



**DAV CENTENARY PUBLIC
SCHOOL, CHANDER NAGAR,
GHAZIABAD**

**ANNUAL CURRICULUM PEDAGOGICAL
PLAN**

SESSION:2026-27

CLASS-XII

Economics

Month	Unit / Topic	Learning Objectives	Learning Outcomes	Resources	Interdisciplinary Connections	Assessment Tools
April - May	(Macro) National Income & Aggregates (IED) Development Experience (1947-90)	To understand circular flow and GDP calculation; to analyze the state of India at independence.	Students will calculate NNP_{FC} and evaluate the impact of Land Reforms/Green Revolution.	National Accounts data; "Tryst with Destiny" speech; NCERT.	Maths: Linear equations. History: Colonial impact on trade.	Numerical worksheets; Timeline of Five-Year Plans.
July	(Macro) Money & Banking (IED) Economic Reforms since 1991 (\$LPG\$)	To understand credit creation and RBI tools; to analyze the shift from "License Raj" to Global Markets .	Students can explain Repo Rate/CRR and critically appraise Liberalization and Privatization.	\$RBI\$ Monetary Policy reports; 1991 Crisis case studies.	Business Studies: Global business environment. Legal Studies: Banking laws.	Mock "Monetary Policy Committee" session; Debate on LPG.
August	(Macro) Determination of Income & Employment	To study Aggregate Demand (AD) and the Multiplier effect (k).	Students will identify Inflationary/Deflationary gaps and suggest fiscal/monetary remedies.	Keynesian consumption function graphs.	Psychology: Propensity to consume/save. Maths: Geometric progression (k).	Graph-drawing drill; Multiplier numerical test.
September	(IED) Human Capital & Rural Development	To distinguish between human capital and human development; to study rural credit/marketing.	Students can explain why health and education lead to GDP growth and the role of Organic Farming.	Human Development Index (HDI) reports; NABARD case studies.	Sociology: Rural social structures. Biology: Sustainable agriculture.	Project on "Skill India"; Mid-Term Examinations.
October	(Macro) Govt. Budget & Economy (IED) Employment & Infrastructure	To understand Budget components and deficits; to analyze formal vs. informal employment.	Students will classify govt. receipts/expenditure and analyze the "Jobless Growth" phenomenon.	Current Union Budget documents; NSSO labor data.	Pol. Science: Budgetary process. Social Work: Labor rights.	Budget analysis report; Survey of local informal sector.
November	(Macro) BoP & Forex (IED) Environment & Sustainable Development	To learn about exchange rates and BoP accounts; to understand "carrying capacity."	Students can distinguish between Current/Capital accounts and propose sustainable growth strategies.	Forex rate tickers; Sustainable Development Goals (SDGs).	Geography: Global trade routes. EVS: Carbon footprints.	BoP classification chart; Poster on Green Economy.

December	(IED) Comparison with Neighbours (China/Pak)	To compare growth indicators (GDP, HDI, Sectoral share) across borders.	Students will use data to explain why China outpaced India and identify common hurdles.	World Bank Development Indicators.	International Relations: Geopolitics. Stats: Comparative data analysis.	Comparative data presentation; Viva-voce.
Jan - Feb	Revision & Project Completion	To consolidate all Macro and IED concepts for Board Exams.	Students will demonstrate mastery over theory and the ability to apply it to their 20-mark project.	Sample Papers; Previous Year Questions (PYQs).	General: Critical thinking & writing.	Pre-Board Exams; Final Project submission.

Marketing

Chapter/Topic	Learning Outcomes	Learning Strategies	Resources	Interdisciplinary Connections	ASSESSMENT TOOLS
PRODUCT (APRIL ANDMAY)	Students will be able to * Explain the concept of product mix and its elements. *Understand the stages of the product life cycle (PLC). * Analyze the importance of branding, labelling, and packaging. *Differentiate between various types of products.	*Case studies of successful and failed product launches. * Product design and development simulations. *Analysis of branding strategies. *Creating product portfolios. * Group discussions on product innovation	CBSE STUDY MATERIAL	* Design & Technology: Product design, ergonomics. * Business Studies: Operations management, innovation. * Art & Design: Visual communication, packaging design. *Entrepreneurship: New product development.	*Oral test for the preparation of MCQ'S *Practical file
PRICE MAY TO JULY	Students will be able to: * Explain the factors affecting price determination. *Understand various pricing strategies (cost-based, competition-based, demand-based). * Analyze the importance of pricing policies. * Calculate break-even points and profit margins.	*Price comparison exercises. * Role-playing pricing negotiations. * Case studies on pricing strategies. * Analyzing the impact of discounts and promotions. *Mathematical problem-solving related to pricing.	CBSE STUDY MATERIAL	* Mathematics: Financial calculations, statistical analysis. * Economics: Demand and supply, price elasticity. * Cost Accounting: Cost analysis, break-even analysis. *Business Studies: Financial management.	*Oral test for the preparation of MCQ'S *Practical file

PLACE AUGUST	Students will be able to: * Understand the importance of distribution channels. * Analyze different types of distribution channels (direct, indirect). * Explain the functions of wholesalers and retailers. * Understand the components of physical distribution (logistics).	* Channel mapping exercises. * Visits to retail stores and distribution centers. * Analysis of e-commerce distribution models.	CBSE STUDY MATERIAL	* Geography: Location analysis, transportation networks. * Business Studies: Operations management.	* Oral test for the preparation of MCQ'S * Practical file
PROMOTION September TO OCTOBER	Students will be able to: * Explain the elements of the promotion mix (advertising, sales promotion, PR, personal selling). * Understand the role of integrated marketing communication (IMC). * Analyze the effectiveness of different promotional strategies. * Develop a promotional campaign.	* Creating advertising campaigns (print, digital). * Designing sales promotion materials. * Developing PR strategies. * Analyzing social media marketing campaigns. * Presenting promotional plans.	CBSE STUDY MATERIAL	* Media Studies: Advertising, public relations, digital media. * English Language: Communication skills, copywriting. * Art & Design: Visual communication, graphic design. c.	* Oral test for the preparation of MCQ'S * Practical file
EMERGING TRENDS IN MARKETING October TO November	Students will be able to: * Understand digital marketing and social media marketing	* Analyzing digital marketing campaigns * Discussions on emerging marketing trends	CBSE STUDY MATERIAL		* Oral test for the preparation of MCQ'S * Practical files

**BUSINESS STUDIES
BOOK NCERT**

Unit/Topic	Learning Outcomes	Assessment Tools	Teaching/Learning Strategies/Activities	Resources	Interdisciplinary Connections
PART B: Marketing Management (march to april) Number of periods: 30	Students will be able to *Define the concept and functions of marketing. * Explain the elements of the marketing mix (4Ps). *Explain the process of marketing planning.	* Class tests * Project work on developing a marketing plan *Presentations on marketing campaigns	Interactive lectures * Case study discussions on marketing strategies * Group /individual activities on developing marketing mix elements	* NCERT Textbook * Marketing journals and websites * Case studies on marketing campaigns	* Economics (e.g., market research, consumer behavior) * Psychology (e.g., advertising, branding)
Consumer Protection (may) Number of periods: Part A: Principles and Functions of Management (july) Number of periods:12	Students will be able to *Explain the rights and responsibilities of consumers. * Explain the Consumer Protection Act and its provisions. *Interrelate the redressal mechanisms available to consumers students will be able to * Define management, its features, objectives, and importance. * Explain the evolution of management thought (F.W. Taylor, Fayol, etc.). * Describe the functions of management (planning, organizing, staffing, directing, controlling). * Differentiate between management	* Class tests (legal and case-based) *Presentations on consumer rights * Mock trials on consumer disputes Class tests (objective & subjective) * Case study * Group discussions	Interactive * Role-playing consumer complaint scenarios Interactive lectures * Case study discussions * Group projects on real-world organizations * Role-playing management scenarios	* NCERT Textbook * Consumer protection websites . * Articles on consumer rights. NCERT Textbook * Business magazines (e.g., Business Today, Economic Times) * Case study books	Economics (e.g., resource allocation, efficiency) *History (e.g., evolution of organizations) *Psychology (e.g., motivation, leadership)

	levels and their functions.				
2.Principles of Management (July) Number of periods:14	Students will be able to *Evaluate Fayol's 14 principles of management. * Apply these principles to real-world business situations. * Analyze the significance of management principles in achieving organizational goals.	* Class tests (application-based questions) * Case study analysis * Group discussions * Project work on applying principles in organizations	* Interactive lectures * Case study discussions * Group activities applying principles * Debates on the relevance of principles in modern business	* NCERT Textbook * Case study	* Ethics (e.g., fairness, equity) * Social Studies (e.g., organizational structures)
Business Environment (aug) Number of periods:12	Students will be able to *Explain the concept of the business environment and its importance. * Explain the features of the business environment (dynamic, complex, etc.). * Analyze the impact of various dimensions of the business environment (economic, social, political, technological, legal) on business decisions.	* Class tests (case-based questions) *Group discussions on environmental impact * Project work on analyzing a specific business environment	* Interactive lectures * Newspaper and magazine analysis * Group projects on analyzing the business environment of a particular industry	* NCERT Textbook *Business newspapers and magazines * Online resources on current events	*Economics (e.g., economic policies, market forces) *Political Science (e.g., government regulations) *Sociology (e.g., social trends)
4.Planning (aug) Number of periods:14	Students will be able to *Define the concept and importance of planning. * Explain the steps involved in the planning process. *Differentiate between different types of plans (objectives, strategies, policies, procedures, budgets, etc.).	* Class tests (objective & subjective) * Case study analysis on planning scenarios	* Interactive lectures * Case study discussions * Group activities on developing plans * Simulation exercises on planning	* NCERT Textbook * Case study	

5.Organizing (sept) Number of periods:15	Students will be able to *Describe the concept and importance of organizing. * Explain the steps involved in the organizing process. *Differentiate between formal and informal organizations. *Discuss the different organizational structures (functional, divisional). * Explain the concept of delegation and decentralization.	* Class tests (diagrammatic and descriptive) * Case study analysis on organizational	* Interactive lectures * Case study discussions * Group activities on designing organizational charts	* NCERT Textbook *Organizational structure charts	* Social Studies (e.g., organizational behavior)
6.Staffing (oct) Number of periods: 16	Students will be able to *Define the concept and importance of staffing. * Explain the process of staffing (recruitment, selection, training, development). *Explain the various methods of recruitment and selection.	* Class tests (process-based questions)	* Interactive lectures * Case study discussions on staffing issues * Mock interviews and group discussions	* NCERT Textbook	Psychology (e.g., personality tests, motivation)
7.Directing (oct) Number of periods: 15	Students will be able to *Explain the concept and importance of directing. * Explain the elements of directing (supervision, motivation, leadership, communication). *Analyse different leadership styles. * Explain the importance of effective communication.	* Class tests (case-based on leadership and communication) * Role-playing leadership and communication scenarios	* Interactive lectures * Case study discussions on leadership and communication challenges * Group activities on communication skills	* NCERT Textbook	*Psychology (e.g., motivation theories, leadership styles)

8.Controlling (oct) Number of periods: 12	Students will be able to *Define and explain the concept and importance of controlling. * Explain the steps involved in the controlling process. *Evaluate various control techniques.	* Class tests (process-based and analytical) * Case study analysis on control failures	* Interactive lectures * Case study discussions on control mechanisms	* NCERT Textbook	* Statistics (e.g., control charts)
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Accountancy

Topic No. of periods When	Learning Outcome	Assessment Tools	Teaching Learning Strategies/ Activities	Resources	Inter-Disciplinary
Topic: Fundamentals of Partnership No. Of Periods : 15-18 When: March - April	The students will be able to: Define partnership, partnership deed, and partner. State the features of a partnership. Describe the contents of a partnership deed Recall the provisions of the Indian Partnership Act in the absence of a partnership deed Prepare profit and loss appropriation account Account for interest on capital, interest on drawings, and partner's salary Differentiate between fixed and fluctuating capital methods	Short Tests Case study analysis by preparing P/L Appropriation a/c in various cases	Preparation of P/L Appropriation a/c Partners Capital and Current accounts Lecture and discussion in various issues faced by Partnership firms Role-playing activity where students act as different types of partners Problem-solving exercises involving adjustments in the P&L appropriation account.	Text book Worksheets Class Board and Chalk and Duster Other reference books	
Topic: Change in PSR and Calculation of Goodwill	The students will be able to: Define goodwill. Recall the factors affecting	Class participation and discussions. Individual and group problem-	Lecture and discussion on the definition and factors affecting goodwill Case studies illustrating situations where goodwill	Text book Worksheets Class Board and Chalk and Duster	

No. Of Periods : 10-12 When: April - May	goodwill. State the different methods of calculating goodwill Calculate the new profit-sharing ratio, sacrificing ratio, and gaining ratio. Account for goodwill in case of a change in profit-sharing ratio Define and explain the concept of change in profit sharing ratio Calculate sacrificing ratio and gaining ratio. Explain the accounting treatment of accumulated profits/losses and reserves. Pass necessary journal entries for the adjustment of goodwill. Prepare the revaluation account and partners' capital accounts. Solve comprehensive problems related to the change in profit sharing ratio.	solving activities. Worksheets and assignments. Periodic tests and quizzes. Comprehensive chapter-end test.	valuation is necessary (e.g., admission/retirement of a partner, sale of business) Practice exercises where students calculate goodwill using the Average Profit Method, Super profit method and capitalization method for different scenarios Journal entries for adjusting goodwill Explanation of different types of reserves and accumulated profits/losses. Journal entries for distribution or transfer of reserves. Explanation of the revaluation process. Preparation of revaluation account and journal entries. Preparation of partners' capital accounts. Comprehensive problem-solving.	Other reference books	
Topic: Admission of a partner No. Of Periods : 15-18 When: May - July	The students will be able to: Define admission of a partner. Recall the reasons for admitting a new partner Calculate the new profit-sharing ratio, sacrificing ratio, and gaining ratio.	Class participation and discussions. Individual and group problem-solving activities. Worksheets and assignments. Periodic tests and quizzes.	Lecture and discussion on the definition and reasons Brainstorming activity where students list potential reasons for admitting a partner Step-by-step explanation of the calculation process of the ratios Discussion on the accounting treatment of	Text book Worksheets Class Board and Chalk and Duster Other reference books	

	ratio Explain the accounting treatment of goodwill Explain the need for revaluation. Prepare the revaluation account and journal entries Justify the adjustments made upon admission of a partner	Comprehensive chapter-end test.	goodwill, including the different methods (e.g., premium method, revaluation method) Practice exercises involving preparing the revaluation account and related journal entries Practice exercises involving preparing partners' capital accounts		
Topic: Retirement and Death of a partner No. Of Periods : 10-12 When: July	The students will be able to: Define retirement and death of a partner. Recall the reasons for retirement Calculate the new profit-sharing ratio, gaining ratio, and remaining ratio Explain the accounting treatment of Goodwill Prepare the revaluation account and journal entries Account for accumulated profits and losses Explain and apply different methods of calculating the amount due (including treatment of goodwill, share of profit up to the date of retirement/death, and interest on capital)	Class participation and discussions. Individual and group problem-solving activities. Worksheets and assignments. Periodic tests and quizzes. Comprehensive chapter-end test.	Brainstorming activity on reasons for retirement Practice exercises with different scenarios Practice exercises with the revaluation account and journal entries Practice exercises preparing capital accounts and Retiring partners Loan a/c Practice exercises preparing Deceased partners capital a/c and his/her Executor's a/c	Text book Worksheets Class Board and Chalk and Duster Other reference books	
Topic: Dissolution of Partnership firm No. Of Periods : 10-12	The students will be able to: Define and explain the meaning of dissolution of a partnership firm.	Class participation and discussions. Individual and group problem-solving activities.	Lectures, presentations Explaining the steps involved in realizing assets, paying liabilities, and distributing surplus/deficit. Explaining the accounting	Text book Worksheets Class Board and Chalk and Duster Other reference	

When: July - August	Explain the accounting treatment of dissolution Differentiate dissolution of partnership and firm. Prepare the key accounts Explain how to account for goodwill, unrecorded assets/liabilities, and partner's loans during dissolution.	Worksheets and assignments. Periodic tests and quizzes. Comprehensive chapter-end test.	treatment of goodwill, unrecorded assets/liabilities, and partner's loans. Solving numerical problems to determine the amount due to/from each partner Working through examples of accounting for unrecorded assets/liabilities and partner's loans.	books	
Topic: Issue of Shares No. Of Periods : 15-18 When: August - September	The students will be able to: Define shares and their characteristics Explain the accounting treatment for different issue scenarios Define key terms related to shares Prepare journal entries for different issue scenarios Prepare journal entries for forfeiture and re-issue	Class participation and discussions. Individual and group problem-solving activities. Worksheets and assignments. Periodic tests and quizzes. Comprehensive chapter-end test.	Lectures, presentations, textbook reading, glossary creation. Explaining the journal entries for at par, premium issues. Explaining the meaning of authorized capital, issued capital, etc. Explaining the accounting treatment for calls in arrears and calls in advance Working through examples of share forfeiture and re-issue Solving numerical problems involving the calculation of calls in arrears and calls in advance	Text book Worksheets Class Board and Chalk and Duster Other reference books	Analyze the impact on financial structure (Business Studies)
Topic: Issue of Debentures No. Of Periods : 15-18 When: September	The students will be able to: Define debentures and their characteristics Explain the types of debentures Explain the accounting treatment for different issue scenarios Analyze the impact on financial structure Prepare journal entries for	Class participation and discussions. Individual and group problem-solving activities. Worksheets and assignments. Periodic tests and quizzes. Comprehensive chapter-end test.	Lectures, presentations, textbook reading, glossary creation Explaining the journal entries for at par, premium, and discount issues. Explaining the meaning of face value, issue price, and redemption value. Discussing how issuing debentures affects a company's debt-equity ratio. Explaining the accounting treatment for debenture interest. Working through	Text book Worksheets Class Board and Chalk and Duster Other reference books	Analyze the impact on financial structure (Business Studies)

	different issue scenarios Prepare journal entries for collateral security Calculate debenture interest and pass related Journal entries Pass entries related to writing off Loss on issue of debentures		examples of issuing debentures as collateral security Solving numerical problems involving the calculation of interest payable on debentures and its Journal entries Accounting treatment of Loss on issue of Debentures as per latest Company Act (amended)		
Topic: Financial statements of a Joint stock company No. Of Periods : 5-6 When: October	The students will be able to: Understand the structure of company financial statements Define key terms related to company financial statements Explain the purpose of financial statement analysis Identify tools of financial statement analysis	Class participation and discussions. Individual and group problem-solving activities. Worksheets and assignments. Periodic tests and quizzes. Comprehensive chapter-end test.	Interactive Lectures: Encourage active participation through questions and discussions. Demonstrations: Show the steps involved in preparing financial statements Group Activities: Facilitate collaborative learning through problem-solving sessions and case study analysis. Hands-on Practice: Provide ample opportunities for students to practice preparing financial statements and analyzing them. Real-world Examples: Use real company financial statements and case studies to illustrate the practical application of these accounting concepts.	Text book Worksheets Class Board and Chalk and Duster Other reference books	
Topic: Comparative and Common Size statements No. Of Periods : 5-6 When: October	The students will be able to: Explain the purpose of these statements Understand the format of the statements Differentiate between the two types of statements Prepare comparative statements Prepare common	Class participation and discussions. Individual and group problem-solving activities. Worksheets and assignments. Periodic tests and quizzes. Comprehensive chapter-end test.	Lectures, presentations, textbook reading Explaining the structure of the statements for both Balance Sheet and Statement of Profit & Loss. Discussing how the statements are used to analyze trends and relationships Case studies, interpreting the data presented in the statements Solving numerical problems, working	Text book Worksheets Class Board and Chalk and Duster Other reference books	

	size statements Evaluate the usefulness of these statements Compare financial performance of different companies		through examples, practicing with worksheets		
Topic: Accounting Ratios No. Of Periods : 10-12 When: October - November	The students will be able to: Define accounting ratios and their purpose Classify accounting ratios. Explain the ratio formulas Explain the significance of ratios Explain the relationship between ratios Compare ratios of different companies Evaluate financial health and performance Create a financial analysis report	Class participation and discussions. Individual and group problem-solving activities. Worksheets and assignments. Periodic tests and quizzes. Comprehensive chapter-end test.	Lectures, presentations, textbook reading, glossary creation. Categorizing activities, explaining the characteristics of each category. Explaining the formulas for calculating various ratios. Discussing the limitations of using ratios in isolation Solving numerical problems, working through examples, practicing with worksheets Case studies, interpreting calculated ratios and drawing conclusions about company performance Project work, preparing a comprehensive report on a company's financial performance using ratio analysis	Text book Worksheets Class Board and Chalk and Duster Other reference books	
Topic: Cash Flow Statement No. Of Periods : 15-18 When: November	The students will be able to: Define Cash Flow Statement and its objectives. Identify the three types of activities (Operating, Investing, Financing). Recall the format of Cash Flow Statement (Indirect Method) Understand the adjustments required for calculating cash flow from operating activities Calculate cash flow from	Class participation and discussions. Individual and group problem-solving activities. Worksheets and assignments. Periodic tests and quizzes. Comprehensive chapter-end test.	Lectures, presentations, textbook reading, glossary creation. Categorizing activities, explaining the characteristics of each category. Explaining the format for each activity Solving numerical problems, working through examples, practicing with worksheets Project work, preparing a comprehensive report on a company's financial performance using CFS	Text book Worksheets Class Board and Chalk and Duster Other reference books	

	operating, investing, and financing activities using given information. Prepare a Cash Flow Statement using the indirect method. Apply the concepts to solve numerical problems				
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Physical Education

Topic/Month	Learning Outcomes	Assessment Tools	Teaching Learning Strategies/ Activities	Resources	Interdisciplinary Activities
APRIL Management of sports Events Function of sports events Management(Planning, Organizing, Staffing, Directing and Controlling) Various Committees and their responsibilities (Pre, During & Post) Fixtures and their procedures Knock-out (Bye & Seeding) and League (Staircase, Cyclic, Tabular method) and Combination tournaments. Intramural and Extramural tournaments-Meaning, Objectives and its significance Community Sports programme	After completing the unit, the students will be able to: Describe the functions of sports event management Classify the committees and their responsibilities in the sports event Differentiate the different types of tournaments. Prepare fixture of knock-out, league and combination. Distinguish between intramural and extramural sports events. Design and prepare different types of community.	Class discussion, Draw Fixture Assignment	Plan any sports event which is to be organized in our school Classify the names	BIG-Thing Publication BIG- Thing Publication	Students will apply concepts from sports management, marketing, finance, logistics to plan and execute a mini sports tournament

(Sports day, Health Run, Run for Fun, Rub for Specific Cause and Run for Unity Yoga as Preventive Measure for Lifestyle Disease Obesity Diabetes Asthma Hypertension Back Pain and Arthritis Procedure, Benefits and Contraindications of different Asanas related to different lifestyle disease.	After completing the unit, the students will be able to: Identify the asanas beneficial for different ailments and health problems. Recognize importance of various asanas for preventive measures of obesity, diabetes, asthma, hypertension, back pain and arthritis. Describe the procedure for performing a variety of asanas for maximal benefits. Distinguish the contraindications associated with performing different asanas. Outline the role of yogic management for various health benefits and preventive measures.	Demonstration Or Draw pictures of Asanas in Practical file	as types of nouns(eg. Parvatasana-mountain; Ushtraasana-Camel)		
MAY Children and women in sports Exercise guidelines of WHO for different age groups. Common postural deformities- knock knees, flat foot, round shoulders, lordosis, Kyphosis, Scoliosis and bow legs and their respective corrective measures.	After completing the unit, the students will be able to: Differentiate exercise guidelines for different stages of growth and development. Classify common postural deformities and identify corrective measures Recognize the role and importance of sports participation of women in India. Identify special considerations relate to menarche and menstrual dysfunction. Express female	Class discussion, Assignment		BIG- Thing Publication	Students will explore the challenges and opportunities for children and women in sports by integrating concepts from sports science, sociology, psychology and media.

Women's participation in sports – physical, psychological and social benefits. Special consideration(menarche and menstrual dysfunction) Female athlete triad (osteoporosis, amenorrhea, eating disorders. JULY Physical education and sports for CWSN (Children with special need – Divyang) Organizations promoting Disability sports (special Olympics; Paralympics; Deaflympics) Concept of classification and divisioning in sports. Concept of inclusion in sports, its needs and implementation . Advantages for children with special needs. Strategies to make physical activities assessable for children with special needs.	athlete triad according to eating disorders. After completing the unit, the students will be able to: Value the advantages of physical activities for children with special needs. Differentiate between methods of categorization in sports for CWSN. Understand concepts and the importance of inclusion in sports. Create advantages for children with special needs through physical activities. Strategies physical activities accessible for children with special needs.	Class Discussion Oral test	Working in groups, investigate the history of the Indian Paralympics and special Olympics and special Olympics teams of last Olympics. Who have been most successful athletes.	BIG -Thing Publication	
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Sports and Nutrition Concept of balance diet and nutrition. Macro and Micro Nutrients: food sources and functions. Nutritive and Non-Nutritive components of Diet. Eating for healthy weight control- A healthy weight, The pitfalls of Dieting, Food Intolerance and Food Myths. Importance of diet in sports- pre, During and post competition Requirements	After completing the unit, the students will be able to: Understand the concept of a balance diet and nutrition. Classify Nutritive and non-Nutritive components of diet. Identify the ways to maintain a healthy weight. Know about foods commonly causing food intolerance. Recognize the pitfalls of dieting and food myths.	Class test Quiz	Take 5 ready to eat food items like packets of chips, etc. Check their nutritive values displayed on the packet and analyse which of them are good and bad for your health.	BIG -Thing Publication	
AUGUST Test and measurement in sports Fitness Test – SAI khelo india fitness test in school: Age group 5-8 years/class 1-3: BMI, Flamingo Balance Test, Plate Tapping test Age group 9-18 years/class 4-12: BMI, 50 mt speed test, 600mt Run/Walk, sit and reach flexibility test, strength test (Partial Abdominal curl up, push-ups for boys, modified push-	After completing the unit, the students will be able to: Perform SAI Khelo India fitness test in school (Age group 5-8) years/Class 1-3 and (age group 9-18) yrs/class 4-12. Determine physical fitness Index through Harvard step test/ Rock – port test. Compute Basal Metabolic Rate (BMR) Describe the procedure of Rikli and Jones – senior citizen fitness test.	Demonstration and calculation of different tests of fitness	Every student will prepare their own profile of fitness test.	BIG -Thing Publication	

ups for girls). Measurement of cardiovascular fitness- Harvard step test . Computing Basal Metabolic Rate(BMR) Rikli and Jones – senior citizen fitness test Johnsen – Methney test of motor educability (Front Roll, Roll, Jumping Half-Turn, jumping full-turn)					
Physiology and injuries in sports Physiological factors determining components of physical fitness. Effect of exercise on the Muscular System. Effects of exercise on the cardio-Respiratory system. Physiological changes due to aging. Sports injuries: Classification (Soft tissue injuries – Abrasion, Contusion, Laceration, Incision, Sprain and strain: Bone and joint injuries – Dislocation, fractures – Green Stick, comminuted, transverse	After completing the unit, the students will be able to: Recognize the physiological factors determining the components of physical fitness. Comprehend the effects of exercise on the Muscular system and cardio respiratory systems. Figure out the physiological changes due to ageing. Classify sports injuries with its Management.	Question and flow charts	Select a player of your favorite sport who got injured while playing the sport. Study about his/her injury type and how it was treated. Is it possible to prevent such type of injury while playing the sport?	BIG -Thing Publication	

oblique and impacted).					
SEPTEMBER Biomechanics and sports Newton's law of motion and its application in sports. Types of Levers and their application in sports. Equilibrium = Dynamic and static and centre of gravity and its application in sports. Friction and sports. Projectile in sports.	After completing the unit, the students will be able to: Understand Newton's law of motion and its application in sports. Recognize the concept of equilibrium and its application in sports. Know about the centre of gravity and will be able to apply it in sports. Define friction and application in sports. Understand the concept of projectile in sports.	Oral Class test Assignment	Try simple test for balance	BIG -Thing Publication	
OCTOBER Psychology and sports Personality; its definition and types (Jung classification and Big Five theory) Motivation, its types and techniques. Exercise Adherence; Reasons, Benefits and strategies for Enhancing it. Meaning, Concept and types of aggressions in sports.	After completing the unit, the students will be able to: Classify different types of personality and their relationship with sports performance. Recognize the concept of motivation and identify various types of motivation. Identify various reasons to exercises, its associated benefits and strategies to promote exercise adherence. Differentiate	Questions through case study	Which of your personality trait would you never want to change and which one would you like to change and why discuss with your friend.	BIG -Thing Publication BIG -Thing	

Psychological attributes in sports – self-esteem, mental imagery, self-talk, goal setting. Training in Sports Concept of talent Identification and talent development in sports. Introduction to sports training Cyle- Micro, Meso, Macro Cycle. Types and methods to develop – Strength, Endurance and Speed. Types and methods to develop- flexibility and coordinative ability. Circuit training – Introduction and its importance.	between different types of aggression in sports. Explain various psychological attributes in sports. After completing the unit, the students will be able to: Understand the concept of talent identification and methods used for talent development in sports. Understand sports training and the different cycle used in the training process. Understand different types and methods to develop-strength, endurance and speed in sports training. Understand different types and methods to develop – flexibility and coordinative ability. Understand circuit training and its importance.	Class test project	Prepare a circuit training programme of your favourite sports	Publication	
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Mathematics

Topic; No. of Class Periods; When	Learning Outcomes	Assessment Tools	Teaching Learning Strategies / Activities	Resources	Inter- Disciplinary
Chapter: 1 Topic: Relations & Functions No. of Class Periods : 15 When: APRIL	Students will be able --to identify one to one, onto and invertible functions. --to find inverse of a function if it exists.	Oral Class Test Worksheet Quiz	Analytical method with pictorial view using Venn diagrams Activity 1 Activity 2 Activity 3 Activity 4	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in Activities_1_10  Activities_11_20 	Applications in real life as in finding patterns, in making predictions , in conducting logical operations .
Chapter: 2 Topic: Inverse trigonometric Functions No. of Class Periods : 5 When: April	Students will be able --to find inverse values of trigonometric functions	Class Test Worksheet	Graphical method. Learning by doing method. Activity 5	Textbook by NCERT Exemplar book by CBSE www.cbseacademic.in	Medical Science – “Analyzing ECG”

Topic; No. of Class Periods; When	Learning Outcomes	Assessment Tools	Teaching Learning Strategies / Activities	Resources	Inter- Disciplinary
Chapter: 3 Topic: Matrices No. of Class Periods : 25 When: May	Students will be able --to add or subtract two matrices. --to express matrix as sum of symmetric and skew symmetric matrices. --to find inverse of a matrix by using elementary row transformation	Class Test Worksheet Quiz	Lecture method Indo-deductive method Experimental method	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in Activities_1_10  Activities_11_20 	Engineering : Analyzing circuits, structural mechanics and system dynamics . Economics : Analyzing economic models and solving linear system in econometrics. Computer Science –Data structure “Program for various operations of matrices”.
Chapter: 4 Topic: Determinants No. of Class Periods : 25 When: May	Students will be able --to find area of triangle --to understand properties of determinants to simplify determinants --to solve system of linear equations using matrices.	Class Test Worksheet Quiz	Lecture method Concentric approach .	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	Computer Science –Data structure “Program for various operations of Determinants”.

Topic; No. of Class Periods; When	Learning Outcomes	Assessment Tools	Teaching Learning Strategies / Activities	Resources	Inter- Disciplinary
Chapter: 5 Topic: Continuity & Differentiability No. of Class Periods : 15 When: May	Students will be able --to identify points of discontinuity of functions. --to identify points of non- differentiability of function. --to find derivatives of exponential and logarithmic functions. --to find derivatives of functions in parametric form	Class Test Worksheet Quiz	Previous knowledge will be used to develop new concepts. Scientific method with demonstrati -on will be used to teach the topic. Activity 9	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in Mathematics lab Manual by NCERT	Key uses are in analyzing motion, Optimization problems, Modeling real world phenomena, curve sketching, Approximation techniques and in Economic analysis.
Chapter: 6 Topic: Applications of Derivatives . No. of Class Periods : 10 When: July	Students will be able --to find Rate of change of dependent variable due to change in independent variable. --to identify increasing and decreasing functions. --to find maxima and minima points of a function.	Class Test Worksheet Quiz	Knowledge of previous class will be used to develop concept. Spiral approach will be used Activity 7 Activity 10 Activity 13	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in Activities_1_10  Activities_11_20 	In Physics it is used to study nature of curves, in approximation and in rate of change of quantities and even making informed business decisions based on profit/loss analysis using graphs.

Topic; No. of Class Periods; When	Learning Outcomes	Assessment Tools	Teaching Learning Strategies / Activities	Resources	Inter- Disciplinary
Chapter: 7 Topic: Integrals No. of Class Periods : 20 When: August	Students will be able --to understand integration as an inverse process of differentiation. --to apply methods of integration --to find definite integration	Class Test Worksheet Quiz	Analytic method with Concentric approach	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	Topic is used in Engineering geometry, to find centroid. moment of inertia ,forces.
Chapter: 8 Topic: Applications of Integrals No. of Class Periods : 15 When: September	Students will be able --to find the area under simple curves --to find the area bounded between two curves	Class Test Worksheet Quiz	Deductive method with spiral approach will be used to explain the topic	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	It is used in model and solve problems, in Economics it is used in Model economic processes. In Biology it is used in model pollutants.
Chapter: 9 Topic: Differential Equations No. of Class Periods : 15 When: October	Students will be able --to identify degree and order of a differential equation. --to form differential equation when solution is given. --to solve differential equation	Class Test Worksheet Quiz	Analytic method with blending of integral and differential equations will be used to explain the topic	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	Topic is used to calculate the movement or flow of electricity, motion of an object to and fro like pendulum, to explain thermodynamics , in banking sector to calculate annuities.

Topic; No. of Class Periods; When	Learning Outcomes	Assessment Tools	Teaching Learning Strategies / Activities	Resources	Inter- Disciplinary
Chapter: 12 Topic: Linear Programming No. of Class Periods : 20 When: October	Students will be able --to find optimal solution by graphical method	Class Test Worksheet Quiz	Analytic method with blending of graphical method and linear inequations will be used to explain the topic	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	Topic is used in transportation, production, supply chain, diet and in marketing.
Chapter: 10 Topic: Vector Algebra No. of Class Periods : 15 When: November	Students will be able --to find dot product and cross product of 2 vectors. --to find Scalar triple product of 3 vectors. --to find projection of one vector on another. --to analyze vectors product and cross product .	Class Test Worksheet Quiz	Deductive method and pictorial structures will be used to explain the topic Activity 20	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	Vector algebra is used in many fields, including physics, engineering, computer graphics and video games.

Topic; No. of Class Periods; When	Learning Outcomes	Assessment Tools	Teaching Learning Strategies / Activities	Resources	Inter- Disciplinary
Chapter: 11 Topic: Three Dimensional Geometry No. of Class Periods : 15 When: November	Students will be able --to find equation of line in space in Cartesian and vector form. --to find angle between 2 lines. --to find distance between 2 lines. --to find angle between 2 planes using normal lines. --to find distance between a point from a plane	Class Test Worksheet Quiz	Three dimensional models and scientific method with simulation.	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	Topic is used in furniture and Interior design, Video gaming and virtual reality, Architecture and Building design, Navigation and Map making.
Chapter: 13 Topic: Probability No. of Class Periods : 30 When: November	Students will be able --to find probability using conditional probability formula. --to identify and solve problem by Bayes' theorem. --to find probability distribution of different random variables. --to identify and solve problem by using Bernoulli trials.	Class Test Worksheet Quiz	Learning by doing method with concentric approach. Daily life examples will be used to explain the problems.	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	Key applications are: Weather forecasting,, Sports analytics, Insurance Industry, Genetics, Quality Control, Finance and Investment, Medical Research, Machine learning and AI, Game Theory.

Topic; No. of Class Periods; When	Learning Outcomes	Assessment Tools	Teaching Learning Strategies / Activities	Resources	Inter- Disciplinary
December 2026 :	Revision I Preboard			 Competency Focused Practice Questions vol. 1  Competency Focused Practice Questions vol. 2	
January 2027:	Revision II Preboard				
February 2027:	Revision on one to one basis				

POLITICAL SCIENCE

Topic No. of periods When	Learning Outcomes	Assessment Tools	Teaching Learning Strategies / Activities	Resources	Interdisciplinary Activities
1.The end of bipolarity April No of periods 10	After completion of chapter students will be able to: Identify the basic features of the soviet system. Discuss the background and outcomes of disintegration of soviet union. Examine the consequences of unipolar world.Assess the features of Shock Therapy. Trace the developments between India and Russia	Mcqs based on causes of collapse of Soviet union	Map work Cartoon interpretation Analysis of relevant newspaper articles	Ncert text book Case study: Russia transition to capitalism	History: Rise of Russia after disintegration of USSR Geography: map Post Soviet states
2. Challenge s of Nation building April No of	Students will be able to: Analyze the challenges which independent India faced.	Debate: has India successfully overcome the challenges after partition	Documentarie s Cartoon interpretation Map work	Documentary: India's partition	Geography: map History : impact of partition

periods:10 3. Era of one party dominance May No of periods 7	Describe the factors that led to the partition of India. Explain the circumstances under which different princely states signed the instrument of accession. Assess how language became the basis of the states. Evaluate the role played by leaders in Nation building . Students will be able to Appreciate the substance of democratic policies in the country. Evaluate the electoral politics post-independence Assess the dominance of the Indian National Congress from 1952 to 1967 Evaluate the role of opposition parties	Case study: evolution of political parties in India	Group discussion: Recent changes in the electoral system Map and cartoon interpretation	Mock election	Economics: role of money in elections
	Students will	Essay: is	Debate and	Documentary:	Economics: socialism

4. Politics of planned development May No of periods 10	be able to Identify the varied option considered by the government to balance growth and socio-economic justice. Know the difference between left and right ideology. Understand the Need for the formation of planning commission. Appreciate the need for strategic long term development programme and policies	planning still relevant today	discussion First three five year plans Comparative analysis The left and the right	The story of India's economy	versus liberalism Geography: regional economic disparities History: planning under different governments
5.India's External Relations July No of periods 9	Students will be able to: Recognize the significance of NAM Interpret, compare and contrast multilateral aspects of India-China relationship Demonstrate knowledge on indo- pak wars Appreciate the steps	Debate: strategic alignment vs non alignment	Group discussion India's relations with China and Pakistan (present and past) research and report writing	Case study: India- china- Pakistan relations	History: india's role in cold War diplomacy

6.Challenges to and restoration of congress system July No of periods 10	taken by Indian government to develop military capacity Reflect and introspect on the choices that the country must consider for the cause of development and peace building Students will be able to: Analyse the challenges of political succession after Nehru Evaluate the opposition unity and the congress dominance. Compare and contrast the new congress and the congress system Summarize the initiatives taken by Indira Gandhi to overcome the challenges faced by her. Analyze the process of restoration of the congress system	Debate: was the dominance of congress beneficial for Indian democracy?	Use of timeline Group discussion Changing electoral performance of the congress		History: Rise and decline of Indira Gandhi and its impact Geography: map Activity
7. The crisis to democratic order August	Students will be able to Explain the causes and consequences of emergency.	Class test : 1.Name the judge who passed a	Group discussion Comparative analysis Cartoon interpretation	Report writing on the declaration of emergency and its consequences.	Economics: impact of emergency on India's economy

No of periods 9	Examine the lessons of emergency. Evaluate the role of Janata Government	judgement declaring Indira Gandhi's elections to the Lok Sabha invalid			
8. Regional Aspirations August No of periods 10	Students will be able to: Discuss the implications of regional demands. Analyze the importance of integrity in India. Appreciate the initiatives taken by the government in dealing with regional aspirations.	2. Crucially evaluate the impact of emergency on the newspapers and magazines. 3. State two reasons which the government gave for declaring the National Emergency Oral responses, class presentation by the students	Group discussion Time line	Case study: Khalistan movement, Dravida movement	Map Activity Economics: Demands of special status, resources
9. Recent developments in India September No of periods 9	Students will be able to: express the momentous changes taking place in the nation since 1989. Trace the rise and growth of BJP. Identify the areas of growing consensus.		Time line Cartoon interpretation Map work	Ncert text book, Recent articles and reports	Geography: Map Activity Analysis media coverage of 2024 elections., focusing on bias, representational the role of journalism in democracy
10. Contemporary centres of power October No of periods 10	Students will be able to: Compare and contrast the importance of European Union and ASEAN. Evaluate the extent of rise of Chinese economy on world	Essay Article Will China be able to overtake the US as a super power	Use of timeline Map Activity Cartoon interpretation Newspaper clippings	Case study Rise of China	Economics: impact of China on global trade Geography: map

11. Contemporary South Asia October No of periods 9	politics. Summarize india's relations with China. Students will be able to: Identify and locate the seven countries of South Asian Region Appreciate the mixed record of democracy in South Asian Region. Examine the role of political leaders Reflect upon causes of various conflicts and movements in this region. Justify the creation of SAARC. Understand the involvement of US and China in South Asia. Students will be able to: Define international organizations. Appreciate the role of United Nations and its agencies. Reflect upon the events	Debate: is SAARC still relevant? Essay " is UN effective today Mcqs	Interpretation of cartoon Current economic conditions of Srilanka, Pakistan and Bangladesh Discussion and debate Cartoon interpretation Newspaper clippings	Reports on India Pakistan relations Case study: UN peace keeping mission	Economics: Trade relations in South Asia History: formation of UN
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13.Environment and Natural Resources November No of periods 7	taking place in the post – cold War Era. Understand the Need for reforms in the United Nations Students will be able to: Enlist and explain the facts related to global environmental issues. Recognize and understand the Need to conserve critical resources Demonstrate knowledge and appreciation towards india’s responsibility in protecting environment Realize the need to conserve resources and exhibit responsibility towards prudent use of facilitate sustainable development Know about The nature of concerns of indigenous communities and understand how the governments	Group discussion: is economic growth sustainable?	Newspaper clippings Debate and discussion	Data on carbon emission	Economics: sustainable development policies
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14. Security in the contemporary world December No of periods 8	of different countries respond to their plea. Students will be able to: Recognize causes of security threats. Enhance analytical skills to provide solutions to security concerns. Develop critical thinking about the role of various stakeholders in ensuring security today. Students will be able to: Appreciate the significance of globalization. Elucidate the political, economic and cultural dimensions of globalization on India Draw attention to resistance movements of globalization and envisage its future trends	Debate: security vs privacy in the digital age	Interpretation of cartoon	Case study: 9/11 and its impact	Cs : cyber security threats
15. Globalisation December No of periods 8		Essay: pros and cons of globalization	Cartoon interpretation Group discussion	Case study: impact of globalization on Indian markets	English: Article on globalization Economics: effects of globalization on Indian market

BIOLOGY

Topic/Month	Learning Outcomes	Assessment Tools	Teaching Learning Strategies/ Activities	Resources	Interdisciplinary Activities
<u>APRIL & MAY</u> Chapter 1: Sexual Reproduction in Flowering Plants Topics: ● Structure of a Flower ● Pre-Fertilisation Structures and Events Stamen, Microsporangium and Pollen Grain ● The Pistil, Megasporangium And Embryo sac ● Pollination-types, agents ,out breeding devices ● Pollen-Pistil interaction Double fertilization; Post fertilization structures and events ● Development of endosperm and embryo ● Development of seed and formation of fruit	Students will be able to: ● Explain and draw the structure of flower ● Explain the different terms like microsporogenesis, megasporogenesis Illustrate the structure of stamen, pollen grain, pistil and ovule. ● Answer reasoning facts on pollination Differentiate between autogamy, geitonogamy, and xenogamy. ● Interpret the fate of parts of flower after fertilisation. ● Appreciate the use of apomixis in farming. ● Discuss the formation of fruit and seed.	Ncert text book –back exercise questions Diagrams MCQ	Lecture method Activity based learning Classroom Activity ● Dissection of a flower Lab Activities ● Spotting ● Observation of pollen grain through dissecting microscope ● Study of pollen germination on a slide ● Study of wind pollinated and insect pollinated plant from vicinity ● Controlled pollination Emasculation, bagging and tagging.	Ncert text book Flower from school garden Slides Biology lab material	Integration of biology with art in making beautiful diagrams of flower dissection.

● Apomixes and Polyembryony					
Chapter 2-Human reproduction Topics: ● Male and female reproductive systems Microscopic anatomy of testis and ovary Gametogenesis, spermatogenesis & oogenesis. ● Menstrual cycle Fertilisation and implantation ● Preganacy and embryo development upto blastocyst formation ● Parturition and Lactation	Students will be able to: ● Locate and explain the parts of male and female reproductive system ● Discuss the role of hormones in the control of reproduction ● Differentiate between oogenesis and spermatogenesis ● Draw sectional views of ovary and testis ● Explain the pre fertilization events and the formation of a zygote ● Trace the structural changes occuring during development of an embryo ● Explain the role of hormones and its relation in the ovarian and uterian changes.	NCERT Exemplar questions Back exercise questions from text book Assignment	Lecture method Collaborative learning Lab Activities: T.S. of blastula through permanent slides (Mammalian).	Ncert text book Slides Biology lab material	Integration of biology with social science Students will analyze and evaluate policies related to reproductive health, such as access to birth control or abortion.

Chapter-3 Reproductive Health Topics: - Problems and strategies of reproductive health - Birth control – Need and methods of Contraception MTP, Amniocentesis and STDs - Infertility and assisted reproductive technologies	Students will be able to: - Define reproductive health. - Reasons for population explosion. - Explain amniocentesis. - Understand the process of contraception - Explain the importance of contraception and sexually transmitted diseases. - Explain the reasons of infertility and how these problems can be altered.	Quiz MCQ Peer Assessment Group discussion NCERT back exercise questions Worksheets	Finding various cuttings and news articles on the population control measures taken by government to improve the standard of living of public.	Ncert text book Smart board Ppt and videos of this lesson.	Integration with social science by creating awareness among the young minds about STD's.
<u>JULY-AUGUST</u> Chapter 4-Principles of inheritance & variation Topics: - Mendelian Inheritance - Inheritance of one gene - Incomplete Dominance - Co-Dominance - Inheritance of two Genes	Students will be able to : - Explain and understand Mendel's monohybrid and dihybrid experiment and the different laws like law of dominance, independent assortment, and law of segregation. - Understand and express the limitations of Mendel's experiment, incomplete dominance and co-dominance. - Understand and express the Mendelian ratios - Understand and express the limitations of Mendel' experiment.	MCQ Peer Assessment Group discussion NCERT back exercise questions Worksheet on Pedigree analysis Oral Test	Demonstration and collaborative learning Activity: 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.	Ncert text book Smart board Ppt and videos on this lesson.	Integration with maths for calculating the probability of inheriting certain traits or genetic disorders.

● Chromosomal theory of inheritance ● Linkage and recombination ● Polygenic inheritance ● Pleiotropy ● Sex determination ● Genetic disorders	● Describe Chromosomal theory of inheritance and will understand how it modified Mendel's limitations. ● Understand the concept of sex determination and the mutations which leads to variation. ● Understand the concept of pedigree analysis, mendelian disorder and chromosomal disorder				
Chapter 5- Molecular Basis of Inheritance Topics: ● The DNA ● The search of Genetic Material ● RNA World ● Replication ● Transcription ● Genetic code ● Translation ● Regulation of gene expression ● Human Genome Project ● DNA Fingerprinting	Students will be able to: ● Understand the location and chemical composition of DNA, structure of polynucleotide chain and packaging of DNA Helix ● Know and understand Griffith experiment, Hershey-Chase experiment and Stahl's experiment ● Explain the process of DNA replication, transcription and protein synthesis ● Understand the Human Genomic project which provide information for various genetic diseases and its treatments. ● Understand and express the different pattern of sequencing of DNA by the process of DNA finger printing	MCQ Group discussion NCERT back exercise questions Worksheets Class test	Inquiry based learning Lab Activity Prepare a temporary mount of onion root tip to study mitosis.	Ncert text book Biology lab material items for DNA extraction	Integrated with maths to analyse the genetic code and to stimulate the structure of DNA and explore its properties.

Chapter 6:Evolution Topics: ● Origin of life ● Evolution of Life Forms ● Evidences of evolution Adaptive radiation ● Biological Evolution ● Mechanism of Evolution ● Hardy Weinberg Principle ● Brief Account of evolution ● Origin and evolution of man	Students will be able : ● Understand origin of life and will learn about Miller's experiment ● Understand the process of evolution. ● Describe the process of convergent evolution Differentiate between homologous and analogous structure. ● Identify the animals belonging to different epochs. ● Recall that modern-day Homo sapiens evolved from early human ancestors, including Ardipithecus ramidus, Australopithecus afarensis, Homo habilis, and Homo erectus, State how long ago these human ancestors (Hominins) existed ● Describe the fossil evidence for the evolution of humans, including changes in skull size and the spine, ● Describe the material evidence for human evolution, including the development of stone tools, form conclusions about evidence presented and understand the limitations of the fossil record ● Apply knowledge of modern-day Homo sapiens to explain how humans may have outcompeted other Hominid species like Neanderthals.	Ncert text book –back exercise questions Case-based questions MCQ	Lecture method Activity: Flash cards models showing examples of homologous and analogous organs	NCERT text book Audio visual aid Biology lab material	Integration with maths to construct the phylogenetic trees and explore the relations between different species.
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Chapter 7-Human health & disease Topics: ● Common disease in Humans ● Life cycle of malarial parasite ● Basic concepts of immunity ● Types of Immunity ● Vaccination and immunisation ● HIV and AIDs ● Cancer ● Adolescence, drug and alcohol abuse	Students will be able: ● Differentiate between infectious and non - infectious disease ● List the common diseases and their symptoms ● Explain about malarial life cycle ● Explain the types of immunity with their sub divisions ● Understand the need for Vaccination and immunization ● Differentiate between Vaccination and immunization ● Explain the role of T-cell during organ transplantation. ● Explain about AIDS and CANCER ● Describe various drugs and their abuse ● Gain knowledge about Prevention of AIDS prevention and control of alcohol and drugs among adolescents	Ncert text book –back exercise questions MCQ Case-based questions	Lecture method Lab Activity: Study of 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. Comparative study of communicable diseases discussed in the chapter under the headscausal organism, mode of transmission, symptoms, treatment, precautions, any other feature. Group discussion on Drug and alcohol abuse.	Ncert text book Smart board Charts Biology lab material	Use computer simulations to model medical scenarios, such as surgeries or emergency response situations.
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Chapter 8: Microbes in Human Welfare Topics: ● Microbes in Household products ● Microbes in Industrial Products ● Microbes in Sewage Treatment ● Microbes in Production of Biogas and Biocontrol agent ● Microbes as Biofertilisers	Students will be able to: ● Define the LAB. ● Differentiate between the distillation and without distillation beverages. ● Describe the process of sewage treatment. Define fermentation and antibiotic. ● Identify the important microbes in our daily life. Describe the process of biogas production. ● List out the name of microbes help in nitrogen fixation. ● Explain the function of cyclosporine A, Statins and Streptokinase. ● Know the importance BGA in agriculture. Explain the role of baculoviruses as biological control agent.	Ncert text book –back exercise questions Peer assessment MCQ Quiz	Source based learning Activity: Tabulation of useful microbes, product obtained and its uses.	NCERT text book Audio visual aid	Students design and propose biotechnology applications that utilize microbes, such as biofuels or bioremediation.
OCTOBER- NOVEMBER Chapter 9:Principles of Biotechnology Topics: ● Tools of recombinant DNA Technology ● Process of Recombinant DNA technology	Students will be able to: ● Understand Basic concept of genetic engineering ● Learn basic tools of rDNA technology ● Describe restriction enzymes, cloning vector and competent Host. ● Understand procedures, to transfer rDNA into host cell, apply procedures to identify recombinants, acquire knowledge of DNA sequencing ● Enumerate the applications of PCR.	Ncert text book –back exercise questions Diagrams practice MCQ	Inquiry based method Lab Activity Experiment -Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.	Ncert text book Biology lab material	Biology is integrated with arts. Biotech Debate: Have students debate the benefits and risks of biotechnological applications, such as GMOs or gene editing.

Chapter10: Biotechnology and its Application ● Biotechnological application in Agriculture ● Biotechnological Application in Medicines ● Transgenic Animals & Ethical Issues	Students will be able to : ● Understand GMO, Bt cotton and RNA interference. ● know about the Genetically engineered Insulin and Gene therapy ● understand the role played by biotechnology in improving health care for human beings and application in industries, applications in forensic sciences, formation of GMO's or Transgenic organisms	Ncert text book –back exercise questions Extra questions MCQ	Inquiry based method Activity: Quiz	NCERT text book Audio visual aid	Biotechnology is integrated with human health Students research and present on the applications of biotechnology in human health, such as gene therapy or regenerative medicine.
Chapter 11: Organisms and Populations Topics: ● Population attributes ● Population growth ● Population interaction	Students will : ● Understand the terms Natality, Mortality, immigration and Emigration ● Understand various population interactions like Mutualism, Competition, Predation, Parasitism, Commensalism and amensalism ● Be able to enhance their ability to learn and understand biotic community. ● Be able to explore their critical thinking by studying population growth and growth models Be able to make them share their opinion in population interactions	Ncert text book –back exercise questions Case-based questions MCQ Class test	Collaborative learning Lab Activity: Experiment: Study the plant population density by quadrat method. Experiment: Study the plant population frequency by quadrat method. Models specimen showing symbolic association in root modules of leguminous plants, Cuscuta on host, lichens.	NCERT text book Biology Lab material A4 sheets Chalk Board	Biology is integrated with social science in studying the population attributes.

Chapter 12:Ecosystem Topics: ● Ecosystems: Structure and Function ● Productivity ● Decomposition ● Energy flow ● Ecological Pyramids	Students will be able: ● Understand Basic concept of Ecosystem Describe various biotic components in ecosystem like producers, consumers decomposers and certain abiotic components Understand different types of food chains, grazing and detritus food chain Acquire knowledge of different types of ecological pyramids ● Understand ten percent law in energy flow models ● Evaluate the mechanism of decomposition in ecosystem ● Understand the terms like primary productivity, gross primary productivity, net primary productivity and secondary productivity.	Ncert text book –back exercise questions Calculation based questions based on ten percent Law MCQ	Lecture method Group discussion Activity: Quiz	NCERT text book Audio visual aid	Biology is integrated with social science in studying ecosystem services.
Chapter 13: Biodiversity and its Conservation Topics: ● Concept of biodiversity ● Patterns of biodiversity ● Importance of biodiversity ● Loss of biodiversity ● Biodiversity conservation	Student will be able to: ● Understand Genetic diversity, species diversity and Ecological diversity ● Understand patterns of biodiversity, species area relationship and importance of Species to the ecosystem ● Gain knowledge about various causes of biodiversity losses and will be sensitized about biodiversity conservation.	Ncert text book –back exercise questions Diagrams practice MCQ	Group Discussion	NCERT text book Audio visual aid	Biology is integrated with social science in studying the conservation of nature and natural resources.

CHEMISTRY

Topic/Month	Learning Outcomes	Assessment Tools	Teaching Learning Strategies/ Activities	Resources	Interdisciplinary Activities
MONTH: APRIL Chapter 1: SOLUTIONS: TOPICS: different types of solutions; concentration of solution in different units • Henry's law and Raoult's law; ideal and non-ideal solutions • Deviations of real solutions from Raoult's law • colligative properties of solutions • Abnormal colligative properties exhibited by some solutes in solutions.	Students will be able to: • Describe the formation of different types of solutions • Express concentration of solution in different units • state and explain Henry's law and Raoult's law • Understand the difference between ideal and non ideal solutions • Explain the deviations of real solutions from Raoult's law • Describe the colligative properties of solution • Abnormal Molecular Mass	NCERT back exercise questions. MCQ Assignment Oral test Solving numerical on the basis of molarity, molality, mole fraction and ppm.	Experiential Learning, Inquiry-Based Learning, Co-operative Learning ACTIVITIES Volumetric Analysis KMnO₄ vs. Mohr's Salt Solution Volumetric Analysis KMnO₄ vs Oxalic Acid,	NCERT book Chalk Black Board Chemistry lab material Reference books	• Utilize the concept of osmosis injecting isotonic saline solutions into the body. • Appreciate the use of saline water to treat sore throat. • Appreciate the process of dialysis in the human system . • Prepare different category of solutions for various studies Subjects integrated: Physics (changes in

					boiling point and
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Numbers Of Periods :10					freezing points of binary solution), Biology (Chemical processes in living beings)
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MONTH : APRIL -MAY Chapter 2: Haloalkanes and Haloarenes: TOPICS : Haloalkanes: Nomenclature, nature of C–X bond, physical and chemical properties, optical rotation mechanism of substitution reactions. Haloarenes: Nature of C–X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only) **Uses and environmental effects of -dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT Numbers Of Periods :10	:This unit will enable students to • know about IUPAC nomenclature of halo compounds. They will further understand the physical, chemical properties, uses, reactivity difference between aliphatic and aromatic halo compounds . These activities will promote deeper understanding of the topic and develop conceptual competence in them To develop problem solving skills . .	NCERT back exercise questions. MCQ Assignment	Experiential Learning, Inquiry-Based Learning, Co-operative Learning	NCERT text book of Chemistry Chemistry Lab Material Chalk Board	Subject integrated (Biology) Use of Chloroform as anesthetic and Iodoform as antiseptic Use of DDT as insecticide
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CHAPTER --3 Alcohols, Phenols and Ethers MONTH :JULY TOPICS: Alcohols, Phenols and Ethers: Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration. Uses of methanol and ethanol. Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols. Ethers: Nomenclature, methods of preparation, physical	Students will be able to correlate the properties of alcohol ,phenol and ethers with their structure .This will help them to predict the outcome and mechanism of some simple organic reactions like dehydration and oxidation using a basic understanding of the relative reactivity of functional groups .Students will realize the importance of alcohols, phenols and ethers in daily life and in industries.	NCERT back exercise questions. MCQ Assignment Oral test	ACTIVITES Group discussion on polyhalogen compounds used in daily life. Students will be asked to prepare concept focus questions and conversion charts (both aromatic and aliphatic organic compounds). Lab Activity Differentiate between Primary , Secondary and Tertiary Alcohols by Chemical test.	NCERT text book of Chemistry Chemistry Lab Material Chalk Board	Subject Integrated (Biochemistry) Uses of Ethanol and Acetone for medicinal purpose
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and chemical properties, uses.					
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			Neutral Ferric Chloride test for Phenol These activities will promote deeper understanding of the topic and develop conceptual competence in them		

Chapter 4: Aldehydes, Ketones and Carboxylic Acids MONTH: AUGUST TOPICS: Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods	Students will be able to : • write the common and IUPAC names of aldehydes, ketones and carboxylic acids; • write the structures of the compounds containing functional groups namely carbonyl and carboxyl groups; • describe the important methods of preparation and reactions of these classes of compounds; • correlate physical properties and chemical reactions of aldehydes, ketones and carboxylic acids, with their structures;	NCERT back exercise questions. MCQ Assignment Oral test	Experiential Learning, Inquiry-Based Learning, Co-operative Learning Activities: Sodium bicarbonate test to confirm the	NCERT text book of Chemistry Chemistry Lab Material Chalk Board	Subject Integrated (Biochemistry) Uses of Ethanol and Acetone for medicinal purpose
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of preparation, physical and chemical properties, mechanism of nucleophilic addition, the reactivity of alpha hydrogen in aldehydes, uses. Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties Numbers Of Periods 10	• explain the mechanism of a few selected reactions of aldehydes and ketones; • understand various factors affecting the acidity of carboxylic acids and their reactions; • describe the uses of aldehydes, ketones and carboxylic acids. Students will develop fair understanding of the reactivity of different carbonyl compounds towards nucleophilic reaction and will be able to write the products of addition reaction to carbonyl compounds. Students will be able to predict the reaction pathway for the		presence of Carboxylic acid. Iodoform test to be performed in chemistry lab to check the presence of Aldehydes and Ketones		
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	transformation of a given				
Chapter 5: Amines TOPICS: MONTH : AUGUST SEPTEMBER Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines. **Diazonium salts: Preparation, chemical reactions and importance	Students will be able to: · describe amines as derivatives of ammonia having a pyramidal structure; · classify amines as primary, secondary and tertiary; · name amines by common names and IUPAC system; · describe some of the important methods of preparation of amines; · explain the properties of amines; · distinguish between primary, secondary and tertiary amines; · describe the method of preparation of diazonium salts and their importance in the synthesis of a series of aromatic compounds including azo dyes. Describe and differentiate between properties of	NCERT back exercise questions. MCQ Assignment Group Discussion	Experiential Learning, Inquiry-Based Learning, Co-operative Learning Lab Activity Preparation of azo dye	NCERT text book of Chemistry Chemistr yL ab Material Chalk Board	Subject Integrated (Biochemistry) Formation of Dyes and Formation of Proteins by Polymerisation reaction of Amino acids

in synthetic organic chemistry. Numbers Of Periods :10	different amines. Students will appreciate the importance of organic chemistry and its relevance to individuals and society.				
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Chapter- 6 Electrochemistry TOPICS: MONTH : OCTOBER Redox reactions, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis. Lead accumulator, fuel cells, corrosion, law of electrolysis (elementary idea), dry cell electrolytic cells and	,Students will be able to: describe an electrochemical cell and differentiate between galvanic and electrolytic cells; · apply Nernst equation for calculating the emf of galvanic cell and define standard potential of the cell; · derive relation between standard potential of the cell, Gibbs energy of cell reaction and its equilibrium constant; · define resistivity (r), conductivity (k) and molar conductivity (Λ_m) of ionic solutions; · differentiate between ionic (electrolytic) and electronic conductivity; · describe the method for measurement of conductivity of electrolytic solutions and calculation of their molar conductivity; · justify the variation of conductivity and molar conductivity of solutions with change in their concentration and define Λ_m° (molar conductivity at zero concentration or infinite dilution); · enunciate Kohlrausch law and learn its applications; · understand quantitative aspects	NCERT back exercise questions. MCQ Assignment Group Discussion	Experiential Learning, Inquiry-Based Learning, Co-operative Learning ACTIVITES To set up simple Daniell cell .	NCERT text book of Chemistry Chemistry Lab Material Chalk Board	SUBJECT INTEGRATED (Physics) Conversion of Chemical energy to electrical energy Or Electrical energy to Chemical energy
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Galvanic cells,. Numbers Of Periods :12					
Chapter 7: Chemical Kinetics MONTH: OCTOBER TOPICS: Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half-life (only for zero and first order reactions). **Concept of collision theory (elementary idea, no mathematical	● Students would develop ● concepts on : ● need of chemical kinetics, ● elementary reaction, ● complex reaction, order, ● molecularity, rates of ● reaction, integrated rate ● laws, collision theory, ● Arrhenius Equation	NCERT back exercise questions. MCQ Assignment Group Discussion	Experiential Learning, Inquiry-Based Learning, Co-operative Learning Lab Activity Chemitrsy Practical to study Rate of reaction(Chemical Kinetics).	NCERT text book of Chemistry Chemistry Lab Material Chalk Board Audio Visual aid	

treatment), activation energy, Arrhenius					
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equation Numbers Of Periods :10					
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Chapter 8 : D and F-Block Elements MONTH: NOVEMBER TOPICS: General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transition metals – metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation.	After studying this unit the students will be able to: -> Recognise the position of d and f block elements in the periodic table -> Describe the general trend in properties of elements of 3d series. -> Explain the tendencies of d-block elements towards the formation of .	NCERT back exercise questions. MCQ Assignment Group Discussion	Experiential Learning, Inquiry-Based Learning, Co-operative Learning ACTIVITES Qualitative analysis Determination of one cation and one anion in a given salt.	NCERT text book of Biology Biology Lab Material Chalk Board Audio Visual aid	
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Lanthanoids - Electronic configuration, oxidation states and lanthanoid contraction and its consequences. **Chemical reactivity of lanthanides, Actinides - Preparation and properties of KMnO_4 and $\text{K}_2\text{Cr}_2\text{O}_7$ s Numbers Of Periods :12					
Chapter 9: Coordination Compounds MONTH NOVEMBER TOPICS: Coordination compounds Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination	Students will learn about properties and bonding of coordination compounds. • recognize the importance of inorganic molecules in • supporting organic biological systems.	NCERT back exercise questions. MCQ Assignment NCERT Exemplar questions Draw and practice the structures of various biomolecules	Experiential Learning, Inquiry-Based Learning, Co-operative Learning ACTIVITES Lab Activity: Preparation of Inorganic Compounds Preparation of double salt of Ferrous Ammonium Sulphate or Potash Alum.	NCERT text book of Chemistry Chemistry Lab Material Chalk Board	SUBJECT INTEGRATED (Biology) Use of Fitkari(Potash Alum) as after shave lotion i.e as an antiseptic

compounds. Bonding, Werner's theory, VBT, and CFT.					
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**Structure and stereoisomerism, importance of coordination compounds Numbers Of Periods :12					
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Chapter 10: Biomolecules MONTH November -December TOPICS: Carbohydrates Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D- L'Configuration Proteins -Elementary idea of amino acids, peptide bond, polypeptides, proteins, structure of proteins primary, secondary, tertiary structure and quaternary structures ,denaturation of proteins. Nucleic Acids: DNA and RNA.	Students will become aware of the structure and function of the four classes of organic molecules of life. Students should be able to distinguish between various molecules using simple chemical tests. Students would realise that foods have different nutritional content and appreciate the importance of a balanced diet.	NCERT text book of Chemistry Chemistry Lab Material Chalk Board Audio Visual aid	Experiential Learning, Inquiry-Based Learning, Co-operative Learning Lab activity Content based practical To study simple tests of proteins, starch and fats .	NCERT back exercise questions. MCQ Concept map Assignme nt Draw and practice the diagrams related to the chapter	SUBJECT INTEGRATED (Biology) Uses of Carbohydrates ,Proteins and Vitamins for living organisms
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Subject: PHYSICS (042)

Topic; No. of Class Periods; When	Learning Outcomes	Assessment Tools	Teaching Learning Strategies	Resourc es	Inter- Disciplinary Activities/Exper iments
Chapter: 1 Topic: Electrostatic charges and field Sub Topics: Electric Charge ;Basic Properties of charge, Coulomb's law force between two point charges, forces between multiple charges; superposition principle and continuous charge distribution. Electric field: electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field. Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell	Students will be able to *Explain origin, types and properties of electric charges. *Derive and apply Coulomb's law to calculate forces due to one/multiple charges. *Deduce electric field using electrostatic force and explain the properties of field lines. *Understand electric dipole and apply Coulomb's law to calculate electric field and torque due to electric dipole. *Explain and apply electric flux using a simple charge placed inside a surface. *Apply Gauss law to calculate electric field when the source distribution has simple continuous symmetry.	Class Test Worksheet	Lecture method Demonstrative method. Graphical method Project method	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	Class Activity * Designing of Electroscope by using Aluminium foil and glass jar. * Exploring Static Electricity with everyday Objects. Lab Activity *To assemble the components of a given circuit * To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.

<i>(field inside and outside).</i> No. of Class Periods : 20 When: April					
Chapter: 2 Topic: Electric Potential and capacitance Sub Topics: Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two point charges and of electric dipole in an electrostatic field. Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarisation, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with	Students will be able *Describe the concept of electric potential energy and potential. *Compare the variation of electric field and electric potential due to a point charge with the distance from the charge and solves problems related to electric potential and electric potential energy *Derive the expression for the electric potential due to an electric dipole, system of charges, charged spherical shell and a sphere. *Describe the concept of an equipotential surface and explains the relationship between electric field and rate of change of electric potential. *Explain electrostatic properties of solid conductors and a dielectric. *Define a capacitor and derives expressions for capacitance for parallel plate capacitor and related terms for dielectrics.	Periodic Test Worksheet Quiz	Lecture method Experimental method	Textbook by NCERT Exemplar book by NCERT <u>www.cbseacademic.in</u>	Interdisciplinary activity Students can : *Explore how capacitors behave when arranged in series and parallel configurations. They can measure the total capacitance in each setup, analyze the mathematical relationships, and apply these concepts to practical circuit designs. * Investigate how capacitors are used in signal processing applications, such as filtering and tuning circuits. (Maths, Engineering, computer science

<i>and without dielectric medium between the plates, energy stored in a capacitor</i> <i>No. of Class Periods : 10</i> <i>When: May, July</i>					
<i>Topic; No. of Class Periods; When</i>	<i>Learning Outcomes</i>	<i>Assessment Tools</i>	<i>Teaching Learning Strategies/ Activities</i>	<i>Resources</i>	<i>Inter-Disciplinary</i>
Chapter: 3 Topic: Current Electricity Sub Topics: <i>Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, electrical resistance, V-I characteristics (linear and nonlinear), electrical energy and power, electrical resistivity and conductivity. series and parallel combinations of resistors; temperature dependence of resistance. Internal resistance of a cell, potential difference and</i>	<i>Students will be able</i> <i>*State and explain Ohms law in conductors.</i> <i>*Define resistivity of materials, states its formula and identifies its dependence on temperature of the material.</i> <i>*Describe the power loss in a conductor carrying current.</i> <i>*Define and differentiate between emf and potential difference across a cell.</i> <i>*Derive and describe the equivalent emf across a combination of cells connected in series and parallel.</i> <i>*State and explain Kirchhoff's rules across electric circuits</i> <i>*Describe the working principle of Wheatstone bridge and using Kirchhoff's rules derive the balanced condition of the bridge.</i>	<i>Class Test</i> <i>Worksheet</i>	<i>Interactive and demonstrative method</i> <i>Graphical method.</i> <i>Learning by doing method.</i>	<i>Textbook by NCERT</i> <i>Exemplar book by CBSE</i> <i>Sample Book</i> <i>Physics lab</i> www.cbseacademic.in	<i>Learning skills- interconnection of electrical engineering with medicines, environmental science and electronics.</i> <i>Classroom Activities :</i> <i>i . Teacher will demonstrate the emf of a cell purchased from market.</i> <i>ii Teacher will demonstrate how the student will calculate the total no. of electrons in 1 kg water.</i> <i>iii Teacher will show the electrolyte used in different cells which are being used in the laboratory.</i> <i>Lab activity</i> <i>To determine resistivity of two / three wires by plotting a graph for potential difference versus current.</i> <i>To find resistance of a given wire /</i>

<i>emf of a cell, combination of cells in series and in parallel. Kirchhoff's laws and simple applications like Wheatstone bridge, metre bridge.</i> <i>No. of Class Periods :18</i> <i>When: July</i>					<i>standard resistor using metre bridge.</i>
Chapter: 4 Topic: Magnetic effects of current Sub Topics: Concept of magnetic field, Oersted's experiment. Biot - Savart law and its application to current carrying circular loop. Ampere's law and its applications to infinitely long straight wire. Straight and toroidal solenoids, Force on a moving charge in uniform magnetic and electric fields. Cyclotron. Force on a current-carrying conductor in a uniform magnetic field.	<i>Students will be able to</i> <i>1 Explain magnetic Lorentz force on a charge moving in magnetic field</i> <i>2 Describe the path followed by charged particles projected in the region under the combined effect of electric and magnetic fields.</i> <i>3 State Biot Savart's law and describes the magnetic field produced by current element and a current carrying loop.</i> <i>4 State Ampere's circuital law and applies it to determine the magnetic field due to an infinitely long current-carrying conductor.</i> <i>5 Describe the current carrying solenoid and toroid and derives magnetic fields produced due to them.</i> <i>6. Explain the forces exerted by a pair of parallel current-carrying wires on each other and defines one ampere of current.</i> <i>7. Describe the torque</i>	<i>Class Test</i> <i>Worksheet</i> <i>Quiz</i>	<i>Analytical method</i> <i>Lecture method</i> <i>Demonstrative method</i>	<i>Textbook by NCERT</i> <i>Exemplar book by NCERT</i> <u>www.cbseacademic.in</u> <i>Physics lab</i>	<i>Electric motors and transformers operate based on the magnetic effects of electric current (physics with technology)</i> <i>Data Storage and Computing</i> <i>Class room Activities : *</i> <i>Teacher will demonstrate the presence of magnetic field due to current carrying conductor.</i> <i>*Teacher will demonstrate the force experience by current carrying conductor placed in uniform magnetic field.</i> <i>*Teacher will demonstrate the model of galvanometer in the class.</i> <i>Lab Activity</i> <i>To verify the laws of combination of resistances using a metre bridge.</i>

Force between two parallel current-carrying conductors definition of ampere. Torque experienced by a current loop in uniform magnetic field; moving coil galvanometer-its current sensitivity and conversion to ammeter and voltmeter. No. of Class Periods : 20 When: July&August	acting on a current-carrying loop placed in a magnetic field and identifies it as equivalent to a magnetic dipole placed in an external magnetic field. 8 Describe the construction and working principle of moving coil galvanometer and takes the initiative to convert an MCG into a voltmeter and an ammeter and use it appropriately for the measurements of voltages and currents in an electric circuit.				
Topic; No. of Class Periods; When	Learning Outcomes	Assessment Tools	Teaching Learning Strategies/ Activities	Resources	Interdisciplinary
Chapter: 5 Topic: Magnetism Sub Topic: Current loop as a magnetic dipole and its magnetic dipole moment. Magnetic dipole moment of a revolving electron. Magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis. Torque on a magnetic dipole	Students will be able 1Describe a bar magnet and identify the features of a magnetic field due to the bar magnet. 2.Define a magnetic dipole and describe its interaction with the external magnetic field when placed parallel, anti-parallel or any other angle. 3.State and explain Gauss's law of magnetism. 4 Define magnetisation, magnetic intensity and magnetic susceptibility and differentiate different types of magnetic materials basis these properties.	Class Test Worksheet Quiz	Previous knowledge will be used to develop new concepts.	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	The teacher will demonstrate the magnetic lines of force due to a bar magnet in the class

<i>(bar magnet) in a uniform magnetic field; Para-, dia- and ferro - magnetic substances, with examples.</i> <i>No. of Class Periods : 04</i> <i>When: August</i>					
Chapter: 6 Topic: <i>Electromagnetic Induction</i> Sub Topics: <i>Electromagnetic induction; Faraday's laws, induced emf and current; Lenz's Law, Eddy currents. Self and mutual induction.</i> <i>No. of Class Periods : 16</i> <i>When: August</i>	<i>Students will be able to</i> <i>1 Take the initiative to explore the historical experiments of Faraday and Henry and states Faraday's two laws of induction.</i> <i>2 Explain the concept of motional emf induced across a conductor moving through a magnetic field with a velocity and undergoes change in the magnetic flux as a function of time.</i> <i>3. Explain inductance as property of the coil undergoing change in the magnetic flux linked with the coil.</i> <i>4 Describe the construction and working principle of AC generator.</i>	<i>Worksheet</i> <i>Quiz</i>	<i>Knowledge of previous class will be used to develop concept.</i>	<i>Textbook by NCERT</i> <i>Exemplar book by NCERT</i> www.cbseacademic.in	<i>Electromagnets, which utilize the magnetic effects of current, are integral in medical devices like MRI machine (physics with Biology and chemistry)</i> <i>Maglev trains utilize magnetic levitation, achieved through electromagnets, to reduce friction and enable high-speed travel. By controlling electric currents, these trains float above tracks, offering efficient and rapid transportation. (physics with technology)</i>
<i>Topic;</i> <i>No. of Class Periods;</i>	<i>Learning Outcomes</i>	<i>Assessment Tools</i>	<i>Teaching Learning Strategies/</i>	<i>Resources</i>	<i>Interdisciplinary</i>

<i>When</i>			<i>Activities</i>		
Chapter: 7 Topic: Alternating current Sub Topics: Alternating currents, peak and rms value of alternating current/voltage; reactance and impedance; LCR series circuit, resonance; power in AC circuits wattless current. AC generator and transformer. No. of Class Periods : 08 When: August	<i>Students will be able to</i> 1Define alternating current and voltage and describe the behavior of current, voltage and power dissipated across a resistor when an alternating voltage is applied 2Describe the behaviour of current, voltage and power dissipated through an AC circuit containing inductor only 3.Describe the behaviour of current, voltage and power dissipated through an AC circuit containing with capacitor only. 4.Describe the AC circuit containing inductor, capacitor and resistor in series and explains the variation of current, voltage and power dissipation in the series LCR circuit. 5Define instantaneous power dissipated in a series LCR circuit and identifies the power factor 6Describe the construction, working principle and derives the related equations of a transformer.	Worksheet	Analytic method with Concentric approach	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	Lab Activity To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.
Chapter: 8 Topic: Electromagnetic Waves Sub Topics: Basic idea of displacement current, Electromagnetic waves, their characteristics, their transverse	<i>Students will be able</i> 1.Explain the concept of displacement current produced between two charged plates and compares it with conduction current 2Take the initiative to understand the historical experiments conducted by Hertz, Maxwell and Bose to produce electromagnetic waves and describes the	Worksheet Quiz	Deductive method with spiral approach will be used to explain the topic	Textbook by NCERT Exemplar book by NCERT Flow chart www.cbseacademic.in	

<i>nature (qualitative idea only). Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses.</i> <i>No. of Class Periods : 04</i> <i>When: September</i>	<i>nature of the em waves. 3Describe the nature of electromagnetic waves in terms of time-varying electric and magnetic fields 4.Describe the electromagnetic spectrum, the different em waves, the order of their distribution in the em spectrum, the frequency ranges and states the applications of each of the type of em wave</i>			<i>n</i>	
<i>Chapter: 9</i> <i>Topic: Ray Optics</i> <i>Sub Topics: Reflection of light, spherical mirrors, mirror formula. Refraction of light, total internal reflection and its applications, optical fibres, refraction at spherical surfaces, lenses, thin lens formula, lens - maker's formula. Magnification, power of a lens, combination of thin lenses in contact, combination of a lens and a mirror. Refraction and</i>	<i>Students will be able</i> <i>1Recall all the technical terms defined for spherical mirrors and identifies the correct sign conventions for mirrors and lenses</i> <i>2Draw ray diagram to determine the position of the image of an object and derives all the equations related to spherical mirrors</i> <i>3Know Snells law of refraction and obtains the relationship among relative refractive indices of different materials.</i> <i>4 Explain various phenomena related to refraction and the phenomenon of total internal reflection.</i> <i>5Derive the relationship between object and image distances and derives lens maker's and thin lens.</i> <i>6Explain the magnification by a microscope</i> <i>7.Derive the expression for the magnification by a telescope</i>	<i>Class Test</i> <i>Worksheet</i> <i>Quiz</i>		<i>Textbook by NCERT</i> <i>Exemplar book by NCERT</i> <i>www.cbseacademic.in</i>	<i>Optical Fibers in Sensing Technologies (physics, chemistry, computer)</i> <i>Application the concept of TIR in cables used in computers and transmission of Data</i> <i>Lab Activity</i> <i>To find the focal length of a convex lens by plotting graphs between u and v or between 1/u and 1/v.</i> <i>To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation.</i>

<i>dispersion of light through a prism.</i> <i>Magnifying power of microscope and astronomical telescope.</i> <i>No. of Class Periods : 20</i> <i>When: October</i>					
<i>Topic; No. of Class Periods; When</i>	<i>Learning Outcomes</i>	<i>Assessment Tools</i>	<i>Teaching Learning Strategies/ Activities</i>	<i>Resources</i>	<i>Inter-Disciplinary</i>
<i>Chapter: 12</i> <i>Topic: Wave Optics</i> <i>Sub Topics: refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width, coherent sources and sustained interference of light. Diffraction due to a single slit, width of central maximum</i> <i>No. of Class Periods : 10</i> <i>When: October</i>	<i>Student will be able to</i> <i>1 Compare wave theory with corpuscular theory and explains geometrical optics in terms of wave optics</i> <i>2 State Huygens principle, explains Snell's law of refraction, law of reflection and total internal reflection using the principle.</i> <i>3 State the superposition principle of waves and derive the expressions for intensity of light for interference from coherent and incoherent light sources.</i> <i>4 Explain the Young's double slit experiment and derives the expression for fringe width in Young's experiment.</i> <i>5. Explain what is diffraction of light waves and the pattern observed for diffraction from a single slit.</i>	<i>Class Test</i> <i>Worksheet</i> <i>Quiz</i>		<i>Textbook by NCERT</i> <i>Exemplar book by NCERT</i> <u>www.cbseacademic.in</u>	<i>Observe and analyze the diffraction pattern produced when light passes through a narrow slit.</i> <i>Exploring Image Formation by a Concave Mirror, convex lens, combination of lenses</i> <i>Lab Activity</i> <i>To determine refractive index of a glass slab using a travelling microscope.</i> <i>To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.</i>

Chapter: 10 Topic: Dual nature of Radiation and matter Sub Topics: Dual nature of matter and EM Waves. Dual nature of radiation. Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation - particle nature of light. Matter waves - wave nature of particles, de Broglie relation. No. of Class Periods : 08 When: November	<i>Students will be able</i> 1.Describe the three significant historical experiments that lead to the discovery of electrons and recognise that valence electrons can be emitted from the metal surfaces under certain conditions. 21.Describe how photoelectric effect was first observed historically and identify the factors that leads to photoelectric emission in metals 3.Explain the variation of photoelectric current as a function of the intensity of incident radiation & potential difference and describes the variation of stopping potential with frequency of the incident radiation. 4.Describe the basic features of Einstein's explanation for photoelectric effect. 5Explain the outcomes of de- Broglie's equation	Worksheet		Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	Lab Activity To observe diffraction of light due to a thin slit
Topic; No. of Class	Learning Outcomes	Assessment Tools	Teaching Learning	Resources	Inter-Disciplinary

Periods; When			Strategies/ Activities		
Chapter: 11 Topic: Atoms and Nuclei Sub Topics: Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model, energy levels, hydrogen spectrum. Composition and size of nucleus, atomic masses, isotopes, isobars; isotones. Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission No. of Class Periods : 15 When: November	<i>Students will be able</i> 1.Take the initiative to understand historical experiments related to the atomic models. 2Explain the nature of electron orbits basis Rutherford model of atom. 3.Explain the characteristics of atomic spectra of hydrogen atom. 4Take initiative to study the details of simplest atomic spectra of hydrogen atom. 5State and explains why Rutherford nuclear model failed and how Bohr model was a better model of atom. 62.Identifie the energy levels of single electron in the hydrogen atom as per Bohr model. 73.Explain line spectra of hydrogen atom basis Bohr's postulates. 8Take initiative to understand de-Broglie explanation of Bohr postulate of quantisation of angular momentum. 9Explain the nature and type of energy that binds the nucleons inside the nucleus. 9.Describe the important characteristics of nuclear forces and understanding of nuclear fusion and fission.	Class Test Worksheet	Lecture method	Textbook by NCERT Exemplar book by NCERT www.cbseacademic.in	Rutherford's Alpha Scattering Experiment Simulation Calculating Binding Energy Per Nucleon(chemistry and maths)
Chapter: 13 Topic: Semiconductor Sub topic: Energy bands in solids	<i>Students will be able</i> 1.Classify solids as conductors, semiconductors and insulators on the basis of resistivity and energy bands. 2Explain the lattice	Worksheet Quiz	Learning by doing method with concentric approach. Daily life examples	Textbook by NCERT Exemplar book by NCERT	Investigating the V-I Characteristics of a Semiconductor Diode (maths) Constructing and Analyzing a Half-

<i>(Qualitative ideas only) conductor, insulator and semiconductor; semiconductor diode – I-V characteristics in forward and reverse bias, diode as a rectifier;</i> <i>No. of Class Periods : 10</i> <i>When: November</i>	<i>structure and behaviour of intrinsic semiconductors and how it can be converted into extrinsic semiconductor.</i> <i>3 Define and describe pn junction as the basic building block of semiconductor devices describes its behaviour under the effect of forward and reverse external bias.</i> <i>4. Explain the working of the pn junction diode as a rectifier in electronic circuits.</i>		<i>will be used to explain the problems.</i>	<u>www.cbseacademic.in</u>	<i>Wave Rectifier Circuit/Fullwave rectifier(electronics)</i> <i>Lab Activity</i> <i>To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items.</i> <i>To draw the I-V characteristic curve for a p-n junction diode in forward and reverse bias.</i>
<i>Topic; No. of Class Periods; When</i>	<i>Learning Outcomes</i>	<i>Assessment Tools</i>	<i>Teaching Learning Strategies/ Activities</i>	<i>Resources</i>	<i>Inter-Disciplinary</i>
<i>December 2026</i>	<i>Revision I Preboard</i>				
<i>January 2027</i>	<i>Revision II Preboard</i>				
<i>February 2027 :</i>	<i>Revision on one to one basis</i>				

Computer Science

Topic No. of periods when	Learning Outcome	Assessment Tools	Teaching Learning Strategies/ Activities	Resources	Inter- Disciplinary
Topic: Computational Thinking and Programming Sub-Topic: Revision of Python Topics Covered in Class XI No. Of Periods :20 When: April	Students will revise previous years basic Python concepts	Class Test	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Computational Thinking and Programming Sub-Topic: Revision of Python Topics Covered in Class XI No. Of Periods : 10 When: May	Students will revise previous years basic Python concepts	Class Test	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Computational Thinking and Programming Sub-Topic: Functions No. Of Periods : 20 When: July	Students will be able to define and classify built in functions, UDF , modules, methods, parameter, arguments, calling of functions	Class Test	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Computational Thinking and Programming Sub-Topic: Exceptional Handling No. Of	Students will be able to define programs using exceptional handling in Python	Class Test	Discussion Lecture method	- NCERT Book - PPT - Demonstration	

Periods : 15 When: August					
Topic: Computational Thinking and Programming Sub-Topic: File Handling in Python No. Of Periods : 25 When: September	Students will be able to use and appreciate different types of files using Python	Class Test	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Computational Thinking and Programming Sub-Topic: Data Structure No. Of Periods : 7 When: September	Students will be able to use Stack using python lists	Class Quiz	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Computer Networks Sub-Topic: No. Of Periods : 20 When: October	Students will be able to appreciate the value of network and how they are used in real life	Class Quiz	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Database management Sub-Topic: No. Of Periods :15 When: November	Students will be able to appreciate the use of database	Class Quiz Class Test Assignment	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Project Work Sub-Topic: No. Of Periods : 30 When: December	Students will be able to create a computer project using Python and Database for their final practical exam				
Topic: Revision Sub-Topic: No. Of Periods : When: January					
Topic: Revision					

Informatics Practices

Topic No. of periods when	Learning Outcome	Assessment Tools	Teaching Learning Strategies/ Activities	Resources	Inter- Disciplinary
Topic: Database Queries using SQL Sub-Topic: Revision of Database concepts Covered in Class XI No. Of Periods :25 When: April	Students will be able to revise previous years basic Database concepts and SQL	Class Test Assignment	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Database Queries using SQL Sub-Topic: MySQL function & Querying and manipulating data using group by, Having , Order By. Working with Two tables No. Of Periods : 15 When: May	- Students will be able to classify different type of SQL function - Manipulating data using SQL clauses Group By, Having and Order by - Working with two tables	Class Test Assignment	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Introduction to Computer Network Sub-Topic: Introduction to Networks, Devices, Topologies, Internet, Website	Students will be able to appreciate the role of networks and associated devices, topologies and other related technologies.	Class Test Class Quiz Assignments	Discussion Lecture method	- NCERT Book - PPT - Demonstration	

technologies and web browsers No. Of Periods : 15 When: July					
Topic: Societal Impacts Sub-Topic: No. Of Periods : 15 When: August	- Students will learn digital footprints, communication etiquette, IPR, FOSS, Cybercrime and Cyber Laws. - E-waste - Awareness about health issues related to technologies	Class Test	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Data Visualization Sub-Topic: No. Of Periods :10 When: September	Students will learn data visualization using Python Library matplotlib	Class Test	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Data handling using Python Pandas Sub-Topic: No. Of Periods : 30 When: October	- Students will be able to install Python Pandas - Data Structure in Pandas - Pandas Series - Pandas DataFrames	Class Quiz Assignments	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Project Work Sub-Topic: No. Of Periods : 30 When: November	Students will be able to generate python project using Python Pandas	Class Quiz	Discussion Lecture method	- NCERT Book - PPT - Demonstration	
Topic: Project Work & Practical Work Sub-Topic: Revision No. Of Periods : When: December	- Students will be able to generate python project using Python Pandas - Students will Prepare their Practical file				
Topic: Revision Sub-Topic: No. Of	- Revision Work				

विषय- हिंदी, कक्षा- बारहवीं

विषय/कालांश संख्या	अधिगम प्रतिफल	मूल्यांकन उपकरण	शिक्षण विधि/गतिविधि	संसाधन	अंतः विषय गतिविधि
पाठ -1 भक्तिन (गद्य) कालांश -6 अप्रैल	- लेखिका द्वारा खींचे गए रेखाचित्र को अपने शब्दों में लिख सकेंगे। - भक्तिन के जीवन के पहले, दूसरे व तीसरे परिच्छेद के संघर्षों को व्यक्त कर सकेंगे। - विवाह के संदर्भ में स्त्री के मानवाधिकारों की स्थिति को अपने शब्दों में अभिव्यक्त कर सकेंगे - विशिष्ट भाषा-प्रयोगों को समझकर उनके अर्थ स्पष्ट कर सकेंगे।	- गतिविधि - समूह चर्चा	- व्याख्यान विधि - आगमन-निगमन विधि सतत विकास लक्ष्य : 4 गुणवत्तापूर्ण शिक्षा 5 लैंगिक समानता 10 असमानताएं कम करना 17 लक्ष्य हेतु भागीदारी गतिविधि संपूर्ण कहानी के आधार पर प्रवाह चित्र	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2	राजनीति विज्ञान : महिलाओं के अधिकारों एवं विभिन्न कानून।
पाठ-2 पहलवान की ढोलक (गद्य) कालांश -5 अप्रैल	- पहलवान की ढोलक कहानी का विश्लेषण कर सकेंगे। - महामारी से उत्पन्न भयावह स्थिति को लिखकर व्यक्त कर सकेंगे। - लोक कलाओं के घटते प्रचलन के बारे में विचार प्रकट कर सकेंगे	- कक्षा चर्चा - गतिविधि - गृहकार्य	- परिचर्चा विधि - व्याख्यान विधि गतिविधि -लोकगीत गायन - प्रवाह चित्र - तुलना चार्ट सतत विकास लक्ष्य : 1 शून्य गरीबी 2 भुखमरी में मुक्ति 4 गुणवत्तापूर्ण शिक्षा 5 लैंगिक समानता 10 असमानताएं कम करना 17 लक्ष्य हेतु भागीदारी	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2, वीडियो	विज्ञान – महामारी के कारण, प्रभाव इत्यादि।
पाठ -3 पतंग (कविता) कालांश- 4 अप्रैल	- प्राकृतिक परिवर्तनों को समझकर अभिव्यक्त कर सकेंगे। - कविता में आए बिंबों को स्पष्ट कर सकेंगे।	- कक्षा प्रश्नोत्तरी - समूह चर्चा - रचनात्मक लेखन - प्रसंग सहित व्याख्या	चर्चा-परिचर्चा, पठन विधा, प्रश्नोत्तर विधि व्याख्यानात्मक विधि	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	मनोविज्ञान - बालमनोविज्ञान की समझ, विभिन्न जिज्ञासाएं

	• कविता में आए नवीन शब्दों व अलंकारों की पहचान कर सकेंगे। • जीवन की चुनौतियों के बारे में अपने विचार लिख सकेंगे।		5 लैंगिक समानता 10 असमानताएं कम करना 16 शांति एवं न्याय और सशक्त संस्थाएं		
पाठ-4 सिल्वर वेडिंग कालांश- 9 मई	• विद्यार्थी मनोहर श्याम जोशी जी के हिंदी साहित्य में योगदान से परिचित हो सकेंगे। • मानवीय संबंधों के प्रति सम्मान तथा पीढ़ी-अंतराल को कम करने के उपायों की विवेचना कर सकेंगे। • कठिन शब्दों के अर्थों को समझते हुए आम-बोलचाल में उनका प्रयोग कर पाएंगे।	• पीढ़ी – अंतराल विषय पर समूह चर्चा • नवीं शब्दावली चक्र	पठन विधि, व्याख्यान विधि, प्रश्नोत्तर विधि सतत विकास लक्ष्य-10 असमानताओं में कमी	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	
पाठ-5 हरिवंश राय बच्चन (कविता) आत्मपरिचय, एक गीत कालांश-8 मई	• विद्यार्थी काव्य-पंक्तियों का अर्थ स्पष्ट कर सकेंगे • विद्यार्थी कविता के शिल्प संबंधी बिंदुओं को स्पष्ट कर सकेंगे। • विद्यार्थी अपने वाचन कौशल में विकास कर पाएंगे।	• कक्षा प्रश्नोत्तरी • कविता का भाव व शिल्प- सौंदर्य लेखन • कविता का आदर्श वाचन	पठन विधि, व्याख्यान विधि, आगमन-निगमन विधि गतिविधि: जीवन संघर्षमय है, इससे घबराकर थमना नहीं चाहिए' इससे संबंधित कवि हरिवंशराय बच्चन की अन्य तीन कविताओं को एकत्र कर एक एलबम तैयार कीजिए। सतत विकास लक्ष्य- 4 गुणवत्तापूर्ण शिक्षा सतत विकास लक्ष्य-17 लक्ष्य हेतु भागीदारी	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	
पाठ-6 बाजार दर्शन जुलाई	• विद्यार्थी बाजार की सार्थकता और निरर्थता की परस्पर तुलना कर सकेंगे।	• समूह चर्चा (मॉल-संस्कृति की उपयोगिता पर पक्ष-विपक्ष रखवाना) • कार्यपत्रक	सतत विकास लक्ष्य- 10 असमानताओं में कमी सतत विकास लक्ष्य- 16 शांति, न्याय और सशक्त संस्थाएँ	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	अर्थशास्त्र- उपभोक्तावाद संस्कृति, बाजार क्या है?

	• बाजारवाद की अवधारणा को अपने शब्दों के स्पष्ट कर सकेंगे। • गद्यांश पर आधारित प्रश्नों के उत्तर हल कर सकेंगे।	• गद्यांश के आधार पर बहुविकल्प प्रश्न	गतिविधि: भूमिका अभिनय विषय: बाजार का जादू		
पाठ-7 कविता के बहाने, बात सीधी थी पर (कुंवर नारायण) (कविता) कालांश -6 जुलाई	• विद्यार्थी कवि की कृतियों के नाम बताने में सक्षम हो सकेंगे। • विद्यार्थी कविता के भाव-सौंदर्य को स्पष्ट करने में सक्षम हो सकेंगे। • कविता के शीर्षक को स्पष्ट कर पाएंगे।	• कक्षा चर्चा • प्रसंग सहित व्याख्या • फ्लावर ग्रीड	व्याख्यान विधि पठन विधि प्रश्नोत्तर विधि आगमन-निगमन विधि सतत विकास लक्ष्य- 4 गुणवत्तापूर्ण शिक्षा 17 लक्ष्य हेतु भागीदारी	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	
पाठ- 8 काले मेघा पाई दे (धर्मवीर भारती) कालांश -6 अगस्त	• विद्यार्थी वैज्ञानिक-चेतना और संस्कारों के द्वंद के आधार पर बौद्धिक चेतना का विकास कर पाएंगे। • विद्यार्थी पाठ में निहित संदेश को समाज से जोड़ कर व्यक्त करने में सक्षम होंगे। • विद्यार्थी शब्दों का संदर्भानुसार प्रयोग करने में सक्षम होंगे।	• पठन-पाठन • प्रश्नोत्तरी • नवीं- शब्दावली चक्र	• व्याख्यान विधि • आगमन-निगमन विधि गतिविधि समाज में व्यास अंधविश्वासों पर परिचर्चा/रोचकपूर्ण प्रस्तुति सतत विकास लक्ष्य- 9 उद्योग, नवाचार और बुनियादी ढांचे का विकास 10 असमानताओं में कमी	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	विज्ञान: पानी का संरक्षण, वैज्ञानिक तर्क
परिष्का हेतु पुनरावृत्ति एवं प्रथम सत्र परीक्षा सितंबर					
पाठ-10 जूझ (आनंद यादव) कालांश -6 सितंबर	• विद्यार्थी 'जूझ' के शाब्दिक अर्थ को स्पष्ट कर सकेंगे। • विद्यार्थी आनंदा और मास्टर सौंदलगेकर के व्यक्तित्व की विशेषताओं को स्पष्ट कर सकेंगे। • आरोह-अवरोह, यति-गति जैसे शब्दों	• कक्षा चर्चा • प्रश्नोत्तरी • चरित्र-चित्रण (टी-चार्ट)	व्याख्यान विधि, पठन-पाठन विधि, आगमन-निगमन विधि। पी.पी.टी. सतत विकास लक्ष्य -5 लैंगिक समानता	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	राजनितिक विज्ञान शिक्षा का महत्त्व तथा ग्रामीण परिवेश में स्त्रियों की स्थिति

	के अर्थ बताने में सक्षम हो सकेंगे।				
पाठ-11 उषा (कविता) (शमशेर बहुद सिंह) कालांश -6 अक्टूबर	- विद्यार्थी कविता में निहित शिल्प-सौंदर्य को समझकर बता पाएंगे। - विद्यार्थी काव्यांश-आधारित प्रश्नों के उत्तर लिखने में सक्षम हो सकेंगे। - विद्यार्थी ग्रामीण संस्कृति और जीवन की सादगी के महत्त्व की विवेचना कर पाएंगे।	- कक्षा चर्चा - कार्यपत्रक - प्रसंग सहित व्याख्या	पठन विधि आगमन-निगमन विधि व्याख्यान विधि सतत विकास लक्ष्य -3 उत्तम स्वास्थ्य और आरोग्य	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	
पाठ-12 बादल राग (कविता) (सूर्यकांत त्रिपाठी निराला) कालांश-8 अक्टूबर	- विद्यार्थी कविता का भाव, भाषा और शिल्प सौंदर्य का स्पष्टीकरण कर सकेंगे। - विद्यार्थी कविता के आधार पर पूछे गए प्रश्नों के उत्तर देने में सक्षम होंगे। - विद्यार्थी समाज में व्याप्त आर्थिक और सामाजिक असमानता से परिचित हो पाएंगे।	- समूह चर्चा - मौखिक प्रश्नावली - कक्षा- परीक्षा	- पद्य गायन विधि - व्याख्यान विधि - विवरणात्मक विधि	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	अर्थशास्त्र : समाज में आर्थिक समस्याएँ किसान की समस्याएँ
पाठ-13 कवितावली (उत्तरकाण्ड से) लक्ष्मण मूर्च्छा और राम का विलाप (तुलसीदास) कालांश -6 अक्टूबर	- विद्यार्थी "कवितावली" कविता का मूल भाव लिख पाएंगे। - विद्यार्थी काव्यांश-आधारित प्रश्नों के उत्तर लिख सकेंगे। - कविता का शिल्प-सौंदर्य और भाव सौंदर्य को समझकर बता पाएंगे।	- कक्षा चर्चा - गृह-कार्य - प्रसंग सहित व्याख्या - कार्यपत्रक (प्रवाह चित्र)	- पद्य गायन विधि - व्याख्यान विधि - वर्णात्मक विधि	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	
पाठ-14 शिरीष के फूल (हजारी प्रसाद द्विवेदी) कालांश -6 नवंबर	विद्यार्थी पाठ में आए विभिन्न वृक्षों से परिचित हो सकेंगे • विद्यार्थी अच्छे कवि	- कक्षा चर्चा - मौखिक प्रश्नावली - फ्लावर ग्रीड	- पठन विधि - प्रश्नोत्तरी - आगमन – निगमन विधि	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	विज्ञान: विभिन्न प्रकार के वृक्षों के बारे में जानकारी। संस्कृत: कालिदास का संदर्भ

	की विशेषताओं को जान पाएंगे। • विद्यार्थी हिंदी गद्य लेखन की विधा-ललित निबंध से परिचित होंगे		सतत विकास लक्ष्य- 8 उत्कृष्ट कार्य और आर्थिक विकास		
पाठ-15 अतीत में दबे पाँव (वितान) कालांश -6 नवंबर	• विद्यार्थी मुअनजो-दड़ो के बारे में बता पाएंगे। • विद्यार्थी मुअनजो-दड़ो के नगर-नियोजन के बारे में लिखकर अभिव्यक्त कर सकेंगे	• समूह चर्चा • प्रश्नोत्तरी • टी-चार्ट	• पठन विधि • प्रश्नोत्तरी • आगमन- निगमन विधि	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	इतिहास: मुअनजोदड़ो एवं सिंधु घाटी सभ्यता (नगर-नियोजन) उस समय का देशकाल, वातावरण, सभ्यता एवं संस्कृति
पाठ-16 श्रम विभाजन और जाति प्रथा मेरी कल्पना का आदर्श समाज (बाबा साहेब भीमराव आंबेडकर) कालांश- 6 अक्टूबर	• विद्यार्थी श्रम विभाजन और जाति प्रथा के सामाजिक प्रभाव और आदर्श समाज की अवधारणा को समझेंगे। • विद्यार्थी मुख्य विचारों का विश्लेषण तथा लेखक की कल्पना के आदर्श समाज को समझ सकेंगे। • विद्यार्थी पाठ की भाषा शैली और लेखक के व्यंगात्मक दृष्टिकोण को समझ सकेंगे।	• कक्षा प्रश्नोत्तरी • चर्चा (विचार-विमर्श) • “समाज में मानता का महत्त्व या जाति प्रथा का प्रभाव” विषय पर छात्रों से रचनात्मक लेख लिखवाना।	• व्याख्यान विधि • आगमन-निगमन विधि सतत विकास लक्ष्य- 17 लक्ष्य हेतु भागीदारी	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	सामाजिक विज्ञान : जाति प्रथा और श्रम विभाजन के ऐतिहासिक और सामाजिक प्रभाव को समझना।
पाठ-17 रूबाइयाँ (कविता) [फ़िराक गोरखपुरी] कालांश -6 अक्टूबर	• विद्यार्थी को रूबाइयाँ की परंपरा, इसकी संरचना और शिल्प का ज्ञान होगा। • विद्यार्थी में उर्दू साहित्य की समृद्धि और उसके साहित्यिक योगदान के प्रति जागरूकता विकसित होगी।	• कक्षा चर्चा • कविता संबंधी कार्य	वेन आरेख - सतत विकास लक्ष्य 10 असमानताओं में कमी	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	
पाठ -18 छोटा मेरा खेत, बगुलों के पंख	• विद्यार्थी कविता की प्रतीकात्मकता, भावात्मक गहराई और	• समूह चर्चा • प्रश्नोत्तरी	सतत विकास लक्ष्य - 10 असमानताओं में कमी	श्यामपट्ट/श्वेतपट्ट पाठ्य पुस्तक : आरोह भाग-2,	

(कविता) [उमाशंकर जोशी] कालांश -4 नवंबर	सरल भाषा का विश्लेषण कर पाएंगे।		सतत विकास लक्ष्य -16 शांति, न्याय और सशक्त संस्थाएं व्याख्यान विधि		
नवंबर	प्रीबोर्ड परीक्षा -1				
दिसंबर	प्रीबोर्ड परीक्षा – 2				
	जनवरी/फरवरी पुनरावृत्ति एवं द्वितीय सत्र वार्षिक परीक्षा				

Painting

Topic No. of periods When	Learning Outcomes	Assessment tools	Teaching Learning Strategies/ Activities	Resources	Inter- disciplinary
Topic: Fundamentals of Art Sub-Topics: Elements of Art & Principles of Art Practical: Composition Colour wheel No. of Periods: 09 each When: April	Students will be able to: - Identify and apply elements and principles in artwork - Analyse how elements and principles create visual impact - Develop creative compositions using fundamental concepts	Rubric-Based Evaluation Criteria based on creativity, composition, and techniques Peer Assessment Classmates provide constructive feedback on each other's work Portfolio Review Collection of sketches and completed compositions Concept Mapping – Visual representation of how elements and principles interconnect	Visual Exploration Observing artworks and nature for elements Hands-on Practice Drawing exercises focusing on each element Interactive Demonstration Showing contrasts in art principles Collage Making Using textures, colours, and patterns	Traditional Art Materials Pencils, Watercolours, charcoal Tactile Objects Textured materials for hands-on learning Colour Wheel & Charts Understanding colour relationships Classroom Models Geometric shapes, sculptures for form study	Mathematics Proportion, symmetry, patterns Science Light, colour theory, material properties History Evolution of artistic styles using elements and principles Literature Storytelling through visual composition

Topic No. of periods When	Learning Outcomes	Assessment tools	Teaching Learning Strategies/ Activities	Resources	Inter- disciplinary
Topic: Miniature Painting Sub-Topics: Origin, Development, and Rajasthani School of Painting -Themes, Characteristics, Famous Artists, Techniques Practical: - Portrait of (Radha BaniThani) - Landscape No. of Periods: 09 each When: May	Students will be able to: - Understand historical context, key features, and stylistic differences - Analyse themes, colour schemes, and techniques used in Rajasthani miniature - Develop skills in fine detailing and traditional art techniques	Group Discussion Debate the impact of royal patronage on miniature art Portfolio Submission Sketches inspired by miniature art techniques Peer Review Feedback on artwork and analysis presentations Case Study Analysis Researching and presenting a significant Rajasthani miniature painting	Gallery Walk Displaying different miniature paintings for observation Live Demonstration Traditional techniques of miniature painting Case Study Analysis of specific paintings like <i>Ragamala</i> or <i>Bani Thani</i> Hands-on Activity Creating a miniature-inspired border design	- Handmade paper - Natural pigments - Art books	History Rajput kingdoms, patronage, and cultural influences. Literature Connection to Rasikapriya, Geet Govinda, and Ramayana themes. Science Natural pigment preparation and traditional colour-making techniques. Mathematics Symmetry, proportion, and layout in miniature compositions..

Topic No. of periods When	Learning Outcomes	Assessment tools	Teaching Learning Strategies/ Activities	Resources	Inter- disciplinary
Topic: Pahari School of Painting Sub-Topics: Origin, Themes, Characteristics, Famous Artists, Techniques Practical: Composition (2 figures) Still Life (Pencil Shading) No. of Periods: 08 each When: July	Students will be able to: - Understand historical context, key features, and stylistic differences - Analyse themes, colour schemes, and techniques used in Pahari miniature - Develop skills in fine detailing and traditional art techniques	Rubric-Based Evaluation Criteria based on creativity, composition, and techniques Group Discussion Debate the impact of royal patronage on miniature art Portfolio Submission Sketches inspired by miniature art techniques Peer Review Feedback on artwork and analysis presentations	- Visual Analysis & Discussion - Storytelling Session - Art Analysis Activity - Hands-on Art Exploration Comparative Study Assignment Divide students into groups to research different sub-schools (Basohli, Kangra, etc.)	- Handmade paper - Natural pigments - Objects for still life - Reference photos	History Literature depictions of epics Cultural Studies Folklore, religious narratives

Topic No. of periods When	Learning Outcomes	Assessment tools	Teaching Learning Strategies/ Activities	Resources	Inter- disciplinary
Topic: Mughal School of Painting Sub-Topics: Origin, Themes, Sub-school, Famous Artists, Characteristics Practical: Bird Composition Still Life (watercolour) No. of Periods: 09 each When: August	Students will be able to: Identify the unique characteristics of Mughal miniature paintings. Analyse themes and narratives depicted in Mughal paintings. Evaluate the impact of Persian and European influences on Mughal paintings. Apply Mughal miniature painting techniques in their own artwork.	Peer Critique Students analyse each other's Mughal-inspired compositions. Rubric-Based Evaluation Assessing artwork for accuracy and technique. Process Journal Reflection on watercolour challenges and improvements.	Hands-on Practice Students recreate Mughal style painting- Felcon on a bird rest Traditional Techniques Exploration Fine brushwork exercises. Gesture & Contour Drawing – Quick sketches of birds for dynamic poses. Observational Still Life Practice – Analyse light & shadow, and apply watercolour techniques for realism.	• Handmade paper • Reference Photos • Watercolour Painting Guides • Bird Study References • Still Life references	History Mughal patronage, court culture etc. Literature Depictions of epics Cultural Studies Folklore, religious narratives Science Pigment preparation, gold leaf application Mathematics Proportion, perspective, and symmetry in miniature compositions.

Topic No. of periods When	Learning Outcomes	Assessment tools	Teaching Learning Strategies/ Activities	Resources	Inter- disciplinary
Topic: Deccan School of Painting Sub-Topics: Origin, Themes, Sub-school, Famous Artists, Characteristics Practical: Folk Art Warli, Madhubani, Gond, Pattachitra etc. No. of Periods: 08 each When: September	Students will be able to: Identify Deccan painting characteristics Analyse persian and local influences Apply folk art techniques.	Presentation Sketchbook Review Peer Critique Practical Artwork Submission Rubric-Based Evaluation.	Visual Analysis Demonstration Guided Practice Storytelling Folk Art Hands-on Activity	• Handmade paper • Reference Photos • Watercolour Painting Guides • Miniature Painting References, • Folk Art references	History (Deccan Sultanates) Literature (Sufi & Deccan poetry) Mathematics (Symmetry in Folk Art) Science (Natural Pigments) Cultural Studies (Regional Traditions)

Topic No. of periods When	Learning Outcomes	Assessment tools	Teaching Learning Strategies/ Activities	Resources	Inter- disciplinary
Topic: Bengal School of Painting Sub-Topics: Origins, Influences, Key Artists, Wash Techniques & The Evolution of Indian National Flag. Practical: Animal Composition (Journey's End) & Monochromatic Design No. of Periods: 09 each When: October	Students will be able to: - Analyse the stylistic features of the Bengal School. - Understand wash techniques, and explore the historical evolution of the Indian National Flag.	Rubric-Based Evaluation Quiz on key artists Practical demonstration of wash techniques, Timeline creation of the Indian National Flag's evolution, Comparative analysis of flag symbolism.	Lecture with visual aids Hands-on practice of wash techniques Guided demonstration, Group discussion on nationalism in art Visual representation of flag evolution.	- Handmade paper for practical work - Wash painting tutorial - Documentary video - Historical records on the Indian National Flag	History (Swadeshi Movement & Flag Evolution) Literature (Tagore's influence on art & nationalism) Chemistry (pigments & wash technique science) Political Science (symbolism of the national flag).

Topic No. of periods When	Learning Outcomes	Assessment tools	Teaching Learning Strategies/ Activities	Resources	Inter- disciplinary
Topic: Modern Trends in Indian Art Sub-Topics: Painting, Sculpture, and Graphic Art Practical: Three-Figure Composition & Acrylic Painting No. of Periods: 09 each When: November	Students will be able to: - Understand the evolution, styles, and key artists in modern Indian painting, sculpture, and graphic art. - Analyse the evolution of modern Indian art - Evaluate the significance of key artists and movements - Apply new techniques	Rubric-Based Evaluation Criteria based on creativity, composition, and techniques Quiz to assess knowledge of key artists Practical tasks to apply techniques Comparative study to evaluate different trends in modern art	- Case Studies - Demonstration Method - Hands-on Practice - Collaborative Learning - Peer Review & Critique Facilitate discussions where students provide feedback on each other's work.	Contemporary Indian artworks and artist portfolios. Practical Art Resources: Acrylic paints Brushes Canvas Handmade paper. Clay	History students analyse post-independence art movements Literature evaluate artistic influences in poetry and prose Chemistry explore pigments & materials in modern art

Topic No. of periods When	Learning Outcomes	Assessment tools	Teaching Learning Strategies/ Activities	Resources	Inter- disciplinary
Topic: Revision Bengal school & Modern Trends in Indian Art Sub-Topics: Wash techniques, & Paintings of modern trends Practical: Symmetrical design Nature-inspired artwork using wash technique No. of Periods: 09 each When: December	Students will be able to: Recall the characteristics, influences, and key artists of the Bengal School of Painting. Understand the evolution, styles, and significance of modern Indian art, including painting, Develop artistic skills through wash techniques, acrylic painting, and symmetrical design.	Comparative analysis of Bengal School and modern Indian art. Practical assignments in wash painting, acrylic painting, and symmetrical design. Group discussions and peer reviews on artistic interpretations.	Hands-on Activities Case Studies Analyse works by Abanindranath Tagore, Nandalal Bose, M.F. Husain, and S.H. Raza. Comparative Study Discuss differences and similarities between the Bengal School and modern Indian art. Symmetry in Art Explore examples of symmetrical compositions in traditional and modern Indian art.	• Practical Art Resources: Acrylic paints Water colour Brushes Canvas Handmade paper. Clay	History The Swadeshi Movement's impact on the Bengal School post-independence modern art movements. Mathematics Understanding symmetry, balance, and proportions in art. Chemistry: Study of pigments, colour mixing, and the science behind wash and acrylic painting.

Topic No. of periods When	Learning Outcomes	Assessment tools	Teaching Learning Strategies/ Activities	Resources	Inter- disciplinary
Topic: Revision of Modern Trends in Indian Art Sub-Topics: Sculpture, and Graphic Art of Modern Trends Practical: Symmetrical design Nature-inspired artwork using wash technique No. of Periods: 09 each When: Jan- Feb	Students will be able to: Recall the characteristics, influences, and key artists of the modern trend's sculptures Understand the evolution, styles, and significance of modern Indian art, including sculpture, and graphic art. Develop artistic skills through wash techniques, acrylic painting, and symmetrical design.	Comparative analysis of modern Indian art. Practical assignments in acrylic painting, and symmetrical design. Group discussions and peer reviews on artistic interpretations.	Hands-on Activities Case Studies Analyse works by Abanindranath Tagore, Nandalal Bose, M.F. Husain, and S.H. Raza. Comparative Study Discuss differences and similarities between the modern Indian art. Symmetry in Art Explore examples of symmetrical compositions in traditional and modern Indian art.	• Practical Art Resources: Acrylic paints Water colour Brushes Canvas Handmade paper. Clay	History post-independence modern art movements. Mathematics Understanding symmetry, balance, and proportions in art. Chemistry: Study of pigments, colour mixing, and the science behind wash and acrylic painting.

Hindustani Music Vocal

Topic/Month	Learning Outcomes	Assessment Tools	Teaching Learning Strategies/ Activities	Resources	Interdisciplinary Activities
APRIL THEORY - Brief study of the following- Alankar, Kan, alap, taan. - Description of Rupak Taal along with taal notation with Thah, Dugun, Tigun and chaugun. - Notation and description of Raga bhairav APRIL PRACTICAL - One Drut Khyal with simple elaboration and a few taanas in raga bhairav - Rupak taal with hand gestures.	Students will be able to : - perform the compositions they have learnt and will be able to learn a detailed description of Raag Bhairav and Rupak taal, both theoretically and practically. - Learn the traditional structure of the raag with the necessary components and compositions, and proper divisions used in Teentaal.	Students will be asked to recite the composition and the taals they've learnt and will be asked to work on a project containing the theoretical structures and topics from the syllabus.	- Recitation of the drut composition in raag Bhairav set in teental "Rain gayi ab Jaago pyaare" will be taught to the students including the elements such as aaroh, avroh, aalap, taan etc. - Practical analysis and rendition of Rupak taal on hand in various tempos.	Text Books and Musical instruments.	Mathematics : Taal cycle in music works in favor of practical understanding of basic mathematical principles wherein, students recognize the flow of beats within the framework of time cycle.
MAY THEORY - Life sketch and contribution of Faiyaz Khan - Brief study of Gram - Notation and description of Raga Bageshree.	Students will be able to: perform the compositions they have learnt and will be able to learn a detailed description of Raag Bageshree and Jhaptaal, both theoretically and	Students will be asked to recite the composition and the taals they've learnt and will be asked to work on a	Recitation of the drut composition in raag Bageshree set in teental "Kaun karat tori vinati" will be taught to the students including the elements such as aaroh, avroh, aalap,	Text Books and Musical instruments.	History: life sketch of Musicians. Mathematics : Rhythm, taal and beat cycle

● Description of Jhaptaal along with taal notation with Thah, Dugun, Tigon and chaugun. MAY PRACTICAL ● One Drut Khyal with simple elaboration and a few taanas in raga Bageshree. ● Jhaptaal with hand gestures.	practically. ● Learn the traditional structure of the raag with the necessary components and compositions, and proper divisions used in Teentaal.	project containing the theoretical structures and topics from the syllabus.	taan etc. ● Practical analysis and rendition of Jhaptaal on hand in various tempos.		
JULY THEORY ● Historical development of time theory of Ragas. ● Brief study of Khatka Murki and Gamak. ● Structure and knowledge of tuning of Tanpura. ● Notation and description of Raga malkauns. JULY PRACTICAL ● Tuning of Tanpura. ● One drut Khyal and tarana with simple elaboration and a few taans in Raga Malkauns	Students will be able to : ● perform the compositions they have learnt and will be provided with a detailed description of Raag Malkauns and learn to tune the tanpura. ● The traditional structure of the raag with the necessary components and compositions, and proper divisions used in Teentaal.	Students will be asked to recite the composition and the taals they've learnt and will be asked to work on a project containing the theoretical structures and topics from the syllabus.	● Recitation of the drut composition in raag Malkauns set in teental "Koyaliala Bole" will be taught to the students including the elements such as aaroh, avroh, aalap, taan etc. ● Practical analysis and rendition of Jhaptaal on hand in various tempos.	Text Books and Musical instruments.	● History and Science: The historical time theory of ragas works in favour of the environmental factors such as the weather and more specifically the position of the sun i.e. time of the day and how it influences the choice of the raga.

AUGUST THEORY ● Brief study of Murchhana ● Detailed Study of Sangeet Ratnakar ● Notation and description of Raga Malkauns vilambit khyal. AUGUST PRACTICAL ● One vilambit Khyal with simple elaborations and a few Taans in raga malkauns.	Students will be able to : ● perform the compositions they have learnt and will be provided with a detailed description of Raag Malkauns and a Vilambit Khyal. ● The traditional structure of the raag with the necessary components and compositions, and proper divisions used in Vilambit Ektaal.	Students will be asked to recite the composition and the taals they've learnt and will be asked to work on a project containing the theoretical structures and topics from the syllabus.	● Recitation of the Vilambit composition in raag Malkauns set in Ektaal will be taught to the students including the elements such as aaroh, avroh, aalap, taan etc.	Text Books and Musical instruments.	● History: Study of granth. ● Mathematics : Rhythm, time and beat cycle.
SEPTEMBER THEORY ● Description of Dhamar taal along with taal notation in thah, dugun, tigon, chaugun. ● Writing in notation the composition of dhamar in raga malkauns. SEPTEMBER PRACTICAL ● Recitation of dhamar with dugun and chaugun in raag malkauns.	Students will be able to: ● perform the compositions they have learnt and will be provided with a detailed description of Raag Malkauns and a Dhamar in it. ● The layakaaris dugun tigon and chaugun are used in a Dhamar style of music.	Students will be asked to recite the composition and the taals they've learnt and will be asked to work on a project containing the theoretical structures and topics from the syllabus.	● Recitation of the Dhamar composition in raag Malkauns set in Dhamar taal will be taught to the students including the elements such as aaroh, avroh, aalap and layakaris.	Text Books and Musical instruments.	● Mathematics : Taal cycle in music works in favour of practical understanding of basic mathematical principles wherein, students recognise the flow of beats within the framework of timecycle.

OCTOBER THEORY - Brief study of Meend. - Detailed study of Sangeet Parijaat. - Life sketch of Ustad Bade Ghulam Ali Khan. - Notation and description of Raga bhairav vilambit khyal. OCTOBER PRACTICAL - One Vilambit Khyal in Raag Bhairav	Students will be able to: - perform the compositions they have learnt and will be provided with a detailed practical and theoretical description of Raag bhairav and a Vilambit Khyal. - The traditional structure of the raag with the necessary components and compositions, and proper divisions used in Vilambit Ektaal.	Students will be asked to recite the composition and the taals they've learnt and will be asked to work on a project containing the theoretical structures and topics from the syllabus.	Recitation of the Vilambit composition in raag bhairav set in Ektaal will be taught to the students including the elements such as aaroh, avroh, aalap, taan etc.	Text Books and Musical instruments.	History: Study of granth. Mathematics : Rhythm, time and beat cycle.
NOVEMBER THEORY - Life sketch and contribution of Pt. Krishna Rao Shankar Pandit NOVEMBER PRACTICAL - One devotional song(he Ishwar tum hamko aisa var aur shakti do) - Recognition of Raagas	Students will be able to: - Develop a deep sense of devotion and connections by learning the devotional song. - Recognise the raagas by hearing and identifying the position of notes being used.	Students will be asked to recite the composition and the taals they've learnt and will be asked to work on a project containing the theoretical structures and topics from the syllabus.	Recitation of Devotional bhajan individually by the students.	Text Books and Musical instruments.	History: life sketch of musicians :The devotional song that the students will learn is going to be a lens capturing the social condition of the time it is set in.