburnum Top L2. We're Not Afraid to Die.... if We Can All Be Together (Not included for Unit Test 1)		G2. Sentence Reordering	
UNIT TEST I ( 31/07/2024 - 07/08/2024)				
AUGUST (20 days)	L3. Discovering Tut: the Saga Continues			R1. Note Making W2. Speech
SEPTEMBER (16 days)	P3. The Voice of the Rain	L2. The Address		W3. Advertisements (Classifieds) i. Situation Wanted/ vacant ii. For sale/ To Let
TERM END EVALUATION ( 18/10/2024 - 30/10/2024)				
OCTOBER (22 days)	P4. Childhood	L3. Mother's Day	G3. IF Clauses	
NOVEMBER (24 days)		L4. Birth	G2. Sentence Reordering	W3. Advertisements (Classifieds) iii. Automobile iv. Missing v. Lost and Found vi. Educational Institution vii. Travel and Tours
DECEMBER (17 days)	L4. The Adventure P5. Father to Son			W4. Debate
UNIT TEST II ( 03/01/2025 - 10/01/2025)				
JANUARY (24 days)	L5. Silk Road	L5. The Tale of Melon City	G4. Transformation of Sentences (Active / passive)	
FEBRUARY (22 days)			Revision	
FINAL EXAMINATION (17/02/2025 - 28/02/2025)				

NAME OF THE TEACHER	NAME OF THE SCHOOL	SIGNATURE
MINI M	Bhavan's Vidya Mandir, Elamakkara	
SONIA P M		
DEVI P S		
SMITHA LAKSHMI R		
PUSHPA K		
HARITHA VIKRAMAN		

LAKSHMY GOPINATH	Bhavan's Varuna Vidyalaya, Tarikkalara	
SANGEETHA E K	Bhavan's Vidya Mandir, Eroor	

**BHARATIYA VIDYA BHAVAN, KOCHI KENDRA**  
**INFORMATICS PRACTICES**  
**YEAR PLAN FOR THE ACADEMIC YEAR 2024-25**

**CLASS: XI**

MONTH	TOPIC	SUB-TOPICS	CONCEPTS
<b>JUNE</b>	Unit: 2 Introduction to Python	Basics of Python programming, execution modes: - interactive and script mode, the structure of a program, indentation, identifiers, keywords, constants, variables, types of operator, precedence of operators, data types, mutable and immutable data types, statements, expression evaluation. comments, input and output statements, data type conversion, debugging.	Python IDE, Python Tokens, Data types, Expressions, Statements, Input and Output, Debugging
<b>JULY</b>	Unit: 2 Introduction to Python	Control Statements: if-else, if-elif-else, while loop, for loop	Concept of conditional statement Concept of Iteration
<b>AUGUST</b>	Unit: 2 Introduction to Python	Control Statements: for loop Lists: list operations - creating, initializing, traversing and manipulating lists	Concept of Iteration Concept of List

<b>SEPTEMBER</b>	Unit: 2 Introduction to Python	list methods and built-in functions – len(),list(),append(),insert(), count(),index(),remove(), pop(), reverse(), sort(), min(),max(),sum()	Concept of List
<b>OCTOBER</b>	Unit: 2 Introduction to Python	Dictionary: concept of key-value pair, creating, initializing, traversing, updating and deleting elements. Dictionary: dictionary methods and built-in functions – dict(), len(), keys(), values(), items(), update(), del(), clear()	Concepts of Dictionary : Key-value pair Concept of Dictionary methods and built-in functions.
<b>NOVEMBER</b>	Unit 1 Introduction to Computer System	Introduction to computer and computing: evolution of computing devices, components of a computer system and their interconnections, Input/output devices. Computer Memory: Units of memory, types of memory – primary and secondary, data deletion, its recovery and related security concerns. Software: purpose and types – system and application software, generic and specific purpose software.	Concepts of Computer System



<p><b>DECEMBER</b></p>	<p>Unit 3: Database concepts and the Structured Query Language</p>	<p>Database Concepts: Introduction to database concepts and its need, Database Management System.          Relational data model: Concept of domain, tuple, relation, candidate key, primary key, alternate key, Advantages of using Structured Query Language, Data Definition Language, Data Query Language and Data Manipulation Language          Introduction to MySQL, creating a database using MySQL, Data Types          Data Definition: CREATE DATABASE, CREATE TABLE, DROP, ALTER</p>	<p>Concept of Database and Structured query language, Data types in MySQL, SQL for data definition</p>
<p><b>JANUARY</b></p>	<p>Unit 3: Database concepts and the Structured Query Language</p>	<p>Data Query: INSERT, SELECT, FROM, WHERE with relational operators, BETWEEN, logical operators, IS NULL, IS NOT NULL          Data Manipulation: DELETE, UPDATE</p>	<p>Data insertion, Data Updation and Deletion</p>

<b>FEBRUARY</b>	Unit 4: Introduction to the Emerging Trends	Artificial Intelligence, Machine Learning, Natural Language Processing, Immersive experience (AR, VR), Robotics, Big data and its characteristics, Internet of Things (IoT), Sensors, Smart cities, Cloud Computing and Cloud Services (SaaS, IaaS, PaaS); Grid Computing, Block chain technology.	Artificial Intelligence, Big data and its characteristics, IOT, Cloud Computing and Cloud Services
<b>S.No</b>	<b>NAME OF SCHOOL</b>	<b>NAME OF TEACHERS</b>	<b>SIGNATURE</b>
1	BVM, ELAMAKKARA		
2	BVM, EROOR		
3	BVV, THRIKKAKARA		
4	BVM, GIRINAGAR		
5	BAV, KAKKANAD		
6	BMV, TRIPUNITHURA		
7	BMV, VELLOOR		

**BHARATIYA VIDYA BHAVAN, KOCHI KENDRA****YEAR PLAN FOR THE ACADEMIC YEAR 2024-25****CLASS XI - BUSINESS STUDIES**

<b>MON TH</b>	<b>TOPIC</b>	<b>SUB-TOPICS</b>	<b>CONCEPTS</b>
<b>JUNE</b>	<b>EVOLUTION AND FUNDAMENTALS OF BUSINESS</b>	1.1 Introduction	History of Trade and Commerce in India, Indigenous Banking System, Rise of Intermediaries, Transport, Trading Communities: Merchant Corporations, Major Trade Centres, Major Imports and Exports, Position of Indian Sub-Continent in the World Economy.
		1.2 Business	Meaning of business with special reference to economic and non- economic activities, characteristics of business, comparison of business, profession and employment.
		1.3 Classification of business activities	Industry and commerce, Industry- types: Primary, secondary, tertiary: Meaning and subgroups , Commerce - Trade and Auxiliaries to trade.
		1.4 Objectives of business	Objectives of business- Economic & Social, Examine role of profit in business.
		1.5 Business Risk	Concept, nature and causes
<b>JUNE/ JULY</b>	<b>FORMS OF BUSINESS ORGANISATION</b>	2.1 Introduction	Introduction
		2.2 Sole proprietorship	Concept, merits and limitation
		2.3 Joint Hindu Family Business	Concept
		2.4 Partnership	Concept, types, merits and limitation of partnership, Registration of a partnership firm, Partnership Deed. Types of partners .



		2.5 Cooperative society	Concept, merit and limitation and types of co-operatives.
		2.6 Joint Stock Company	Concept, merits, and limitations, types- private, public and One person company. Comparison of types of companies. Formation of a company - stages, important documents to be used in formation of a company.
		2.7 Choice of form of business organisation	Distinguish between various forms of business organisations. Choice of form of business organisation
<b>MID TERM EVALUATION - I (25 MARKS)</b>			
<b>AUGUST</b>	<b>PUBLIC, PRIVATE AND GLOBAL ENTERPRISES</b>	3.1 Introduction	Introduction
		3.2 Private Sector and Public sector	Concept
		3.3 Forms of Public Sector Enterprises.	Departmental Undertakings, Statutory Corporations and Government Company. Features, merits and limitations of different forms of public sector enterprises
		3.5 Global Enterprises	Meaning and features.
		3.6 Joint Ventures	Meaning and features.
		3.7 Public, Private partnership	Meaning and features.
		<b>SEPTEMBER</b>	<b>BUSINESS SERVICES</b>
4.2 Nature of Services	Nature of services		
4.3 Types of business services	Meaning and types		
4.4 Banking	Types of bank accounts, banking services - Bank Draft, Bank overdraft, cash credit, E- banking.		
4.5 Insurance	Principles and types- Life, Health, Fire and Marine - Meaning.		
4.6 Communication services	Postal services- Mail, Registered post, parcel, speed post, courier.		
<b>EMERGING MODES OF BUSINESS</b>	5.1 Introduction		Introduction


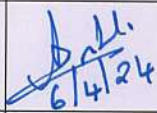
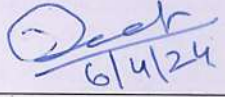
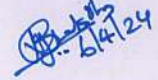


		5.2 E-business	Concept and scope.Distinguish between E-business and Traditional business
		5.3 Benefits of E-Business	Benefits of E-business
<b>OCTOBER</b>	<b>SOCIAL RESPONSIBILITIES OF BUSINESS AND BUSINESS ETHICS</b>	6.1 Introduction	Introduction
		6.2 Concept of Social Responsibility	Concept
		6.3 Arguments for social responsibility	Case of social responsibility
		6.4 Social responsibility towards different interest groups	Social responsibility towards different interest groups
		6.5 Business and environmental protection	Role of business in environment protection
		6.6 Business Ethics	Concept and elements
<b>TERM END EVALUATION (25 MARKS)</b>			
<b>NOVEMBER</b>	<b>SOURCES OF BUSINESS FINANCE</b>	7.1 Introduction	Introduction
		7.2 Meaning, nature and significance of business finance	Meaning, nature and significance of business finance
		7.3 Sources of finance	Owners' funds- equity shares, preference share, retained earnings. Borrowed funds: debentures and bonds, loan from financial institution and commercial banks, public deposits, trade credit, Inter Corporate Deposits (ICD) (meaning only).Distinguish between owner's funds and borrowed funds
	<b>SMALL BUSINESS AND ENTERPRISES</b>	8.1 Entrepreneurship Development	Concept, Characteristics and Need. Process of Entrepreneurship Development: Start-up India Scheme, ways to fund start-up. Intellectual Property Rights and Entrepreneurship.
		8.2 Small scale enterprises	Meaning,MSMED Act 2006 (Micro, Small and Medium Enterprise Development Act)



DECEMBER	INTERNAL TRADE	8.3 Role of small business in India with special reference to rural areas	Role of small business in India with special reference to rural areas
		8.4 Government schemes and agencies for small scale industries	National Small Industries Corporation (NSIC) and District Industrial Centre (DIC) with special reference to rural, backward areas
		9.1 Internal trade	Meaning and types
		9.2 wholesale trade	Services rendered by a wholesaler.
		9.3 Retail Trade	Services rendered by a retailer, Types of retail-trade-Itinerant and small scale fixed shops retailers, Large scale retailers-Departmental stores, chain stores and Mail order business – concept and features.
		9.4 Goods and Services Tax	Concept and features.
<b>MID TERM EVALUATION- II (25 MARKS)</b>			
JANUARY/ FEBRUARY	INTERNATIONAL TRADE	10.1 International Trade	Concept, benefits and scope.
		10.2 Export Trade	Meaning, Procedure and objectives.
		10.3 Import Trade	Meaning, Procedure and objectives.
		10.4 Documents involved in International Trade	Indent, letter of credit, shipping order, shipping bills, mate's receipt (DA/DP)
		10.5 World Trade Organisation	Meaning and objective
<b>FINAL EVALUATION (80 MARKS)</b>			

**SEEN AND SIGNED:**

NAME OF THE SCHOOL	NAME OF THE TEACHER	SIGNATURE
BVM, ELAMAKKARA	SHYLAJA RAJESH	 6/4/24
BVM, EROOR	ANITHA V, RENUKA	 6/4/24
BVM, GIRINAGAR	DEEPA V MENON	 6/4/24
BVV, THRIKAKKARA	VIJAYALAKSHMI B	 6/4/24
BMV, THIRUVAMKULAM	SAJITH S	
BNV, VELLOOR	SHERRY DEEPAK	
BAV, KAKKANAD	DEEPA VARGHESE	