

RAMJAS INTERNATIONAL SCHOOL

R K PURAM



Syllabus Class – 12<sup>th</sup>  
(2024-25)

**SUBJECT -ENGLISH CORE (301)****CLASS-XII**

<b>MONTH</b>	<b>UNIT</b>	<b>TOPIC</b>	<b>ART INTEGRATION</b>	<b>PRACTICALS</b>	<b>SUBJECT ENRICHMENT ACTIVITY</b>
<b>APRIL</b>		Notice Writing	Role Play Illustrate the scene observed by the poet		Look for Public Notices in their environment .
		Invitation and Reply Writing Writing: Letter to The Editor Writing: Job Application			Look for samples of Letters to the Editor from newspapers
<b>MAY</b>		Literature: Prose (Flamingo) - The Lost Spring Literature: Prose (Vistas) - The Third Level Literature: Prose (Vistas) - Journey to the end of the Earth	Compose a song/poem based on the genre of the prose piece		Dialogue Writing: Press Reporter and Saheb/Mukesh
		Literature: Poem (Flamingo) - Keeping Quiet Literature: Prose (Flamingo) - Deep Water Writing: Report Writing Literature: Poem (Flamingo) - A Thing of Beauty			
<b>JULY</b>		Literature: Prose (Flamingo) - The Rattrap			Report Writing- Independence Day Celebrations in our school
		Literature: Poem (Vistas) - The Tiger King Writing: Article Writing			Article Writing- Golden Jubilee Celebration at school
<b>AUGUST</b>		Literature: Prose (Vistas) - The Enemy Literature: Prose (Flamingo) - Indigo Literature: Poem (Flamingo) - Aunt Jennifer's Tigers	Pictorial illustration of the poem		Slogan Writing
<b>SEPTEMBER</b>					

		Literature: Prose (Flamingo) - Going Places	Role Play		
<b>OCTOBER</b>		Literature: Prose (Vistas) - Memories of Childhood Literature: Prose (Flamingo) - The Interview Literature: Prose (Flamingo) - Poets & Pancakes			Interview Writing
<b>NOVEMBER</b>		Literature: Poem (Flamingo) - A Roadside Stand Literature: Prose (Vistas) - On the Face of It			Compare and contrast the characters of the poem with those of 'The Lost Spring'

### SUBJECT –PHYSICS

MONTH	UNIT	TOPICS	ART INTEGRATION ACTIVITY	PRACTICALS	SUBJECT ENRICHMENT ACTIVITY
April	I	Chapter–1: Electric Charges and Fields Chapter–2: Electrostatic Potential and Capacitance		1.Ohms law, 2.Meter bridge-resistance 3. Meter bridge-series	1. To assemble a circuit
May	II, III	Chapter–3: Current Electricity Chapter–4: Moving Charges and Magnetism		4.Prism – angle of min deviation	2. Open circuit/ Closed circuit
June	III	Chapter–4: Moving Charges and Magnetism			
July	III,IV	Chapter–5: Magnetism and Matter Chapter–6: Electromagnetic Induction Chapter–7: Alternating Current	Investigatory Project	5.‘f’-Convex lens	3. to study variation of potential drop
Aug	V, VI	Chapter–8: Electromagnetic Waves Chapter–9: Ray Optics and Optical Instruments		6.‘f’-Convex mirror 7.Frequency-AC Mains	
Sept	VI	Chapter–10: Wave Optics			4. Identify Diode etc
Oct	VII, VIII, IX	Chapter–11: Dual Nature of Radiation and Matter Chapter–12: Atoms Chapter–13: Nuclei		8.P- Junction	5.Nature and size- convex lens 6. Polariser / Analyser

		Chapter–14: Semiconductor Electronics:Materials, Devices and Simple Circuits			
Nov	VIII, IX	Revision			
Dec		Revision &Pre Board 1 Exam			
Jan		Pre Board 2 Exam			
Feb					

### Syllabus : Chemistry (043)

Month	Unit	Topics	Art Integration Activity	Practicals	Subject Enrichment Activity
April'24	2. Electrochemistry 3. Chemical Kinetics	<p><b>2. Electrochemistry</b> Redox reactions, EMF of a cell, standard electrode potential, Relation between Gibbs energy change and EMF of a cell, Nernst equation and its application to chemical cells, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis.</p> <p><b>3. Chemical Kinetics</b> 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).</p>	Development and study of different type of cells	<p>(i) Characteristic <b>tests of carbohydrates, fats and proteins</b> in pure samples and their detection in given foodstuffs.</p> <p>(ii) Characteristic <b>tests of functional groups</b></p>	<p>1. Worksheets 2. Discussion of PYQ 3. Discussion of important Questions</p>
May'24	1. Solutions # Pre UT1	<p><b>1. Solutions</b> Types of solutions, expression of concentration of solutions of solids in</p>	HHW	<p><b>Volumetric analysis</b> Determination of concentration/ molarity of</p>	<p>1. Worksheets 2. Discussion of PYQ</p>

		liquids, solubility of gases in liquids, solid solutions, Raoult's law, colligative properties - relative lowering of vapour pressure, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties.		KMnO <sub>4</sub> solution by titrating it against a standard solution of (i) Oxalic Acid (ii) Mohr's Salt	3. Discussion of important Questions
July'24	# UT1 6. Haloalkanes and Haloarenes 7. Alcohols, Phenols and Ethers	<b>6. Haloalkanes and Haloarenes</b> <b>Haloalkanes:</b> Nomenclature, nature of C–X bond, physical and chemical properties, optical rotation mechanism of substitution reactions. <b>Haloarenes:</b> Nature of C–X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only). <b>7. Alcohols, Phenols and Ethers</b> <b>Alcohols:</b> Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration. <b>Phenols:</b> Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols. <b>Ethers:</b> Nomenclature, methods of preparation, physical and chemical properties, uses.		<b>Chromatography</b> <b>Salt analysis</b>	1. Worksheets 2. Discussion of PYQ 3. Discussion of important Questions
August'24	8. Aldehydes, Ketones and Carboxylic acids	<b>8. Aldehydes, Ketones and Carboxylic Acids</b> <b>Aldehydes and Ketones:</b> Nomenclature, nature of		<b>Salt analysis</b>	1. Worksheets 2. Discussion of PYQ

	9. Organic compounds containing Nitrogen	<p>carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes, uses.</p> <p><b>Carboxylic Acids:</b> Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses.</p> <p><b>9. Organic compounds containing Nitrogen</b> Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines.</p>			<p>3. Discussion of important Questions</p> <p>4. Visit</p>
September'24	<p># Half Yearly Examinations</p> <p>10. Biomolecules</p>	<p><b>10. Biomolecules</b></p> <p><b>Carbohydrates:</b> Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D-L configuration</p> <p><b>Proteins:</b> Elementary idea of - amino acids, peptide bond, polypeptides, proteins, structure of proteins - primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins.</p> <p><b>Nucleic Acids:</b> DNA and RNA</p>	Study of different food items and their composition	# Revision	<p>1. Worksheets</p> <p>2. Discussion of PYQ</p> <p>3. Discussion of important Questions</p>
October'24	<p>4. d and f block elements</p> <p>5. Coordination Compounds</p>	<p><b>4. d-and f-Block Elements</b></p> <p>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</p>		# Revision	<p>1. Worksheets</p> <p>2. Discussion of PYQ</p> <p>3. Discussion of important Questions</p> <p>4. Talk by alumni</p>

		<p>radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation.</p> <p>Lanthanoids - Electronic configuration, oxidation states and lanthanoid contraction and its consequences.</p> <p><b>5. Coordination Compounds</b>          Coordination compounds - Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT.</p>			
November'24	<p><b># Revision</b>  <b># PB1</b></p>			<p><b># Revision</b></p>	<p>1. Worksheets          2. Discussion of PYQ          3. Discussion of important Questions</p>
December'24	<p><b># PB2</b>  <b># Mock Practicals</b></p>			<p><b># Revision</b></p>	
January'25	<p><b># Revision</b>  <b># Practical Examinations</b></p>				
February'25	<p><b># Revision</b></p>				
March'25	<p><b># CBSE Board Examinations</b></p>				

**SUBJECT – MATHEMATICS CLASS 12 (2024-2025)**

MONTH	UNIT	TOPICS	ART INTEGRATION ACTIVITY	PRACTICALS	SUBJECT ENRICHMENT ACTIVITY
APRIL	UNIT II UNIT III	<p>Matrices</p> <ul style="list-style-type: none"> <li>*Order of a matrix.</li> <li>*Types of Matrices</li> <li>*Construction of a matrix</li> <li>*Equality of Matrices</li> <li>*Adjoint &amp; Inverse of a Matrix</li> <li>*Symmetric &amp; Skew Symmetric Matrices</li> <li>*Breaking a square matrix as sum of a symmetric and a skew Symmetric Matrix.</li> </ul> <p>Determinants</p> <ul style="list-style-type: none"> <li>*Evaluation of a Determinant by any row or any column.</li> <li>*Area of a triangle using Determinants.</li> <li>*Collinearity of 3 points using determinants.</li> <li>*discussion on Continuity &amp; Differentiability</li> <li>*Differentiation</li> </ul>	CS Coding on construction of a matrix	1.To check the continuity of a function at a given point.	Quiz
MAY	UNIT I UNIT V	<p>Relations &amp; Functions</p> <ul style="list-style-type: none"> <li>*Types of Relations</li> <li>*Types of Functions</li> <li>*Inverse trigonometry</li> <li>*Principal value branch</li> <li>*Graphs of Inverse trigonometric Functions.</li> <li>*LPP</li> <li>*Solving a system of constraints by corner point method.</li> </ul>	CS Coding on drawing the graphs of the functions.	<p>2.Graph of <math>\sin^{-1} x</math>.</p> <p>3. Checking of one one &amp; onto functions</p> <p>4.Rolles theorem</p>	Case Studies On Relations & Functions.
JULY	UNIT III	<p>Indefinite Integration</p> <ul style="list-style-type: none"> <li>*Integral as anti derivative</li> <li>*By Substitution</li> <li>*By using Trigonometry</li> <li>*By Partial fractions</li> <li>*By Parts</li> <li>*Standard forms &amp; Definite Integration.</li> </ul>		5.LMV Theorem	Problem solving
AUG	UNIT III	<ul style="list-style-type: none"> <li>*Solving Definite integrals using properties</li> <li>*AO</li> <li>*Differential Equations</li> <li>*Order and degree of a differential equation</li> <li>*Variable Seperable DE</li> <li>*Homogeneous DE</li> <li>*Linear DE</li> </ul>		6.Distance Formula in 3-D	Formula Booklet making
SEP	UNIT III	*Derivative as a rate measurer			Case studies



		*Increasing and decreasing functions			
OCT	UNIT III UNIT IV	*Maxima Minima *First Derivative Test *Second Derivative Test *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 a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition, Geometrical Interpretation, properties and application of scalar (dot) product of vectors. * Vector (cross) product of vector		7,Application of Maxima Minima 8.Absolute Maxima Minima	Case studies
NOV	UNIT IV UNIT VI	3-D *Equations of lines *In Vector and Cartesian Form *Angle between lines *Skew lines *Distance between parallel lines *PROBABILITY *Conditional Probability *Independent Events *Bayes theorem *PD Table		9.Prove using Vectors that the angle in a semi circle is a right angle. 10.Conditional Probability activity.	Case Studies Problem Solving.
DEC		PREBOARDS			QUIZ REASONING
JAN		PREBOARDS			

### SYLLABUS SUBJECT -BIOLOGY

MONTH	UNIT	TOPICS	ART INTEGRATION ACTIVITY	PRACTICALS	SUBJECT ENRICHMENT ACTIVITY
APRIL	Unit-VII Genetics and Evolution	Chapter-5: Principles of Inheritance and Variation		Study the plant population density by quadrat method.	PROJECT WORK (will continue till half yearly)
	Unit-VI Reproduction	Chapter-2: Sexual Reproduction in Flowering Plants		Study the plant population frequency by quadrat method	
	Unit-VII Genetics and Evolution			Prepare a temporary mount of onion root tip to study mitosis.	

		Chapter-6: Molecular Basis of Inheritance			
MAY	Unit-VI Reproduction	Chapter-3: Human Reproduction	HHW	Prepare a temporary mount to observe pollen germination.	
JULY	Unit-VI Reproduction  Unit-IX Biotechnology and its Applications	Chapter-4: Reproductive Health  Chapter-11: Biotechnology - Principles and Processes  Chapter-12: Biotechnology and its Applications	RESEARCH AND PPT PRESENTATIO N	Mendelian inheritance using seeds of different colour/sizes of any plant.  Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness  Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.	VISIT
AUGUST	Unit-VII Genetics and Evolution  Unit-X Ecology and Environment	Chapter-7: Evolution  Chapter-13: Organisms and Populations		Flowers adapted to pollination by different agencies (wind, insects, birds).  Pollen germination on stigma through a permanent slide or scanning electron micrograph. Models specimen showing symbolic association in root modules of leguminous plants, Cuscuta on host, lichens.  Flash cards models showing examples of homologous and analogous organ  Common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing	

				ringworm through permanent slides, models or virtual images or specimens. Comment on symptoms of diseases that they cause.	
SEPTEMBER	exam				
OCTOBER	Unit-VIII: Biology and Human Welfare  Unit-X Ecology and Environment	Chapter-8: Human Health and Diseases  Chapter-10: Microbes in Human Welfare  Chapter-14: Ecosystem		Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).  Meiosis in onion bud cell or grasshopper testis through permanent slides.  T.S. of blastula through permanent slides (Mammalian)  Controlled pollination - emasculation, tagging and bagging.	TALK ON NEET PREPARATION
NOVEMBER					CAREER COUNSELLING
DECEMBER	PB-1				
JANUARY	PB-2				

**SUBJECT – ECONOMICS**

MONTH	UNIT	TOPICS	ART INTEGRATION ACTIVITY	PRACTICALS	SUBJECT ENRICHMENT ACTIVITY
April	1	Introduction to Macro Economics  Circular Flow of Income  national Income and Related Aggregates	Data Visualization Art: students to analyze real-world economic data related to national income, such as GDP, GNP, disposable income, and consumption patterns. Then, challenging them to create artistic data visualizations, such as infographics or digital artworks, that communicate their findings in a visually compelling way.	Numerical Problems to be	Assessment Sheet
May	II,IV	Money and Banking  Govt. Budget	Banknote Collage: Provide old banknotes (no longer in circulation) or photocopies of banknotes and have students create collages depicting different aspects of money and banking, such as saving, investing, inflation, or financial institutions.		Organize a role-play activity where students take on different roles in a simulated banking environment, such as bank tellers, customers, loan officers, and financial advisors. This can help reinforce understanding of banking procedures and customer interactions.
July	III	Determination of Income and employment	Economic Policy Posters: Challenge students to design posters advocating for specific economic policies aimed at promoting income growth and employment opportunities. They can research policies such as minimum wage laws, fiscal stimulus measures, or education and training initiatives, and visually communicate their potential impacts.	Numerical Problems to be solved	Assessment sheets

August	VI	Indian Economy Development Experience (1947-90) and Economic Reforms since 1991	-----	-----	Economic Reforms Debate: Organize a structured debate where students take on the roles of policymakers, economists, business leaders, and social activists to argue for and against specific economic reform policies implemented in India since 1991. This activity can help students understand different perspectives on economic issues and policy choices.
September	VIII	Current Challenges facing Indian Economy  # Human capital formation  #rural Development	Rural Development Multimedia Presentations: students to be divided into small groups and each group is assigned a specific aspect of rural development to research and present to the class. They will be encouraged to use multimedia tools such as PowerPoint, Prezi, or video presentations to communicate their findings effectively. They can incorporate images, videos, music, and narration to provide insights into challenges and opportunities related to rural development in India.	Any one topic can be taken for CBSE Board Practical file and data analysis to be done	Nil
October	VIII	# Employment  # Sustainable development		Same as in September	
November	VIII	Development Experiences of India a comparison from neighbouring countries China and Pakistan	Economic Data Visualizations: Have students research and analyze economic data from India, China, and Pakistan, such as GDP growth rates, income distribution, poverty levels, and infrastructure development. Then, ask them to create data visualizations, such as graphs, charts, or infographics, to illustrate their findings artistically and highlight key differences and similarities among the three countries.	-----	Assessment sheets

December	V	Balance of Payments and foreign exchange	Global Currency Map: Have students create a world map highlighting different currencies and their exchange rates relative to a base currency (e.g., US dollar). They can use color-coding or symbols to indicate the strength or weakness of each currency, as well as factors influencing exchange rate movements such as inflation, interest rates, and geopolitical events.	Numerical Problems to be solved	-----
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### Accountancy

MONTH	UNIT	TOPICS	ART INTEGRATION ACTIVITY	PRACTICALS	SUBJECT ENRICHMENT ACTIVITY
APRIL	FUNDAMENTALS OF PARTNERSHIP  2.NATURE AND VALUATION OF GOODWILL	<ul style="list-style-type: none"> <li>• Partnership: features, Partnership Deed.</li> <li>• Provisions of the Indian Partnership Act 1932 in the absence of partnership deed.</li> <li>• Fixed v/s fluctuating capital accounts.</li> </ul> Preparation of Profit and Loss Appropriation account Past adjustments Guarantee of profits.  Meaning, Nature, Factors Affecting and Methods of valuation	Prepare a table showing Provisions of the Indian Partnership Act 1932 in the absence of partnership deed.  Prepare a quiz by students based on their learning.	Provide students with a variety of problem-solving tasks.	Play Tic Tac Toe to encourage active participation and critical thinking.  Provide ample practice exercises and worksheets for students to reinforce their understanding.
MAY	RECONSTITUTION OF PARTNERSHIP: - A) CHANGE IN PSR AMONG EXISTING PARTNERS	sacrificing ratio, gaining ratio, accounting for revaluation of assets and reassessment of liabilities and treatment of reserves, accumulated profits and losses. Preparation of revaluation account and balance sheet.	Flow Chart of Different Treatment at the time of Reconstitution	Numerical Problems to be solved	Regularly assess students understanding through quizzes, tasks and assignments.
JULY	RECONSTITUTION	Effect of admission	The	Provide	Regularly assess students

	<p>OF PARTNERSHIP: - B) ADMISSION OF A PARTNER (CONTINUED)</p> <p>C) RETIREMENT OF A PARTNER</p>	<p>of a partner on change in the profit sharing ratio, treatment of goodwill (as per AS 26), treatment for revaluation of assets and re-assessment of liabilities, treatment of reserves, accumulated profits and losses, adjustment of capital accounts and preparation of capital, current account and balance sheet.</p> <p>Effect of retirement / death of a partner on change in profit sharing ratio, treatment of goodwill (as per AS 26), treatment for revaluation of assets and reassessment of liabilities, adjustment of accumulated profits, losses and reserves, adjustment of capital accounts and preparation of capital, current account and balance sheet. Preparation of loan account of the retiring partner.</p>	<p>opportunity to explain by table how concepts and variables of Reconstitution are related to one another.</p>	<p>students with a variety of problem-solving tasks.</p>	<p>understanding through quizzes, tasks and assignments.</p>
AUGUST	<p>RECONSTITUTION OF PARTNERSHIP: - D) DEATH OF A PARTNER</p>	<p>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. Meaning of dissolution of partnership and partnership firm, types of dissolution of a firm. Settlement of accounts - preparation of realization account, and other related accounts: capital</p>	<p>The opportunity to explain by table how concepts and variables are related to one another &amp; causes</p>	<p>Encourage students to solve a variety of problems.</p>	<p>Play games like Tic Tac Toe, intraclass quiz to encourage active participation and critical thinking.</p>

	<p>DISSOLUTION OF A PARTNERSHIP FIRM</p> <p>A) FINANCIAL STATEMENTS OF A COMPANY</p>	<p>accounts of partners and cash/bank a/c (excluding piecemeal distribution, sale to a company and insolvency of partner(s)).</p> <p>Meaning, Nature, Uses and importance of financial Statement. Statement of Profit and Loss and Balance Sheet in</p> <p>After going through this Unit, the students will be able to:</p> <ul style="list-style-type: none"> <li>• develop the understanding of major headings and sub-headings (as per Schedule III to the prescribed form with major headings and sub-headings (as per Schedule III to the Companies Act, 2013))</li> </ul>			
SEPTEMBER	<p>REVISION TERM I EXAM</p> <p>B) ANALYSIS OF FINANCIAL STATEMENTS</p>	<p>Financial Statement Analysis: Meaning, Significance Objectives, importance and limitations.</p> <p>Tools for Financial Statement Analysis: Comparative statements, common size statements, Ratio analysis, Cash flow analysis.</p>	Prepare vertical Financial Statements highlighting with Different colours.	Provide students with a variety of problem-solving tasks.	Show students the financial Statements of Different Companies via. Annual Report.
OCTOBER	C) ACCOUNTING RATIOS	<p>Accounting Ratios: Meaning, Objectives, Advantages, classification and computation.</p> <ul style="list-style-type: none"> <li>• Liquidity Ratios</li> <li>• Solvency Ratios</li> <li>• Activity Ratios</li> <li>• Profitability Ratios</li> </ul> <p>Meaning, objectives Benefits, Cash and Cash Equivalents, Classification of Activities and</p>	PPT depicting Different Ratios	Encourage them to apply the learned concepts to solve these problems step by step.	Show students the financial Statements of Different Companies via. Annual Report. And variables to find different Ratios to make the topic more relatable and relevant for students.



	D) CASH FLOW STATEMENT	<p>preparation (as per AS 3 (Revised) (Indirect Method only) CFS with (i) Adjustments relating to depreciation and amortization, profit or loss on sale of assets including investments, dividend (both final and interim) and tax. (ii) Bank overdraft and cash credit to be treated as short term borrowings. (iii) Current Investments to be taken as Marketable securities unless otherwise specified.</p> <ul style="list-style-type: none"> <li>• Features and types of companies.</li> <li>• Share and share capital: nature and types.</li> <li>• Accounting for share capital: issue and allotment of equity and preferences shares.</li> </ul> <p>Public subscription of shares - over subscription and under subscription of shares; issue at par and at premium, calls in advance and arrears (excluding interest), issue of shares for consideration other than cash.</p> <ul style="list-style-type: none"> <li>• Concept of Private Placement and Employee Stock Option Plan (ESOP), Sweat Equity.</li> </ul>		Prepare format of Cash Flow Statements highlighting with Different colours.	
	ACCOUNTING FOR SHARE CAPITAL	<ul style="list-style-type: none"> <li>• Issue of shares for consideration other than cash.</li> </ul>			Show students the Cash Flow Statements of Different Companies via. Annual Report.
NOVEMBER	ACCOUNTING FOR SHARE CAPITAL (CONTINUED)	<p>Accounting treatment of forfeiture and re issue of shares. • Disclosure of share capital in the Balance Sheet of a company.</p> <p>Debentures: Meaning, types, Issue of debentures at par, at a premium and at a discount. Issue of</p>		Encourage them to apply the learned concepts to solve these problems step by step.	

	ISSUE OF DEBENTURES  PROJECT WORK COMPLETION	debentures for consideration other than cash; Issue of debentures with terms of redemption; debentures as collateral security-concept, interest on debentures (concept of TDS is excluded). Writing off discount / loss on issue of debentures.			
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SUBJECT – Business Studies

MONT H	UNIT	TOPICS	ART INTEGRA TION ACTIVITY	PRACTIC ALS	SUBJECT ENRICHMENT ACTIVITY
April	Marketin g Manage ment  Consume r Protectio n	<ul style="list-style-type: none"> <li>• Marketing – Concept, functions and philosophies</li> <li>• Marketing Mix – Concept and elements</li> <li>• Product – branding, labelling and packaging – Concept</li> <li>• Price - Concept, Factors determining price</li> <li>• Physical Distribution – concept, components and channels of distribution</li> <li>• Promotion – Concept and elements; Advertising, Personal Selling, Sales Promotion and Public Relations</li> <li>• Consumer Protection: Concept and importance</li> <li>• The Consumer Protection Act, 2019: Source: <a href="http://egazette.nic.in/WriteReadData/2019/210422.pdf">http://egazette.nic.in/WriteReadData/2019/210422.pdf</a> Meaning of consumer Rights and responsibilities of consumers Who can file a complaint? Redressal machinery Remedies available</li> <li>• Consumer awareness - Role of consumer organizations and Non-Governmental Organizations (NGOs)</li> <li>• Management - concept, objectives, and importance</li> <li>• Management - concept, objectives, and importance</li> </ul>	<p>Design label of product</p> <p>Design and Development of new product</p> <p>Prepare a chart showing different levels of management and the designations on different levels.</p>	<p>Project</p> <p>Assessment Sheet</p>	<p>Apply 4 P's in Developing new product.</p> <p>Simple techniques to Memory Techniques remember points.</p>

	Nature and Significance of Management	<ul style="list-style-type: none"> <li>• Management - concept, objectives, and importance</li> <li>• Management functions-planning, organizing, staffing, directing andcontrolling</li> <li>• Coordination- concept and importance</li> </ul>			
May	Principles of Management	<ul style="list-style-type: none"> <li>• Principles of Management - concept and significance</li> <li>• Fayol's principles of management</li> <li>• Taylor's Scientific management - principles and techniques</li> </ul>	Asking the students to create visual representations of thePrinciples of Management	Assessment Sheet Project	<p>Students can be tasked with designing posters, infographics, or multimedia presentations that illustrate principles.</p> <p>Simple techniques to Memory Techniques remember points.</p>
May	Business Environment	<ul style="list-style-type: none"> <li>• Business Environment- concept and importance</li> <li>• Dimensions of Business Environment - Economic, Social, Technological, Political and Legal</li> <li>• Demonetization - concept and features</li> </ul>	Design Mind maps mnemonics to memorise	Project	Students examine real-world examples of businesses and analyze their impact on the economy and vice-versa.
July	Planning  Controlling	<ul style="list-style-type: none"> <li>• Planning: Concept, importance and limitation</li> <li>• Planning process</li> <li>• Single use and Standing Plans. Objectives, Strategy, Policy, Procedure, Method, Rule, Budget and Programme</li> <li>• Controlling - Concept and importance</li> <li>• Relationship between planning andcontrolling</li> <li>• Steps in process of control</li> </ul>	Design Mind maps to memorise	Assessment Sheet	Students examine real-world examples of Controlling Activities done at different Levels in Organisation.
August	Organising	<ul style="list-style-type: none"> <li>• Organising: Concept and importance</li> <li>• Organising Process</li> <li>• Structure of organisation- functional and divisional concept. Formal and informal organization – concept</li> <li>• Delegation: concept, elements and importance</li> <li>• Decentralization: concept and importance</li> </ul>	Design Mind maps to memorise	Assessment Sheets	Organisation Chart of Different Business Organisation to understand the flow of Authority and Responsibility.

	Staffing	<ul style="list-style-type: none"> <li>• Staffing: Concept and importance of Staffing</li> <li>• Staffing as a part of Human Resource Management concept</li> <li>• Staffing process</li> <li>• Recruitment process</li> <li>• Selection – process</li> <li>• Training and Development - Concept and importance, Methods of training - on thejob and off the job - vestibule training, apprenticeship training and internship training</li> </ul>			
October	Financial Management and Financial Markets	<ul style="list-style-type: none"> <li>• Financial Management: Concept, role and objectives</li> <li>• Financial decisions: investment, financing and dividend - Meaning and factors affecting.</li> <li>• Financial Planning - concept and importance</li> <li>• Capital Structure – concept and factors affecting capital structure</li> <li>• Fixed and Working Capital - Concept and factors affecting their requirements.</li> <li>• Financial Markets: Concept</li> <li>• Money Market: Concept</li> <li>• Capital market and its types (primary and secondary)</li> <li>• Stock Exchange - Functions and trading procedure</li> <li>• Securities and Exchange Board of India (SEBI) - objectives and functions</li> </ul>	Prepare Line graph to show fluctuations in price.	students examine real-world Company, analyze and design their own portfolio.  Numerical Problems to solved	Stock Market Simulation Game.
November	Directing	<ul style="list-style-type: none"> <li>• Directing: Concept and importance</li> <li>• Elements of Directing</li> <li>• Motivation - concept, Maslow’s hierarchy of needs, Financial and non-financial incentives</li> <li>• Leadership - concept, styles - authoritative, democratic and laissez faire</li> <li>• Communication - concept, formal and informal communication; barriers to effective communication, how to overcome the barriers?</li> </ul>	Role Play	Assessment Sheets	Skit involving Barriers to effective Communication

**SUBJECT: PSYCHOLOGY**

<b>MONTH</b>	<b>UNIT</b>	<b>TOPICS TO BE COVERED</b>	<b>ART INTEGRATION ACTIVITY</b>	<b>PRACTICALS</b>	<b>SUBJECT ENRICHMENT ACTIVITY</b>
April 2024	<p data-bbox="225 248 416 389">-Unit 1: Variations in Psychological Attributes.</p> <p data-bbox="225 1160 395 1272">-Unit 2: Self and Personality.</p>	<ol data-bbox="437 248 767 1603" style="list-style-type: none"> <li>1. Introduction</li> <li>2. Individual Differences in Human Functioning</li> <li>3. Assessment of Psychological Attributes</li> <li>4. Intelligence</li> <li>5. Psychometric Theories of Intelligence, Information Processing Theory: Planning, Attention-arousal and Simultaneous successive Model of Intelligence, Triarchic Theory of Intelligence; Theory of Multiple Intelligences.</li> <li>6. Individual Differences in Intelligence</li> <li>7. Culture and Intelligence</li> <li>8. Emotional Intelligence</li> <li>9. Special Abilities: Aptitude: Nature and Measurement</li> <li>10. Creativity</li> <li>1. Introduction</li> <li>2. Self and Personality</li> <li>3. Concept of Self</li> <li>4. Cognitive and Behavioural aspects of Self</li> <li>5. Culture and Self</li> <li>6. Concept of Personality</li> <li>7. Major Approaches to the Study of Personality</li> </ol>	<p data-bbox="807 248 1046 322">- Experiential Activity</p>	<p data-bbox="1066 248 1278 360">-Introduction to Psychological testing.</p>	<p data-bbox="1303 248 1517 322">-Introduction to Case Study</p>

May 2024	<p>-Unit 2: Self and Personality</p> <p>-Unit 3: Meeting Life's challenges.</p>	<p>8. Assessment of Personality</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Self-report Measures</li> <li><input type="checkbox"/> Projective Techniques</li> <li><input type="checkbox"/> Behavioural Analysis</li> </ul> <p>1.Introduction  2.Nature, Types and Sources of Stress  3. Effects of Stress on Psychological Functioning and Health</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Stress and Health</li> <li><input type="checkbox"/> General Adaptation Syndrome</li> <li><input type="checkbox"/> Stress and Immune System</li> <li><input type="checkbox"/> Lifestyle</li> </ul> <p>4. Coping with Stress</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Stress Management Techniques</li> </ul> <p>5. Promoting Positive Health and Well-being</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Life Skills</li> <li><input type="checkbox"/> Positive Health</li> </ul>	-Poster making	- Practical 1: Raven's Progressive Matrices.	-Case Subject Selection and data collection.
July 2024	-Unit 4: Psychological Disorders	<p>1. Introduction  2. Concepts of Abnormality and Psychological Disorders</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Historical Background</li> </ul> <p>3. Classification of Psychological Disorders  4. Factors Underlying Abnormal Behaviour  5. Major Psychological Disorders</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Anxiety Disorders</li> <li><input type="checkbox"/> Obsessive-Compulsive and Related Disorders</li> <li><input type="checkbox"/> Trauma-and Stressor-Related Disorders</li> <li><input type="checkbox"/> Somatic Symptom and Related Disorders</li> <li><input type="checkbox"/> Dissociative Disorders</li> <li><input type="checkbox"/> Depressive Disorder</li> <li><input type="checkbox"/> Bipolar and Related Disorders</li> <li><input type="checkbox"/> Schizophrenia Spectrum and Other Psychotic Disorders</li> <li><input type="checkbox"/> Neurodevelopmental Disorders</li> <li><input type="checkbox"/> Disruptive, Impulse-Control and Conduct Disorders</li> </ul>	-Video Presentation of various disorders.	-Practical 2: Maudsley Personality Inventory	-Case Study work

		<input type="checkbox"/> Feeding and Eating Disorders <input type="checkbox"/> Substance Related and Addictive Disorders			
August 2024	-Unit 5: Therapeutic Approaches	1. Nature and Process of psychotherapy <input type="checkbox"/> Therapeutic relationship 2. Types of Therapies <input type="checkbox"/> Behaviour Therapy <input type="checkbox"/> Cognitive Therapy <input type="checkbox"/> Humanistic-Existential Therapy <input type="checkbox"/> Alternative Therapies <input type="checkbox"/> Factors contributing to healing in Psychotherapy <input type="checkbox"/> Ethics in Psychotherapy 3. Rehabilitation of the Mentally Ill		-Practical 3: Sinha's comprehensive Anxiety Scale.	-Role play of various therapies and techniques.
September 2024	-Half yearly Examinations	Revision			
October 2024	-Unit 6: Attitude and Social Cognition	1. Introduction 2. Explaining Social Behaviour 3. Nature and Components of Attitudes 4. Attitude Formation and Change <input type="checkbox"/> Attitude Formation <input type="checkbox"/> Attitude Change <input type="checkbox"/> Attitude-Behaviour Relationship 5. Prejudice and Discrimination 6. Strategies for Handling Prejudice		Practical 4: Sodhi's Attitude Scale	-Case study review
November 2024	Unit 7: Social Influence and Group processes	1. Introduction 2. Nature and Formation of Groups 3. Type of Groups 4. Influence of Group on Individual Behaviour <input type="checkbox"/> Social Loafing <input type="checkbox"/> Group Polarisation		Practical 5: Self Concept Scale	-Final case profile review and Interview.
December 2024	Pre Board examination				

Political Science (028)

MONTH	UNIT	TOPICS	ART INTEGRATION ACTIVITY	PRACTICALS	SUBJECT ENRICHMENT ACTIVITY
April	Book 1 Ch 1,2	1. The End of Bipolarity 2. Contemporary Centres of Power	PPT	Individual submission of PPT on Contemporary Centres of Power	Documentary Screening on the background of Bipolarity
May	Book 1 Ch 3,4	3. Contemporary South Asia 4. International Organizations	Small skit on relevance of UN and SAARC		Peer Teaching and Reviewing
June				Selection of Topic for Board Submission of Projects	
July	Book 1 Ch 5,6	5. Security in the Contemporary World 6. Environment and Natural Resources	Case Study of India's Challenges in context to Non-Traditional threats to Security	Group Project on Security-Traditional and Non Traditional or Environmental Movements and Concerns	Debate and Discussion on asymmetric and proxy warfare
August	Book 1 Ch 7 Book 2 Ch 1,2	7. Globalization 1. Challenges of Nation Building 2. Era of One Party Dominance			MUN
September	Book 2 Ch 3,4&5	3. Politics of Planned Development 4. India's External Relations 5. Challenges and Restoration of the Congress System	Role Play as Foreign Delegates/Ambassadors/High Commissioners		MUN
October	Book 2 Ch 6	6. The Crisis of Democratic Order	Political Cartoons		Mock Parliament Session
November	Book 2 Ch 7,8	7. Regional Aspirations 8. Recent Development in Indian Politics	Performance Art involving enactment of Political Speeches	Final Submission and Review of Boards Project File	Political Campaign Simulation
December				Mock Practical	
January				Final Boards Practical	



## SOCIOLOGY

MONTH	UNIT	TOPICS	ART INTEGRATION ACTIVITY	PRACTICALS	SUBJECT ENRICHMENT ACTIVITY
APRIL	BOOK 1 – CHAPTER 2  CHAPTER 3	THE DEMOGRAPHIC STRUCTURE OF THE INDIAN SOCIETY  SOCIAL INSTITUTIONS: CONTINUITY AND CHANGES	GROUP WORK – PPT PRESENTATION ON SOCIAL INEQUALITY	NEWSPAPER ACTIVITY	DEBATE NEWS HEADLINE READING WORKSHEET ASSIGNMENT
MAY	BOOK 1 – CHAPTER 5  BOARD PRACTICAL - PROJECT ON SOCIAL ISSUE	PATTERN OF SOCIAL INEQUALITY  SELECTION OF TOPIC FOR PROJECT	PROJECT ON SOCIAL ISSUE  PROVIDING WITH THE GUIDELINES OF THE PROJECT	CHOOSING A TOPIC ON SOCIAL ISSUE FOR THE PROJECT  HYPOTHESIS AND INTRODUCTION OF THE PROJECT	ROLE PLAY DISCUSSION DEBATE WORKSHEET ASSIGNMENT
JULY	BOOK – 1 CHAPTER 6  BOOK 2 – CHAPTER 1	THE CHALLENGES OF CULTURAL DIVERSITY  STRUCTURAL CHANGE	PPT PRESENTATION ON THE STRUCTURAL CHANGES IN RURAL AND URBAN SOCIETY	CHECKING THE PROJECT	NEWS HEADLINE READING DISCUSSION DEBATE WORKSHEET ASSIGNMENT
AUGUST	BOOK – 2 CHAPTER 2  CHAPTER – 4	CULTURAL CHANGE  CHANGE AND DEVELOPMENT IN RURAL SOCIETY			DEBATE WORKSHEET ASSIGNMENT  DISCUSSION ON NEWS PAPER ARTICLES
SEPTEMBER	BOOK 2 CHAPTER – 5	CHANGE AND DEVELOPMENT IN INDUSTRIAL SOCIETY			HALF YEARLY EXAM
OCTOBER	BOOK 2 – CHAPTER 8	SOCIAL MOVEMENT		MOCK PROJECT PRESENTATION & VIVA	NEWS READING WORKSHEET

NOVEMBER	BOOK 2 – CHAPTER 8 (CONTD)	SOCIAL MOVEMNT (CONTD.)			NEWS READING WORKSHEET REVISION TEST
DECEMBER	PRE- BOARDS	REVISION			ASSIGNMENT S WORKSHEETS
JANUARY	PRE- BOARDS BOARD PRACTICAL S	REVISION			ASSIGNMENT S WORKSHEETS
FEBRUARY	BOARD EXAMS				

**SUBJECT – INFORMATICS PRACTICES 12<sup>th</sup>**

<b>MONT H</b>	<b>UNIT</b>	<b>TOPICS</b>	<b>ART INTEGRATION ACTIVITY</b>	<b>PRACTICALS</b>	<b>SUBJECT ENRICHMANE T ACTIVITY</b>
Apr-24	<b>Unit 1: Data Handling using Pandas -I</b>	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 Frames: creation - from dictionary of Series, list of dictionaries, Text/CSV files; display; iteration; Operations on rows and columns: add, select, delete, rename; Head and Tail functions; Indexing using Labels, Boolean Indexing; Importing/Exportin g Data between CSV files and Data Frames.	<b>Preparing Practical File programs based on the following:</b> 1. Series 2. Data Frames	<b>Practical File programs based on the following:</b> 1. Series 2. Data Frames	Data Manipulation with Pandas DataFrames

May-24	<b>Unit 1: Data Handling using Pandas -I</b>	<p><b>Data Visualization</b> 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.</p>	<p><b>Preparing Practical File programs based on the following:</b> 1. Data Visualization</p>	<p><b>Practical File programs based on the following:</b> Data Visualization</p>	<p>Creating banner: To understand the purpose of data visualization and to learn how to plot and draw different types of plots using Matplotlib, including line plots, bar graphs, and histograms.</p>
Jun-24	<b>Unit 2: Database Query using SQL</b>	<p>Revision of database concepts and SQL commands covered in class XI</p>	<p>Preparing practical file of MySQL</p>	<p><b>Practical File programs based on the following:</b> MySQL</p>	
Jul-24	<b>Unit 2: Database Query using SQL</b>	<p>Revision of database concepts and SQL commands covered in class XI <b>Math functions:</b> POWER (), ROUND (), MOD (). <b>Text functions:</b> UCASE ()/ UPPER (), LCASE ()/ LOWER (), MID ()/ SUBSTRING () /SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM (). <b>Date Functions:</b> NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME (). <b>Aggregate Functions:</b> MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*). Querying and manipulating data using Group by, Having, Order by. Working with two tables using equi-join</p>	<p>Preparing practical file of MySQL</p>	<p><b>Practical File programs based on the following:</b> 1.MySQL 2.Math functions 3. Date Functions 4.Text functions 5.Aggregate Functions 6.equi-join</p>	<p>Design a database schema for the chosen organization, considering the following: Identify and define the entities (e.g., customers, products, orders). Determine the attributes for each entity. Establish relationships between entities (one-to-one, one-to-many, many-to-many). Define appropriate keys (primary keys, foreign keys) for maintaining data integrity.</p>

Aug-24	<b>Unit 3: Introduction to Computer Networks</b>	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.	<b>Preparing Practical File</b>	<b>Preparing Practical File</b>	Create a presentation on network devices highlighting their types, functions, and importance in networking.
Sep-24		Practical File submission + <b>HALF YEARLY EXAM</b> Practical preparation + Revision and doubt session : 6th to 21st <b>HALF YEARLY EXAM</b>	<b>Preparing Practical File</b>	<b>Preparing Practical File</b>	
Oct-24	<b>Unit 3: Database Management</b>	<ul style="list-style-type: none"> <li>● CSV : Importing/Exporting Data between CSV files and Data Frames</li> <li>● Interface of python with an SQL database: connecting SQL with Python, performing</li> </ul>	<b>Practical File + Project work started</b>	<b>Practical File + Project work started</b>	Task Description: Import data from a CSV file into a Python DataFrame and perform data manipulation operations such as filtering, sorting, or statistical analysis. Then, export the

		insert, update, delete queries using cursor, display data by using connect(), cursor(), execute(), commit(), fetchone(), fetchall(), rowcount, creating database connectivity applications, <b>use of %s format specifier or format() to perform queries</b>			modified DataFrame back to a CSV file.
Nov-24	<b>Unit 4: Societal Impacts</b>	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	<b>Practical File + Project work started</b>	<b>Practical File + Project work started</b>	<b>Cyber Safety Awareness Campaign:</b> To raise awareness about digital footprint, net and communication etiquettes, data protection, intellectual property rights (IPR), plagiarism, licensing and copyright, cybercrime and cyber laws, hacking, phishing, cyberbullying, and an overview of the Indian IT Act.
Dec-24		<b>Revision and doubt session all units</b>	<b>Practical File + Project work started</b>	<b>Practical File + Project work started</b>	
Jan-25	<b>CBSE Board Practical Exams</b>	Practical File submission + practical preparation + Revision and doubt session :			
Feb-25	<b>CBSE Board Practical Exams</b>	Revision and doubt session :			

**SUBJECT – COMPUTER SCIENCE 12<sup>th</sup>**

<b>MONT H</b>	<b>UNIT</b>	<b>TOPICS</b>	<b>ART INTEGRATIO N ACTIVITY</b>	<b>PRACTICA LS</b>	<b>SUBJECT ENRICHMAN ET ACTIVITY</b>
Apr-24	Unit 3: Database Management	<ul style="list-style-type: none"> <li>● Database concepts: introduction to database concepts and its need</li> <li>● Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key)</li> <li>● Structured Query Language: introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause, joins: cartesian product on two tables, equi-join and natural join</li> </ul>	Preparing notes and practical file of MySQL	<p><b>Practical File programs based on the following:</b></p> <ol style="list-style-type: none"> <li>1. MySQL</li> <li>2. Data Query</li> <li>3. SELECT</li> <li>4. Delete</li> <li>5. Drop</li> <li>6. Alter</li> <li>7. INSERT</li> <li>8. DELETE UPDATE</li> </ol>	Design a database schema for the chosen organization, considering the following: Identify and define the entities (e.g., customers, products, orders). Determine the attributes for each entity. Establish relationships between entities (one-to-one, one-to-many, many-to-many). Define appropriate keys (primary keys, foreign keys) for maintaining data integrity.
May-24	Unit 1: Computational Thinking and Programming – 2	<ul style="list-style-type: none"> <li>● Revision of Python topics covered in Class XI.</li> </ul>		<p><b>Practical File programs based on the following:</b></p> <p>Class XI all important topics like Function list, dictionary and string</p>	
Jun-24					

Jul-24	Unit 1: Computational Thinking and Programming – 2	<ul style="list-style-type: none"> <li>● Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)</li> <li>● Exception Handling: Introduction, handling exceptions using try-except-finally blocks</li> <li>● Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths</li> </ul>	<p><b>Preparing Practical File programs based on the following:</b></p> <ol style="list-style-type: none"> <li>1. Functions</li> <li>2. Exception Handling</li> <li>3. Introduction to files</li> </ol>	<p><b>Practical File programs based on the following:</b></p> <ol style="list-style-type: none"> <li>1. Functions</li> <li>2. Exception Handling</li> <li>3. Introduction to files</li> </ol>	<p><b>Create a chart :</b></p> <ol style="list-style-type: none"> <li>1. Functions</li> <li>2. Exception Handling</li> <li>3. Introduction to files</li> </ol>
Aug-24	Unit 1: Computational Thinking and Programming – 2	<ul style="list-style-type: none"> <li>● Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file</li> <li>● Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file</li> <li>● CSV file: import csv module, open / close csv file, write into a csv file using writer(), writerow(), writelines() and read from a csv file using reader()</li> <li>● Data Structure: Stack, operations on stack (push &amp;</li> </ul>	<p><b>Preparing Practical File programs based on the following:</b></p> <ol style="list-style-type: none"> <li>1. Text file</li> <li>2. Binary file</li> <li>3. CSV file</li> <li>4. Data Structure</li> </ol>	<p><b>Practical File programs based on the following:</b></p> <ol style="list-style-type: none"> <li>5. Text file</li> <li>6. Binary file</li> <li>7. CSV file</li> <li>8. Data Structure</li> </ol>	<p>Activity based on file modes</p>

		pop), implementation of stack using list.			
Sep-24		Practical File submission + HALF YEARLY EXAM Practical preparation + Revision and doubt session : 6th to 21st HALF YEARLY EXAM	<b>Preparing Practical File Work</b>	<b>Preparing Practical File Work</b>	<b>Preparing Practical File Work</b>
Oct-24	Unit 3: Database Management	<ul style="list-style-type: none"> <li>Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using connect(), cursor(), execute(), commit(), fetchone(), fetchall(), rowcount, creating database connectivity applications, use of %s format specifier or format() to perform queries</li> </ul>	<b>Practical File + Project work started</b>	Project work started	Creating banner based on different type of data access activity
Nov-24	Unit 2: Computer Networks	<ul style="list-style-type: none"> <li>Evolution of networking: introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET)</li> <li>Data communication terminologies: concept of communication, components of data communication (sender, receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)</li> <li>Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves)</li> </ul>	<b>Practical File + Project work started</b>	Project work started	<b>Banner Activity</b> : Network devices Network protocol



		<ul style="list-style-type: none"> <li>● Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card)</li> <li>● Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree)</li> <li>● Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP</li> <li>● Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting</li> </ul>			
Dec-24		<b>Revision and doubt session all units</b>	<b>Practical File + Project work started</b>	Project work started	
Jan-25	CBSE Board Practical Exams	Practical File submission + practical preparation + Revision and doubt session			
Feb-25	CBSE Board Practical Exams	Revision and doubt session			

### GAMES , SPORTS AND FITNESS

MONTH	UNIT	TOPICS	ART INTEGRATION ACTIVITY	PRACTICALS	SUBJECT ENRICHMENT ACTIVITY
April and May	1st week - General motor fitness drills.  2nd week - Mass PT for co-ordination  3rd week - strength and flexibility.	1. Warming up 2. Continuous run/walk. 3. Free hand exercises in group.  1. Warming up 2. Free hand exercises for mobility. 3. Four exercises will be practiced in 16 counts each.  1. Body weight exercises for upper body strength.	N/A	N/A	N/A

	4th week - Free play.	<p>a. Push ups with modification for boys and girls.</p> <p>b. Plank, V Position hold for Core strength.</p> <p>2. Dynamic and Static stretching exercises for upper and lower body.</p> <p>Football Basket ball Badminton Self game</p>			
July	<p>1st week - General motor fitness drills.</p> <p>2nd week - Mass PT for coordination</p> <p>3rd week - speed, agility.</p> <p>4th week - Free play</p>	<p>1. Running/jogging(15 mins)</p> <p>2. Slow fast run/walk.</p> <p>3. Free hand exercises/calisthenics.</p> <p>1. Warming up</p> <p>2. Free hand exercises.</p> <p>3. Six exercises will be practiced in groups, supervised by teacher and student leaders.</p> <p>1. Warming up</p> <p>2. Free hand exercises.</p> <p>3. 50 mts, 80 mts sprints with repetitions.</p> <p>Football Basketball Badminton Self game</p>			
August	<p>1st week - General and specific motor fitness drills.</p> <p>2nd week - March past practice.</p> <p>3rd week - Indigenous game, kho kho</p> <p>4th week - Game play</p>	<p>Running, jumping and shuffling drills on hurdles and cones.</p> <p>1. Standing in file formation</p> <p>2. Marching on the spot.</p> <p>3. About turn practice.</p> <p>4. Quarter turn right and left.</p> <p>Teaching rules and regulations kho kho with game play.</p> <p>Basketball Football Badminton Self game</p>			

September	1st week - Evaluation  2nd and 3rd week - Term 1 exams 4th week - Free play	Fitness test Viva  Term 1 Exams  Football Basketball Volleyball Badminton			
October	1st and 2nd week Mass PT March past  3rd and 4th week  Free play	1.Exercise 1 to 8. practice in one group supervised by student leader and teacher. 2.Marching on the spot. 3.Forward march. 4.practice for arm actions. Football Basketball Badminton Dodgeball			
November	RBCL	RBCL			
December	RBCL	RBCL			
January	1st week and 2nd week 3rd week - Group fitness drills 4th week - Free play	Winter break 1.Shuttle Run. 2.Push ups 3.Sit ups Football Basketball Badminton			
February	Evaluation	Fitness test Viva			