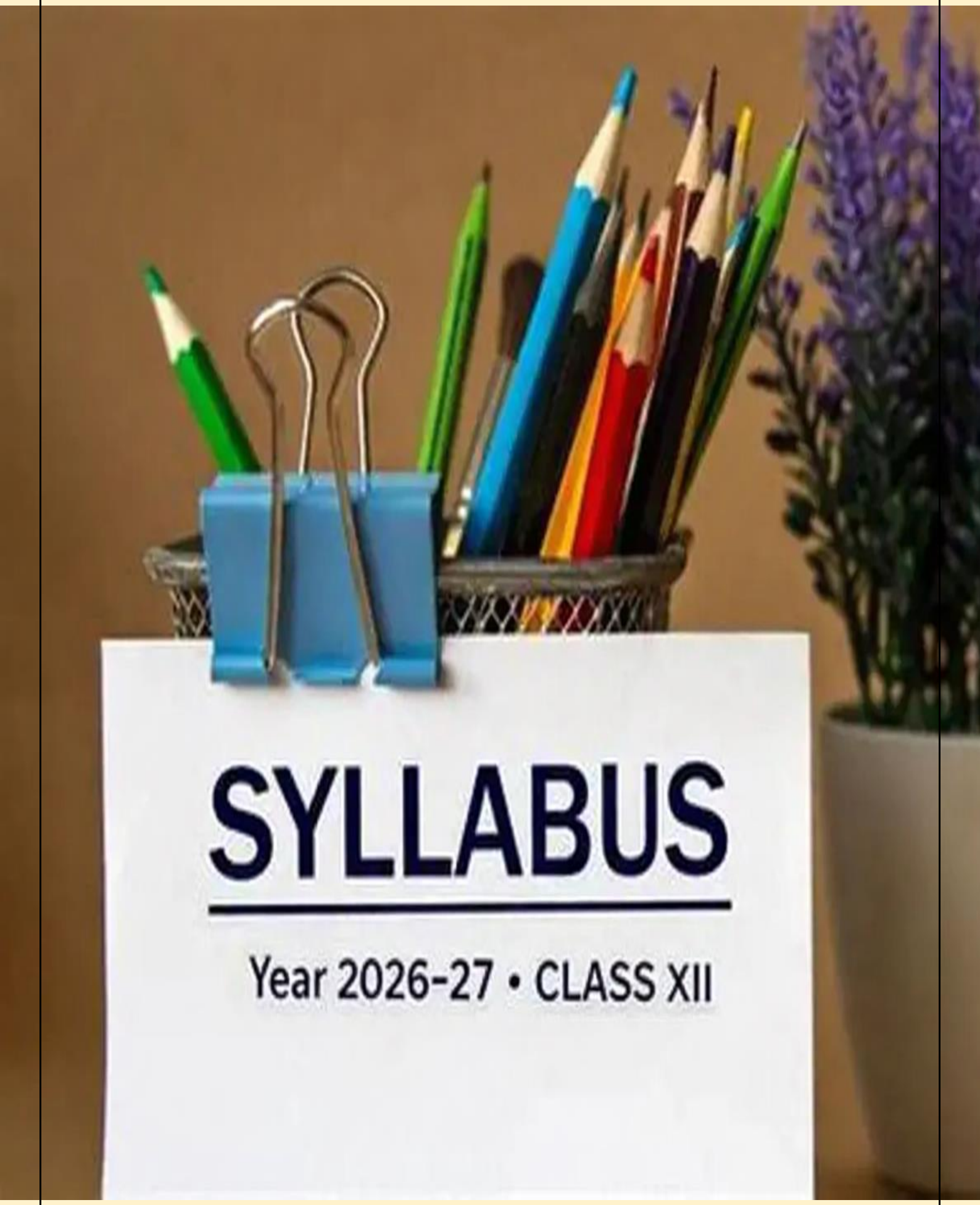
SYLLABUS
Year 2026-27 • CLASS XII

ENGLISH (301)			
MONTH	**READING AND WRITING**	**LITERATURE**	**LEARNING OUTCOMES**
April	Unseen passage: Factual Descriptive /Literary		➢ Assess interpretation, analysis and inferences.
		FLAMINGO: •The Last Lesson	➢ The students will be able to understand the need of preserving one's language, effects of linguistic chauvinism in education and unity in diversity.
		•Lost Spring	➢ Students will be able to understand the lesson and appreciate the author's orientation towards the suffering of child labourers.
		• My Mother at Sixty- Six	➢ Students will be able to learn to value the parents and try to spend quality time with them.
		VISTAS: • The Third Level	➢ Students will be able to comprehend that there is no escape from the realities of life and one has to find inner peace while dealing with all the problems of modern world.
	•Notice Writing		➢ Students will be able to use appropriate format and demonstrate specific information
MAY	Unseen factual passage	**FLAMINGO:** •Keeping Quiet	Assess interpretation, analysis and inferences. Understand the necessity of Introspection.
		VISTAS: •The Tiger King	

			➢ Students will be able to understand not to have blind faith in palmistry and fore- telling. ➢ To analyze and interpret the theme of nature's inevitable revenge.
	•Letter to the Editor		➢ Students will be able to understand the purpose and format of a formal letter to the editor,and express their views on social issues in a clear, coherent and logically structured manner
July	•Unseen passage: Factual Descriptive /Literary		➢ Assess interpretation, analysis and inferences.
		FLAMINGO: •Deep Water	➢ To understand the psychology of fear and its management.
		•*The Rattrap*	➢ To bring home the theme that most human beings are prone to fall in the trap of material benefits and that human beings have a tendency to redeem themselves from dishonest ways.
		•*Indigo*	➢ Students will be able to get acquainted with the legal vocabulary. ➢ Students will understand the role of a leader.
		•A Thing of Beauty	➢ Understand that beauty dwells inside us and gives us happiness. ➢ Appreciate and admire the beauty of nature.
		VISTAS: •Journey to the End of the Earth	➢ Students will be able to understand that millions of years ago humans had not arrived and the climate was much warmer with a variety of flora and fauna, know that the landmass disintegrated into countries shaping the globe.

August	•Unseen Case-based factual passage		➢ Assess interpretation, analysis and inferences.
		FLAMINGO: •Poets & Pancake	➢ Understanding the contrast between creativity and envy within the film industry. ➢ Exploring the themes of unfulfilled dreams, loyalty, and the creative environment of Gemini Studios. ➢ Analyz the dynamic interactions among various personalities in the studio, including poets and makeup artists.
		•The Interview	➢ Students will be able to express personal opinion on the interview genre and will come to know the opinions of eminent people about interview.
		•A Roadside Stand	➢ Identify the figures of speech - understand that the economic well-being of a country depends on a balanced development of the villages and the cities
		VISTAS: •The Enemy	➢ Students will be able to- conclude that people of the world are inherently the same despite the differences in colour, culture and nationalities. ➢ Students will be able to resolve the personal dilemmas .
	•Article Writing		Students will be able to express ideas on contemporary issues in a clear, coherent and well-structured manner, using appropriate format, tone, and vocabulary.
	•Report Writing		Students will be able to present factual information in a

			well-organized manner using an appropriate format & formal tone, develop the ability to describe events objectively, and sequence ideas logically.
September **• Term-1 Examination**	•Revision through Practice Questions •Class Tests & Assignments	•Revision and Practice of Extract-based Questions & •Short & Long Answer Type Questions •Class Tests & Assignments	---
October		**FLAMINGO:** •Going Places	➢ Students will be able to analyze the difference between realistic and unrealistic dreams to compare their world of fantasy and reality.
		•Aunt Jennifer's Tigers	➢ Students will be able to understand the critical appreciation of the poem and empathize with the victims of male chauvinism.
		VISTAS: • On the Face of It	➢ Students will be able to gain insight into the loneliness of physically handicapped. ➢ Students will be able to overcome negative attitude towards life.
		•Memories of Childhood	➢ Students will develop an understanding of cultural assimilation and its harmful effects on identity and dignity.
November	•Revision through Practice Questions •Class Tests & Assignments	•Revision and Practice of Extract-based Questions & •Short & Long Answer Type Questions •Class Tests & Assignments	-------
December	**Pre Board Examination**		

ECONOMICS (030)

MONTH	CHAPTERS	LEARNING OUTCOMES
April	**UNIT 6-DEVELOPMENT EXPERIENCE (1947- 1990)** INDIAN ECONOMY ON THE EVE OF INDEPENDENCE INDIAN ECONOMY (1950-1990)	Students will be able to: • Understand how colonial policies left India with a stagnant economy, low industrial growth, and widespread poverty. • India faced challenges like poor infrastructure, heavy dependence on agriculture, and lack of modern industries, which shaped the need for planned economic development in the post-independence era. • Students will able to do debate in favour and against the licence policy and free play of market forces or intervention by government.
May	**UNIT 2 MONEY & BANKING**	• Becomes aware regarding money supply and its components. • Pupil will be able to understand the role of credit creation by commercial banks and tools controlling money supply in an economy.
June	**SUMMER VACATIONS**	
July	**UNIT -1 NATIONAL INCOME AND RELATED AGGREGATES** Introduction and some basic concepts of macro economics National income and related aggregates **UNIT 3-DETEMINATION OF INCOME AND EMPLOYMENT** Aggregate demand, Aggregate supply and related concepts Short run equilibrium output Problem of Deficient Demand and Excess Demand **UNIT 4 GOVERNMENT BUDGET AND THE ECONOMY**	Students will be able to: Understand concepts of stock and flow, Final and intermediate Goods and other concepts, Different methods of measuring Domestic Income and National Income. Students will be able to relate AD with consumption and Investment, Multiplier impact of Investment. Pupils become familiar regarding how quantitative and qualitative tools curbed the fluctuations of an economy Pupil will be able to understand the importance and structure of govt. Budget, one tax, one market and one Nation.

August	**UNIT - 6** **ECONOMIC REFORMS SINCE 1991** ECONOMIC REFORMS SINCE 1991: NEW ECONOMIC POLICY **UNIT-7 CURRENT CHALLENGES FACING INDIAN ECONOMY** Human capital formation Rural development Employment: growth informalisation and other issues	The learner will understand background of reform policy in 1991 and policy of LPG Learners understand the key reforms in liberalization, privatization, and globalization (LPG), and how these changes aimed to boost growth, efficiency, and integration with the global economy. Pupil able to list Human Resources, will analysis relation between economic development and HCF. Learners will know Rural development and major issues, critical role of credit and marketing in rural development. Pupil will able to develop awareness about structure of employment in India, Informalisation of workforce, evaluate Government Policies and apply economic concepts to real life employment
September	**FIRST TERM EXAM**	
October	Environment and Sustainable development **UNIT -8: DEVELOPMENT EXPERIENCE OF INDIA -A COMPARISON WITH NEIGHBOURS** **UNIT 5-BALANCE OF PAYMENTS** Foreign exchange rate Balance of payment	• Students will learn about different concepts of environment, environmental crisis, concept and strategies of sustainable development. • Students will learn Experiences and achievements and strategies of India, China and Pakistan. • Learners will be able to understand reasons for rise in foreign exchange rate and its impact on exports and Imports and BOP balance.
November (Onwards)	**Thorough revision and Evaluation Tests,**	

December	**Pre-Board/Final Examinations, and Practical's as per the academic schedule**

ACCOUNTANCY (055)

MONTH	CHAPTER	LEARNING OUTCOMES
April	• Accounting for Partnership-Fundamentals	Students will be able to: i. Define partnership, partnership firm, and partnership deed. ii. Explain features of partnership and contents of a partnership deed. iii. Understand provisions of the Partnership Act when no deed exists. iv. Distinguish between fixed and fluctuating capital. v. Prepare Profit & Loss Appropriation Account, including profit guarantees. vi. Make past adjustments correctly.
	• Goodwill: Nature and valuation	i. Understand meaning, nature, and factors affecting goodwill. Ascertain the value of Goodwill with Average Profit, Super Profit and Capitalisation method.
May	• Admission of a partner (Till treatment of Goodwill)	i. Explain the effect of change in profit-sharing ratio on admission of a new partner. ii. Understand treatment of goodwill (as per AS-26)
June	**SUMMER VACATIONS**	
July	• Admission of a Partner (Cont.)	i. Understand accounting treatment of revaluation of assets, reassessment of liabilities, and treatment of reserves and accumulated profits through Revaluation Account and Balance Sheet. ii. Preparation of capital accounts, current accounts, and the new firm's balance sheet with adjustment of capital.
	• Retirement of a partner	i. Explain the effect of retirement/death of a partner on profit-sharing ratio. ii. Understand accounting treatment of goodwill, revaluation, and adjustment of reserves, profits, and losses, along with capital adjustment. iii. Partner's Loan Account.

	• Death of a partner	i. Calculate deceased partner's share and prepare deceased partner's and executor's accounts. ii. Prepare remaining partners' capital accounts and the revised balance sheet.
	• Change in profit sharing ratio	i. Treatment of Reserves, Goodwill and Revaluation of assets and liabilities
	• Dissolution of a partnership firm	i. Identify situations leading to dissolution of a partnership firm. ii. Prepare Realisation Account and related accounts.
August	• Accounting for Share Capital	i. Define shares and share capital; distinguish between equity and preference shares, and types of share capital. ii. Understand private placement and ESOP. iii. Explain accounting treatment for issue of shares. iv. Account for forfeiture and reissue of shares. v. Present share capital in the balance sheet (Schedule III, Companies Act 2013).
	• Issue of Debentures	i. Explain accounting treatment for issue of debentures with terms of redemption. ii. Account for discount/loss on issue of debentures. iii. Understand collateral security and its presentation. iv. Calculate and record interest on debentures.
September	**REVISION OF SYLLABUS** **TERM- I Examination**	
October	• Financial Statements of a Company	i. Understand major headings and sub-headings of Statement of Profit and Loss & Balance Sheet (According to Schedule III) as per Companies Act 2013.
	• Financial statement Analysis	i. Explain the different categories of tools of financial statement analysis.
	• Tools of Financial statement Analysis- Comparative and Common size Statements	i. Prepare the Common size Statements and ii. Comparative statements for analysing the Financial Statements.

	• Accounting Ratio Analysis	i. Understand meaning, objectives, and significance of ratios. ii. Calculate liquidity ratios, solvency ratios, activity ratios and profitability ratios.
	• Cash Flow Statement	i. Define the meaning and objectives of a Cash Flow Statement. ii. Prepare Cash Flow Statement using the indirect method as per AS-3 with adjustments.
November	**Revision of Syllabus**	
December	**Pre Board Examination**	

BUSINESS STUDIES – (054)

MONTH	CHAPTER	LEARNING OBJECTIVE
April	**Ch-1 Nature and Significance of Management** • Management – Concept, Objectives, and Importance • Management as Science, Art and Profession • Levels of Management • Management functions – Planning, Organizing, Staffing, Directing and Controlling • Coordination – Concept and Importance	**After going through the chapter, the students will be able to:** • Understand the concept of management • Explain the meaning of Effectiveness and Efficiency • Discuss the objective of management • Describe the importance of management • Examine the nature of management as a science, art and profession • Understand the role of top, middle and lower levels of management • Explain the functions of management • Discuss the concept and characteristics of coordination • Explain the importance of coordination

	Ch-2 Principles of Management • Principles of Management – Concept and Significance	**After going through the chapter, the students will be able to:** • Understand the concept of principles of management • Explain the significance of management principles
May	**Ch-2 Principles of Management (Cont.)** • Fayol's principles of Management • Taylor's Scientific management – Principles and Techniques	• Discuss the principles of management developed by Fayol • Explain the principles and techniques of 'Scientific Management' • Compare the contributions of Fayol and Taylor
June	**SUMMER VACATIONS**	
July	**Ch-3 Business Environment** • Business Environment – Concept and Importance Dimensions of Business Environment – Economic, Social, Technological, Political and Legal Demonetization – Concept and Features	**After going through the chapter, the students will be able to:** • Understand the concept of 'Business Environment'. • Describe the importance of business environment. • Describe the various dimensions of 'Business Environment'. Understand the concept of demonetization
	Ch-4 Planning • Concept, importance and limitations • Planning process • Single use and standing plans: Objectives, Strategy, Policy, Procedure, Method, Rule, Budget and Programme	**After going through the chapter, the students will be able to :** • Understand the concept of planning • Describe the importance of planning • Understand the limitations of planning • Describe the steps in the process of planning • Develop an understanding of single use and standing plans Describe objectives, policies, strategy, procedure, method, rule, budget and programme as types of plans
	Ch 5 Organising • Concept and importance • Organising Process • Structure of Organisation –	**After going through the chapter, the students will be able to :** • Understand the concept of organising as a structure and as a process.

	Functional and Divisional Concept, Formal and informal organisation – concept • Delegation: Concept, Elements and Importance • Decentralization: Concept and Importance	• Explain the importance of organising. • Describe the steps in the process of organising. • Describe functional and divisional structures of organization. • Explain the advantages, disadvantages and suitability of functional and divisional structure. • Understand the concept of formal and informal organisation. • Discuss the advantages, disadvantages of formal and informal organisation.
	Ch-6 Staffing • Concept and Importance of Staffing • Staffing as a part of Human Resource Management – Concept • Staffing Process • Recruitment Process • Selection – Process • Training and Development – Concept and Importance, Methods of Training – On-the-Job and Off-the-Job: Vestibule Training, Apprenticeship Training and Internship Training	**After going through the chapter, the students will be able to :** • Understand the concept of staffing. • Explain the importance of staffing. • Understand the specialized duties and activities performed by Human Resource Management • Describe the steps in the process of staffing • Understand the meaning of recruitment • Discuss the sources of recruitment • Explain the merits and demerits of internal and external sources of recruitment • Understand the meaning of selection • Describe the steps involved in the process of selection • Understand the concept of training and development • Appreciate the importance of training to the organisation and to the employees • Discuss the meaning of induction training, vestibule training, apprenticeship training and internship training • Differentiate between training and development • Discuss on-the-job and off-the-job methods of training
August	**Ch-7 Directing** • Concept and Importance • Elements of Directing • Motivation – Concept, Maslow's hierarchy of needs, financial and non- financial incentives • Leadership – Concept, styles – authoritative, democratic and laissez	**After going through the chapter, the students will be able to :** • Describe the concept of directing • Discuss the importance of directing • Describe the various elements of directing • Understand the concept of motivation • Develop an understanding of Maslow's Hierarchy of needs • Discuss the various financial and non-financial incentives

	faire Communication – Concept, formal and informal communication; barriers to effective communication, how to overcome the barriers	• Understand the concept of leadership • Understand the various styles of leadership • Understand the concept of communication • Understand the elements of the communication process • Discuss the concept of formal and informal communication • Discuss the various barriers to effective communication • Suggest measures for overcoming barriers to communication
	Ch-8 Controlling • Controlling – Concept and importance • Relationship between planning and controlling • Steps in process of control	**After going through the chapter, the students will be able to:** • Understand the concept of controlling. • Explain the importance of controlling. • Describe the relationship between planning and controlling • Discuss the steps in the process of controlling.
	Ch-12 Consumer Protection • Concept and importance of Consumer Protection • Consumer Protection Act 2019 – Meaning of consumer -Consumer Rights and Responsibilities -Who can file a complaint? – Redressal machinery – Remedies available • Consumer awareness – Role of consumer organization and Non- Governmental Organization (NGOs)	**After going through the chapter, the students will be able to:** • Understand the concept of consumer protection. • Describe the importance of consumer protection. • Discuss the scope of Consumer Protection Act, 2019 • Understand the concept of a consumer according to the Consumer Protection Act, 2019 • Explain the consumer rights • Understand the responsibilities of consumers • Understand who can file a complaint and against whom? • Discuss the legal redressal machinery under Consumer Protection Act, 2019 • Examine the remedies available to the consumer under Consumer Protection Act, 2019 • Describe the role of consumer organizations and NGOs in protecting consumers' interests.
September	**Term- 1 Examination**	
October	**Ch-11 Marketing** • Marketing – Concept,	**After going through the chapter, the students will be able to:**

	Functions and Philosophies • Marketing Mix – Concept and Elements • Product - branding, labelling and packaging - Concept • Price - Concept, Factors determining price • Physical Distribution – Concept, Components and Channels of Distribution • Promotion – Concept and Elements; Advertising, Personal Selling, Sales Promotion and Public Relations	• Understand the concept of marketing. • Explain the features of marketing. • Discuss the functions of marketing. • Explain the marketing philosophies. • Understand the concept of marketing mix. • Describe the elements of marketing mix. • Understand the concept of product as an element of marketing mix. branding, labelling and packaging price. • Describe the factors determining price of a product. • Understand the concept of physical distribution. • Explain the components of physical distribution. • Describe the various channels of distribution. • Understand the concept of promotion as an element of marketing mix. • Describe the elements of promotion mix. • Understand the concept of advertising. • Understand the concept of sales promotion. • Discuss the concept of public relations.
	Ch-9 Financial Management • Concept, role and objectives of Financial Management • Financial decisions: investment, financing and dividend - Meaning and factors affecting • Financial Planning - Concept and Importance • Capital Structure – concept and factors affecting capital structure • Fixed and Working Capital – Concept and factors affecting their requirements	**After going through the chapter, the students will be able to:** • Understand the concept of Financial Management. • Explain the role of financial management in an organisation. • Discuss the objectives of financial management • Discuss the three financial decisions and the factors affecting them. • Describe the concept of financial planning and its objectives. • Explain the importance of financial planning. • Understand the concept of capital structure. • Describe the factors determining the choice of an appropriate capital structure of a company. • Understand the concept of fixed and working capital. • Describe the factors determining the requirements of fixed and working capital.
	Ch-10 Financial Markets	• Discuss the trading procedure in a stock exchange. • Give the meaning of depository services and

	• Financial Markets: Concept • Money Markets: Concept • Capital Market and its types (Primary and Secondary) • Stock Exchange – Functions and trading procedure • Securities and Exchange Board of India (SEBI) – Objectives and Functions	demat account as used in the trading procedure of securities. • State the objectives of SEBI. • Explain the functions of SEBI.
November	**Revision of Syllabus**	
December	**Pre Board Examination**	

PHYSICS (042)

MONTH	TOPIC	Learning Outcomes
April	**Electrostatics** **Chapter**–1: Electric Charges and Fields Electric charges, Conservation of charge, Coulomb's law-force between two- point charges, forces between multiple charges; superposition principle and continuous charge distribution. Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field. Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside). **Chapter–2**: Electrostatic Potential and Capacitance Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two-point charges and of electric dipole in an electrostatic field. Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarization, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric	1.Students will be able to produce static electricity. 2.Students will be able to observe the effects of static electricity. 3.Students will be able to recognize and define the terms attract and repel as they relate to static electricity. 4.Students will be able to collect and graph data. 1.Understand the meaning and significance of electric potential. 2.Use electric potential energy to analyze the motion of charged particles. 3.Calculate the electric potential that a collection of charges produces at a point in space. 4. Students learn how charges interact, create electric fields and potential, and how energy is stored using capacitors.

	medium between the plates, energy stored in a capacitor (no derivation, formulae only).	
May	**Unit II – current electricity** Chapter–3: Current Electricity Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity, temperature dependence of resistance, Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel, Kirchhoff's rules, Wheatstone bridge.	To enable students to understand the concept of electric current and potential ,Ohm's law ,EMF and terminal potential difference. Mechanism of current conduction in metals. temperature dependence of resistance and resistivity, Kirchhoff's laws Wheatstone bridge
June	**SUMMER VACATIONS**	
July	**Unit III: Magnetic Effects of Current and Magnetism** **Chapter**–4: Moving Charges and Magnetism Concept of magnetic field, Oersted's experiment. Biot - Savart law and its application to current carrying circular loop. Ampere's law and its applications to infinitely long straight wire. Straight solenoid (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields. Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer- its current sensitivity and conversion to ammeter and voltmeter. **Chapter–5: Magnetism and Matter** Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines. Magnetic properties of materials- Para-, dia- and ferro – magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties. **Unit IV**	To enable students to understand and apply Biot savart law and Ampere circuital law Force on a charged conductor in magnetic field Behaviour of the conductor in magnetic field, Moving coil galvanometer and its conversion into an ammeter and voltmeter To enable students to understand magnets and its properties. Various terms to study magnetic properties and classification of magnetic materials and their practical applications in our day-to-day life

	Chapter–6: Electromagnetic Induction **Electromagnetic induction**; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction.	To enable students to understand EMI, faraday law and lenz's law, self induction and other related phenomenon
August	**Chapter–7**: **Alternating Current** Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance, power in AC circuits, power factor, wattless current. AC generator, Transformer. **Unit V: Electromagnetic waves** **Chapter–8:** Electromagnetic Waves Basic idea of displacement current, Electromagnetic waves, their characteristics, their transverse nature (qualitative idea only). Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses. **Unit VI: Optics** **Chapter**–9: **Ray Optics and Optical Instruments** Ray Optics: Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism. Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.	To enable students to understand alternating current it's various terms flow of alternating current through resistance inductor and capacitor and power of the AC circuit Student will come to know about the idea of electromagnetic wave. how electromagnetic wave are used in the different radio wave, microwave, radar system, medical purpose like x-ray, greenhouse Understand the laws of reflect the behavior of light through lenses and mirrors Understand optical instruments (microscope, telescope) Draw accurate ray diagrams for mirrors and lenses Perform experiments: Determination of focal length Verification of laws of refraction Understand working of: Optical fibre, Prisms.
	Chapter–10: Wave Optics : Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width (No derivation final expression only), coherent sources and sustained interference of light, diffraction due to a single slit, width of central maxima (qualitative treatment only).	To enable students to understand the wave properties of light and its various phenomenon like diffraction, reflection, refraction and interference .
September	**Term I Examination**	
October	**Unit VII** **Chapter–11**: **Dual Nature of Radiation and Matter** Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light. Experimental study of	Understand the dual nature of light (wave + particle) Explain photoelectric effect and its observations Understand Einstein's photoelectric equation

	photoelectric effect Matter waves-wave nature of particles, de-Broglie relation. **Unit VIII: Atoms and Nuclei** **Chapter–12: Atom**s Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model of hydrogen atom, Expression for radius of nth possible orbit, velocity and energy of electron in nth orbit, hydrogen line spectra (qualitative treatment only). **Chapter–13:** Nuclei Composition and size of nucleus, nuclear force Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion . **Unit IX: Electronic Devices** **Chapter–14: Semiconductor Electronics**: Materials, Devices and Simple Circuits Energy bands in conductors, semiconductors and insulators (qualitative ideas only) Intrinsic and extrinsic semiconductors- p and n type, p-n junction Semiconductor diode - I-V characteristics in forward and reverse bias, application of junction diode -diode as a rectifier.	Learn about matter waves (de Broglie hypothesis) Understand basic idea of wave-particle duality of electrons Understand atomic models (especially Bohr's model) Explain energy levels and spectral lines of hydrogen atom Understand nuclear structure (protons, neutrons) Understand nuclear reactions: fission and fusion Understand the difference between conductors, insulators, and semiconductors Explain intrinsic and extrinsic semiconductors Understand doping (n-type and p-type) Learn the formation and working of a p–n junction diode Understand biasing (forward and reverse bias To enable students to understand conversion of A.C. into D.C. Current
November	**Revision and Practice and Pre- board**	
December	**Revision and Mock Tests and Pre- board**	

CHEMISTRY (043)

Month	Chapter/ Unit	Learning Outcomes
APRIL-: **Physical Chemistry & Organic chemistry**	**Unit -1 Solutions**: (Topics)Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, Raoult's law, colligative properties relative lowering of vapor pressure, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties molecular mass, Van't Hoff factor **UNIT -6 Haloalkanes and Haloarenes**: **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.	The students will be able to: 1. Able to express concentration of different types of solutions in different units 2. Describe colligative properties of solutions 3.Solve numerical related to colligative properties. 4. Comprehend the concept of Raoult's Law and Ideal and Non Ideal solutions. 5. Use Van't Hoff Factor for association and dissociation The students will be able to: 1. Comprehend the preparation, properties and uses of Haloalkanes and Haloarene. 2. Write the reactions for preparation and properties. 3. Understand the concept of Chirality and Optical Activity. 4. List the steps for the mechanisms–SN^1 and SN^2
MAY- Physical Chemistry	**UNIT -2 Electrochemistry**: (Topics) Conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law and its applications	The students will be able to: 1. Identify factors affecting conductance i.e. nature of electrolyte, concentration, temperature, distance between electrodes, etc. 2. Understand the role of cations and anions in carrying current. 3. Compare conductance , specific conductivity and molar conductivity. 4. Interpret graphs and experimental data. .
JUNE-	**SUMMER VACATIONS**	
JULY – Organic and inorganic chemistry	**UNIT -2 Electrochemistry**: (Topics) 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, electrolysis and law of	The students will be able to: 1. Comprehend the concept of Electro-chemical cells and redox reactions taking place. 2. Write the cell representations and calculate EMF of the Galvanic Cells.

	electrolysis (elementary idea), dry cell-electrolytic cells and Galvanic cells, lead accumulator, fuel cells, corrosion.	3. Understand the effect of change of concentration on EMF 4. Define and use the Faraday ‘s law of electrolysis 5.Differentiate between Primary, Secondary and Fuel cells along
	UNIT – 7 Alcohols, Phenols and Ethers **Alcohols:** Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration, uses with special reference to methanol and ethanol. **Phenols**: Nomenclature, methods of preparation, physical and chemical properties, **Ethers:** Nomenclature, methods of preparation, physical and chemical properties, uses	The students will be able to: 1. Comprehend the. preparation, properties and uses of Alcohols, phenols and Ethers. 2. Write the reactions for preparation and properties of alcohol, phenol and ether. 3. Explain the properties and concept of Isomerism. 4. List the steps for the important mechanisms and naming reactions
	UNIT – 4 d and f Block Elements - General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first-row transition metals - metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property. magnetic properties, interstitial compounds, alloy formation, preparation and properties of $K_2Cr_2O_7$ and $KMnO_4$. **Lanthanoids** Electronic configuration, oxidation states, chemical reactivity and lanthanide contraction and its consequences. **Actinoids** - Electronic configuration,	The students will be able to: 1. Explain the properties of d-block elements and lanthanoids and actinoids (f- block) with respect to their electronic configurations, oxidation state, structure and chemical properties. 2. Write chemical reactions of preparation and properties of compounds of d-block elements. 3.List the properties to make the comparative study of different elements.

	oxidation states and comparison with lanthanoids.	
	Unit 8: Aldehydes, Ketones and Carboxylic Acids **Aldehydes and Ketones:** Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes, uses. **Carboxylic Acids:** Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses.	The students will be able to: 1. Understand the preparation and properties of Aldehydes, Ketones and Acid 2. Write the reactions related to properties and preparation of the compounds. 3. List the steps for mechanisms for the reactions. 4. Distinguish between various sets of compounds on the basis of functional group present .
AUGUST - Organic chemistry & Inorganic Chemistry	**Unit 5: Coordination Compounds:** Coordination compounds - Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT; structure and stereoisomerism, importance of coordination compounds (in qualitative analysis, extraction of metals and biological system).	The students will be able to: 1. Define and understand the concept of co-ordinate bond and co-ordination compounds. 2. List the postulates of Werner's Theory, Valence Bond Theory and Crystal Field Theory with suitable examples. 3. Comprehend the different types of Isomerism exhibited by the co-ordination compounds. 4. Write the IUPAC names
SEPTEMBER	**TERM - 1 EXAMINATION**	
OCTOBER – Physical chemistry and organic chemistry	**Unit 3: Chemical Kinetics** Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half-life	The students will be able to: 1. Comprehend the concept of Chemical Kinetics, Rate of reaction and factors affecting rate of reaction. 2. Define Rate Law, Order and Molecularity for reaction.

	(only for zero and first order reactions), concept of collision theory (elementary idea, no mathematical treatment). activation energy, Arrhenius equation.	3.write the integrated rate law as per kinetics of the compound. 4. Solve the numerical of the first order kinetics and Arrhenius equation. 5. List units and examples for different type of order of a reaction.
	Unit 9: Amines: Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines. Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.	The students will be able to: 1. Concept clarity for nomenclature, preparation, reactions and uses of amines. 2. Compare the basic behaviour of aliphatic and aromatic amines. 3. Able to distinguish between primary secondary and tertiary amines
	Unit 10: Biomolecules **Carbohydrates -** Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D-L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates. **Proteins -**Elementary idea of amino acids, peptide bond, polypeptides, proteins structure of proteins primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins; enzymes. Hormones Elementary idea excluding structure. **Vitamins** Classification and functions. **Nucleic Acids**: DNA and RNA.	The students will be able to: 1. Classify carbohydrates, proteins, vitamins and nucleic acid on the basis of their structure. 2. Explain the structure of various biomolecules. 3. Write reactions to elucidate structure of glucose molecule 4.Appreciate the role of biomolecules in biosystem 5.Enumerate points of differences between different types of biomolecules.
NOVEMBER	**Revision and Practice and Pre- board**	
DECEMBER	**Revision and Mock Tests and Pre- board**	

BIOLOGY (044)

MONTH	CHAPTER/ UNIT	LEARNING OUTCOMES

April	**Unit VI Reproduction** **Ch1 Sexual Reproduction in Flowering Plants** Flower structure; development of male and female gametophytes; pollination - types, agencies and examples; out breeding devices; pollen-pistil interaction; double fertilization; post fertilization events - development of endosperm and embryo, development of seed and formation of fruit; special modes- apomixis, parthenocarpy, polyembryony; Significance of seed dispersal and fruit formation	Students will be able to understand: • the structure and function of floral parts including sepal, petal, stamen, carpel. • how Gametes are produced by pollen grain and Embryo sac. • different pollination methods, Artificial hybridization and various outbreeding devices students will understand the structure of seed and functions of the following parts, Testa, plumule radical embryo, cotyledon. • classification of plants into monocots and dicots. they will understand the terms seed dormancy advantages of dormancy importance of hybrid seed production, Apomixis.
	Ch2 Human Reproduction Male and female reproductive systems; microscopic anatomy of testis and ovary; gametogenesis - spermatogenesis and oogenesis; menstrual cycle; fertilisation, embryo development upto blastocyst formation, implantation; pregnancy and placenta formation (elementary idea); parturition (elementary idea); lactation (elementary idea).	Students will be able to understand: • the structure and functions of male and female reproductive systems. • describe the process of gametogenesis and menstrual cycle. • explain the process of fertilization and implantation • understand the stages of embryonic development and the process of parturition and lactation
	Ch3 Reproductive Health Need for reproductive health and prevention of	Students will gain • awareness of the different methods of contraception and their advantages and disadvantages and the importance of making choices about contraception.

	Sexually Transmitted Diseases (STDs); birth control - need and methods, contraception and medical termination of pregnancy (MTP); amniocentesis; infertility and assisted reproductive technologies - IVF, ZIFT, GIFT (elementary idea for general awareness).	• knowledge of the legal and ethical aspects of medical termination of pregnancy MTP including the conditions under which MTP can be performed and the responsibilities of • medical practitioners in providing safe and legal MTP services understanding the causes of infertility and the different treatment options available for couples struggling with infertility
May	**Revision and Unit 1 Exam**	
July	**Chapter-4: Principles of Inheritance and Variation Heredity and variation**: Mendelian inheritance; deviations from Mendelism – incomplete dominance, co-dominance, multiple alleles and inheritance of blood groups, pleiotropy; elementary idea of polygenic inheritance; chromosome theory of inheritance; chromosomes and genes; Sex determination - in humans, birds and honey bee; linkage and crossing over; sex linked inheritance - haemophilia, colour blindness; Mendelian disorders in humans - thalassemia; chromosomal disorders in humans; Down's syndrome, Turner's and Klinefelter's syndromes.	• understand the basic principles of Mendelian inheritance • Describe the chromosomal theory of inheritance • Mutations and causes • Understanding of sex determining factors. • Understanding of inherited diseases and genes related to it. • Knowledge of chromosomal disorders. • explain the molecular basis of inheritance understanding of scientific enquiry the work of Gregor Mendel and other scientist in the field of genetics exemplifies the scientific method including testing data collection and analysis the • students will know the importance of understanding the molecular basis of inheritance help us to understand how evolution occur and how species adapt to change in their environment the molecular basis of inheritance is used in personnel medicine their genetic testing is used to predict individual susceptibility to certain diseases and develop treatment methods • In agriculture molecular inheritance helps the breeders to develop new crop varieties with desire traits

	Ch5 Molecular Basis of Inheritance Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central Dogma; transcription, genetic code, translation; gene expression and regulation - lac operon; Genome, Human and rice genome projects; DNA fingerprinting.	• Students will understand how DNA fingerprinting helps in in diagnosing the diseases and identifying the culprits
	Ch6: Evolution Origin of life; biological evolution and evidences for biological evolution (palaeontology, comparative anatomy, embryology and molecular evidences); Darwin's contribution, modern synthetic theory of evolution; mechanism of evolution - variation (mutation and recombination) and natural selection with examples, types of natural selection; Gene flow and genetic drift; Hardy- Weinberg's principle; adaptive radiation; human evolution.	• understanding the concept of evolution students will learn about the basic concept of evolution how it will late to the diversity of life on earth • students will learn about the various lines of evidence that support the theory of evolution including the Fossil record bio geographic comparative and at me and Molecular Biology • students will learn about the mechanism of evolution including natural selection genetic drift gene floor and mutation • students will learn how human activities such as habitat destruction climate change and pollution are affecting the evolution of species and development scientific skills including critical thinking that an analysis testing through the examination of evidence of evolution
	Unit 8: Biology and Human Welfare **Ch7: Human Health and Diseases**	

	Pathogens; parasites causing human diseases (malaria, dengue, chikungunya, filariasis, ascariasis, typhoid, pneumonia, common cold, amoebiasis, ring worm) and their control; Basic concepts of immunology - vaccines; cancer, HIV and AIDS; Adolescence - drug and alcohol abuse.	• students will learn about the different types of diseases that affect human including infectious non-infectious diseases • they will also understand the cause symptoms and treatment of these diseases • students will learn the understanding of the mun system and its role in protecting body against diseases they will learn about different type of immune cells their functions including production of antibodies. • They will also learn about the measures and that can be taken to prevent the spread of diseases • Importance of public health preventing the spread of diseases. They also learn how to prevent the spread of dreadful diseases and negative effects of drugs alcohol abuse in the youngsters and adolescent stage.
August	**Chap 8: Microbes in Human Welfare** Microbes in food processing, industrial production, sewage treatment, energy generation and microbes as bio-control agents and bio-fertilizers. Antibiotics; production and judicious use. **Unit 9: Biotechnology and its Application** Ch9 Biotechnology-principles and processes Genetic Engineering (Recombinant DNA Technology). **Ch10: Biotechnology and its Applications** Application of biotechnology in health and agriculture: Human insulin and vaccine production, stem cell technology, gene therapy; genetically	• understanding the role of microbes in nutrient cycling and soil fertility • identify the various types of microbes used in biogas production and their importance in generating energy • exploring the process of antibiotic production by microbes and their use of antibiotics to treat bacterial infections • analysing the use of microbes in sewage treatment and their significance maintaining the cleanliness of the environment • understanding the process of fermentation and role of microbes such as east in producing various food and beverage products • Biotechnology can be used to develop sustainable agriculture practices that reduce the use of pesticides and fertilizers conserve water resources and minimise erosion • Understanding the process of biotechnology tools used in biotechnology their role in creating jobs and economic growth through the development of new products and technology such as biopharmaceuticals and biofuels. • biotechnology is rapidly involving field that is constantly pushing the boundaries of what is possible students will learn the importance of innovation and creativity in biotechnology research. • as well as need to stay up to date with the latest scientific and technological advances. • students get encouragement and think about the global implications of biotechnology to address the various challenges in the world.

	modified organisms - Bt crops; transgenic animals; biosafety issues, biopiracy and patents.	
September	**Term 1 Exam**	
October	**Unit10: Ecology and Environment** **Ch11 :Organism and Population** Population interactions - mutualism, competition, predation, parasitism; population attributes - growth, birth rate and death rate, age distribution. **Ch12 : Ecosystem** Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy. **Ch13 Biodiversity and its Conservation** Biodiversity-Concept, patterns, importance; loss of biodiversity; biodiversity conservation; hotspots, endangered organisms, extinction, Red Data Book, Sacred Groves, biosphere reserves, national parks, wildlife, sanctuaries and Ramsar sites.	• This chapter develops a more holistic and integrated approach to problem solving and decision making • by studying this chapter organism and population students will develop scientific enquiry critical and thinking skills they will analyse the data development hypothesis test theories • students will develop life skills such as teamwork communication leadership and collaborate group projects and participate in discussions and debate • student students will understand the concept of ecosystem its component's structure and functions • they will understand different types of ecological pyramids and their significance • students will understand the importance of decomposition process and how it contributes in nutrient cycling and analyses the factors affecting the productivity of an ecosystem • students will understand the different types of the racial and aquatic ecosystems and develop appreciation for the values of ecosystem including ecological economic recreational aesthetic and ethical value • students will understand the concept of biodiversity its types its importance in maintaining balance of ecosystem • students will understand the economical ecological social and ethical values of biodiversity major threats to biodiversity such as habitat loss climate change pollution over exploitation of resources • students will understand the different methods how to conserve biodiversity X2 and in situ conservation • they will understand the role of international treaties and conventions and biodiversity conservation
November	**Revision & Evaluation Test**	
December	**Pre Board Examination**	
LIST OF PRACTICALS		
1	Prepare a temporary mount to observe pollen germination	
2	Study the plant population density by quadrat method	
3	Study the plant population frequency by quadrat method	
4	Prepare a temporary mount of onion root tip to study mitosis	
5	Isolate DNA from available plant material such as spinach, green pea seeds, papaya, banana etc.	

B SPOTTING	
1	Flowers adapted to pollination by different agencies
2	Pollen germination on stigma through a permanent slide or scanning electron micrograph
3	Identification of stages of gamete development
4	Meiosis in onion bud cell or grasshopper testis through permanent slides
5	T.S. of blastula through permanent slides
6	Mendelian inheritance using seeds of different colour/sizes of any plant
7	Prepare Pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, earlobes, widow's peak and colour blindness
8	Controlled pollination emasculation, tagging and bagging
9	Common diseases 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
10	Model's specimens showing symbiotic association in lichens, root nodules of leguminous plants and parasitic mode of nutrition shown by Cuscuta on host.
11	Flashcards/ Models showing examples of homologous and analogous organs.

MATHEMATICS CORE (041)

MONTH	UNIT / CHAPTER	LEARNING OUTCOMES/SKILLS
APRIL	MATRICES	Student will be able to familiarize with the term matrix, understand the types of matrices, perform operations like addition, subtraction and multiplication, identify symmetric and skew symmetric matrices
	DETERMINANTS	Students will be able to associate a real number called determinant to a square matrix, understand and apply determinants in finding out area of triangle. Evaluate Minors, Co-factors & find Adjoint and inverse of a square matrix, identify consistent and inconsistent equations, develop ability to solve equations using Matrix Method.
	INVERSE TRIGONOMETRIC FUNCTIONS	Students will be able to appreciate the need for principal value for a given inverse trigonometric function, comprehend the meaning of various inverse trigonometric formulae, find suitable substitution to simplify. Students will be able to relate the domain and range of various trigonometric functions and inverse trigonometric functions.
MAY	LINEAR PROGRAMMING PROBLEMS	Learning outcomes of linear programming include the ability to formulate/solve real-world problems into mathematical models (objective functions and constraints) and solve two-variable problems using graphical methods

JUNE	**SUMMER VACATIONS**	
JULY	**CONTINUITY & DIFFERENTIABILITY**	Students will be able to analyse and find whether the given functions are continuous and differentiable at given points or interval. Develop skills in finding derivatives of various functions like logarithmic functions, exponential functions, implicit functions etc. Comprehend the meaning of second and higher order derivatives.
	APPLICATIONS OF DERIVATIVES	Students will be able to comprehend the meaning of derivatives as rate of change of quantities, visualize increasing and decreasing functions graphically, find local and absolute maxima and minima, analyse and apply first and second derivative test to find maximum and minimum values of a function, find critical points and points of inflection.
AUGUST	**INTEGRALS**	Students will be able to recognize the integration formula as antiderivative. Evaluate the given integral by using suitable substitution or by applying the trigonometric formulae, special formulae, Integrate a function by method of partial fractions, integration by parts, use various applications of integrals.
	APPLICATIONS OF INTEGRALS	Students will be able to know the need of integration in finding area under the given curves. Visualize and shade the required region between a given line and a curve and find its area.
	DIFFERENTIAL EQUATIONS	Students will be able to understand the basic concept of differential equation and apply an appropriate method to obtain solution of various forms like variable separable, homogeneous differential equation and linear differential equation.
SEPTEMBER	**TERM I EXAMINATION**	
OCTOBER	**VECTORS**	Students will be able to create real life examples of vector and scalar quantities and understand properties of a vector. Understand the geometrical meaning of scalar product and vector product of two vectors.
	THREE DIMENSIONAL GEOMETRY	Students will be able to explore the fundamentals behind direction ratios and direction cosines and able to apply them. Visualize lines, skew lines in space and find their equations using given data and transforming them to standard form.
	PROBABILITY	Students will be able to assimilate the concept of conditional probability to find probability of an event when another event has already occurred. Appreciate Bayes theorem and the conditions necessary to apply it.
	RELATIONS AND FUNCTIONS	Students will be able to understand the concepts of functions and types of relations, domain and range, verify whether the given relation is an equivalence relation or not, justify whether the given function is one-one and onto or not
NOVEMBER	**REVISION & EVALUATION TEST**	

DECEMBER	**PRE BOARD EXAMINATION**

APPLIED MATHEMATICS (241)

MONTH	UNIT / CHAPTER	LEARNING OUTCOMES / SKILLS
APRIL	**MATRICES**	Student will be able to familiarize with the term matrix, understand the types of matrices, perform operations like addition, subtraction and multiplication, identify symmetric and skew symmetric matrices
	DETERMINANTS	Students will be able to associate a real number called determinant to a square matrix, understand and apply determinants in finding out area of triangle. Evaluate Minors, Co-factors & find Adjoint and inverse of a square matrix, identify consistent and inconsistent equations, develop ability to solve equations using Matrix Method.
	FINANCIAL MATHEMATICS	Students will be able to understand the need for perpetuity, sinking fund, EMI, CAGR, bonds and depreciation.
MAY	**TIME BASED DATA**	Students will be able to apply Method of least square and moving averages to find the trend analysis
JULY	**PROBABILITY DISTRIBUTIONS**	Students will be able to assimilate the concept of conditional probability to find probability of an event when another event has already occurred. Appreciate Bayes theorem and the conditions necessary to apply it, familiarize with Binomial Distribution, Poisson Distribution and Normal Distribution.
	LINEAR PROGRAMMING PROBLEMS	Learning outcomes of linear programming include the ability to formulate and solve real-world problems into mathematical models (objective functions and constraints) and solve two-variable problems using graphical methods.
AUGUST	**CALCULUS**	Students will be able to recognize the role of higher order derivatives increasing and decreasing functions maxima and minimum concepts in various commercial aspects, they will understand the integration formula as antiderivative. Evaluate the given integral by using suitable substitution or by applying the trigonometric formulae, special formulae, integrate a function by method of partial fractions, integration by parts, use

		various applications of integrals and solve differential equations using variable separable method only.
SEPTEMBER	**TERM 1 EXAMINATIONS**	
OCTOBER	**INFERENTIAL STATISTICS**	Student will be able to use population and sample data, various parameters and statistics to find out degree of freedom and apply t- test to check the hypothesis for one sample only.
	NUMBERS QUANTIFICATION AND NUMERICAL APPLICATIONS	Students will be able to comprehend the meaning of solve real life situations based on arithmetic modulo, allegation, boats and streams, pipes and cisterns, races and games & numerical inequalities.
NOVEMBER	**REVISION & EVALUATION TEST**	
DECEMBER	**PRE BOARD EXAMINATION**	

PSYCHOLOGY (037)

Book Recommended: NCERT Psychology (Class XII)

Month	Topic/Unit	Learning Outcomes
April	Ch-1 Variations in Psychological Attributes	Students will be able to:- • Apply concepts of individual variances) in educational and workplace settings. • Illustrate the psychological assessment tools used for measuring abilities and traits. • Evaluate the role of heredity and environment in shaping individual differences. • Design strategies to utilize individual strengths in academic and professional growth.
May	Ch–2 Self and Personality	Young minds will be able to:- • Implement the concepts of self and personality in understanding behaviour in social and professional contexts. • Exemplify the personality theories given by different psychologists. • Evaluate the role of self-concept and self-esteem in personal effectiveness. **Unit -1**.
June	Summer Vacation Case Study Project	Students will be able to explore the analytical and application based skills regarding board curriculum
July	Ch-3 Meeting Life Challenges	Students will be able to:- • Use stress management techniques in real-life and workplace situations. • Explore the sources and effects of stress on various aspects • Evaluate coping strategies and their effectiveness in different situations. •Design practical plans for resilience, well-being, and emotional balance.

	Ch-4 Psychological Disorders.	• Escalate the knowledge of psychological disorders. • Identify the causes and types of disorders. • Evaluate the various approaches • Develop the awareness strategies to reduce stigma and promote mental health
August	Ch-5 Therapeutic Approaches Practical -1	• Suggest the various therapeutic approaches. • Implement the techniques used in therapies based on disorders. • Evaluate the effectiveness of various psychological treatments. • Design basic intervention strategies for counselling and mental health support
September	Term-I Examination	Students will be able to demonstrate the conceptual clarity in the examination.
October	Chapter -6 Attitude and Social Cognition Chapter -7 Social influence and group influences	• Understand the concept, components, and functions of attitudes. • Analyse the formation and change of attitudes in social contexts. • Apply principles of attitude change and persuasion in real-life situations. • Evaluate the role of attitudes in influencing behaviour and social interactions. • Apply strategies for effective group functioning and conflict resolution. • Evaluate the impact of social influence on individual behaviour and decision-making.
November	**Revision and Practice and Pre- board**	
December	**Revision and Mock Tests and Pre- board**	

SOCIOLOGY (039)

MONTH	CHAPTER	LEARNING OUTCOMES

APRIL	The Demographic Structure of Indian Society (Book 1)	• Develops an in-depth understanding of key demographic concepts such as fertility, mortality, migration, age structure, and population composition. • Strengthens the ability to interpret and critically evaluate census data, population pyramids, and demographic trends in India. • Encourages analytical understanding of population-related issues such as population growth, urbanization, gender imbalance, and ageing. • Promotes awareness of the relationship between population dynamics and socioeconomic development. • Builds the capacity to examine government policies and programmes related to population control and welfare.
	Social Institutions: Continuity and Change (Book 1)	• Cultivates a comprehensive perspective on the structure and significance of major social institutions. • Enables critical reflection on patterns of continuity and transformation within institutional systems. • Encourages evaluation of institutional change in the context of modernization and globalization. • Reinforces understanding of the role of institutions in shaping social order and dynamics. Enhances awareness of emerging issues and challenges affecting institutions in contemporary society.

MAY	Patterns of Social Inequality and Exclusion (Book 1)	• Provides a critical understanding of various forms of social inequality based on caste, class, gender, and ethnicity. • Promotes examination of the causes and consequences of social exclusion and marginalization. • Fosters sensitivity, empathy, and respect towards disadvantaged groups. • Enhances the ability to analyze policies and initiatives aimed at reducing inequality and promoting social justice. • Builds capacity to apply sociological concepts in understanding real-life social disparities.
JUNE	**SUMMER VACATIONS**	
JULY	The Challenges of Cultural Diversity (Book 1)	• Cultivates a comprehensive perspective on diversity, multiculturalism, and pluralism in contemporary society. • Enables critical reflection on social tensions such as communalism, regionalism, and ethnic divisions. • Reinforces the importance of unity, diversity, and social integration. • Promotes internalization of democratic and constitutional values. • Strengthens the ability to contribute towards an inclusive and harmonious social environment.
	Structural Change (Book 2)	• Develops comprehensive understanding of structural transformations in society, particularly in economic and social institutions.

		• Encourages analysis of the impact of industrialization, globalization, and liberalization on social structures. • Enhances the ability to examine changes in occupational structure, class relations, and economic organization. • Promotes critical thinking about the consequences of structural change on different sections of society. • Builds analytical skills to interpret ongoing transformations in contemporary society.
AUGUST	Cultural Change Book 2	• Provides a comprehensive understanding of key processes of cultural transformation, including modernization, westernization, Sanskritization, and Globalization.

		• Promotes critical comparison between traditional cultural practices and evolving modern lifestyles. • Develops the ability to examine the influence of media, technology, and global interactions on cultural patterns. • Encourages awareness of the coexistence of continuity and change within cultural systems. • Strengthens the capacity to use cultural concepts for interpreting contemporary social realities.
	Change and Development in Rural Society (Book 2)	• Cultivates a comprehensive perspective on rural social organization and agrarian dynamics. • Enables critical exploration of rural transformation through development programmes and reforms. • Deepens awareness of structural challenges faced by rural populations. • Encourages informed evaluation of policy frameworks and their implications. Strengthens engagement with concepts of sustainable and equitable rural development.
SEPTEMBER	**Term 1 Examination**	
OCTOBER	Change and Development in Industrial Society	• cultivates a nuanced understanding of rural social organization and agrarian dynamics. • Enables critical examination of rural transformation through development programmes and policy reforms. • Deepens insight into the structural challenges and inequalities faced by rural populations. • Encourages informed and analytical evaluation of policy frameworks and their socio-economic implications. • Strengthens engagement with the principles of sustainable, inclusive, and equitable rural development.

	Social Movement	• Develops a critical and comprehensive understanding of the concept, typologies, and defining features of social movements. • Facilitates systematic analysis of the socio-economic, political, and cultural factors underpinning the emergence of social movements. • Provides deeper insight into the role of social movements as agents of social change and transformation in diverse contexts. • Promotes analytical examination of different forms of movements, including reformative, transformative, and resistance-oriented mobilizations. • Builds understanding of the interface between social movements, democratic processes, and civil society institutions. • Encourages critical appraisal of the outcomes and implications of social movements on governance, public policy, and social structures • Strengthens sensitivity to issues of rights, justice, identity, and collective action within a pluralistic society.
NOVEMBER	**Complete thorough revision and conduct Evaluation Tests.**	
DECEMBER	**Pre-Board/Final Examinations, and Practical's as per the academic schedule**	

POLITICAL SCIENCE (028)		
MONTH	**CHAPTER**	**LEARNING OUTCOMES**
APRIL	The End of Bipolarity	It will spark curiosity about global political transformations and help learners to: • Understand the concept and features of bipolarity in world politics. • Examine the causes behind the disintegration of the USSR. • Explore the challenges faced by post-Soviet states. • Analyze the impact of the Cold War's end on international relations. Interpret the emergence of a new global order.
	Contemporary Centres of Power	• Promotes analytical understanding of evolving global power configurations and enables leamers to: Recognising prominent emerging power centres such as the European Union, ASEAN, and China. • Understanding the organizational structure and working mechanisms of regional groupings. • Examining the political, economic, and strategic importance of these actors on the global stage. • Evaluating their influence in relation to established powers like the USA. • Interpreting ongoing shifts in global power distribution and emerging multipolar trends.
	Contemporary South Asia	• will strengthen understanding of regional political dynamics and enable learners to: • Identify and interpret the key features of political systems in South Asia. • Explore India's diplomatic and strategic relations with its neighbouring countries. Examine the nature and causes of internal conflicts within the region. • Analyze the role and effectiveness of SAARC in promoting regional cooperation.

MAY	International Organizations	• Cultivates a nuanced understanding of international governance mechanisms and supports learners in: • Examine the significance and functions of international organizations in world affairs. • Understand the structure and working of the United Nations system. • Assess India's participation and its stance on reforms in global institutions. Explore the role of organizations such as WTO, IMF, and WHO in the global economy and governance. • Critically evaluate the effectiveness of international cooperation in addressing global challenges.
JUNE	**SUMMER VACATIONS**	
JULY	Security in the Contemporary World	• Builds a comprehensive understanding of security in the modern world and helps learners to: • Understand the evolving nature and scope of security in contemporary world politics. • Distinguish clearly between traditional and non-traditional dimensions of security. Investigate major concerns such as terrorism, environmental risks, and human security. • Reflect on issues related to global peace, conflict, and cooperation. • Assess present-day security challenges in a dynamic international context.

	Environment and Natural Resources	• Encourages critical understanding of environmental concerns in global politics and helps learners to: • Recognise the significance of natural resources in shaping international relations. Examine the tension between economic development and environmental sustainability. • Investigate major global environmental agreements and initiatives. • Analyze India's participation and role in addressing environmental concerns. • Critically assess contemporary environmental challenges and their implications.
	Globalisation	• Promotes understanding of global linkages and enables learners to: • Define globalization and identify its features. • Understand its political, economic, and cultural dimensions. • Analyze its positive and negative impacts. • Examine India's experience with globalization. • Evaluate its role in shaping modern society.

	Challenges of Nation Building	• Enables a clear understanding of India's initial political challenges and helps learners to: • Understand challenges faced after independence. • Analyze the impact of Partition. • Explore the integration of princely states. • Understand linguistic reorganization. • Appreciate efforts towards national unity. • Understand the process and importance of the integration of princely states • Anal e the rationale behind linguistic reo- anisation of states
AUGUST	Era of One-Party Dominance	• Offers a clear understanding of India's early political system and enables learners to: • Understand the dominance of the Indian National Congress. • Analyze the first three general elections. • Identify opposition parties and their ideologies. • Evaluate democratic functioning during this period. Understand patterns of political competition.

	Politics of Planned Development	• Cultivates understanding of economic planning and decision-making and supports learners in: • Understand the importance of planning in India. • Analyze the role of the Planning Commission. • Examine the features of a mixed economy. • Evaluate debates on development priorities. • Understand economic decision-making processes.
	India's External Relations	• Facilitates deeper insight into foreign policy frameworks and enables learners to: • Understand the principles of India's foreign policy. • Analyze the role of the Non-Aligned Movement. • Examine relations with major global powers. • Understand shifts in post-Cold War foreign policy. • Assess India's role in world politics.
	Challenges to and Restoration of the Congress System	• Highlights key political transformations in India and enables learners to: • Examine challenges faced after the Nehru era. • Analyze the restoration of the Congress system. • Explore key political events and elections. • Understand leadership changes and their impact. Evaluate the evolution of Indian democracy.
SEPTEMBER	**Term I Examination**	

OCTOBER	The Crisis of Democratic Order	• Highlights the major developments during the crisis of democratic order in India and enables learners to: • Examine the political and constitutional circumstances leading to the Emergency. • Analyze the impact of the Emergency on democratic institutions and civil liberties. • Explore the role of political leadership, opposition, and public response during the crisis. • Understand the significance of elections and the restoration of democratic processes. • Evaluate the long-term implications of the crisis for the evolution of Indian democracy.
	Regional Aspirations	• Highlights the dynamics of regional aspirations in India and enables learners to: • Examine the nature and causes of regional demands and movements. • Analyze the role of identity, language, and culture in shaping regional politics. • Explore major regional movements and their impact on national integration. • Understand the responses of the government in addressing regional imbalances. • Evaluate the significance of federalism in managing regional diversity and aspirations
	Recent Developments in Indian Politics	• Provides insight into the evolving nature of contemporary Indian politics and enables learners to: • Examine the transition from one-party dominance to coalition politics. • Analyze the emergence and consolidation of coalition governments at the national level. • Explore the growing significance of regional parties in shaping national
NOVEMBER	**Revision & Evaluation Tests**	
DECEMBER	**Pre Board Examinations**	

FINANCIAL MARKETS MANAGEMENT (805)

MONTH	TOPIC/CHAPTER	LEARNING OUTCOMES
April	1)Communication Skills – IV 2)Introduction to Indian Securities Market and Trading Membership	• Demonstrate effective verbal and written communication. • Understand structure and participants of Indian securities market. • Explain trading membership and roles of intermediaries.
May	3)Self-Management Skills – IV 4)Trading	• Apply self-management techniques for professional growth. • Understand trading process and order types. • Analyze basic trading strategies.
July	5)Clearing and Settlement, Legal Framework 6)ICT Skills – IV	• Explain clearing and settlement procedures. • Understand legal regulations in financial markets. • Use ICT tools for financial data handling.
August	7)Entrepreneurial Skills – IV 8)Financial Statements Analysis	• Develop entrepreneurial competencies. • Interpret financial statements. • Apply ratio analysis for decision making.
September	**Term I Examination**	
October	9)Introduction to Derivatives 10)Future and Option Contracts, Mechanism and Pricing 11)Green Skills – IV	• Understand concept and purpose of derivatives.• Explain futures and options pricing and mechanisms. • Apply sustainable and green practices in financial environments.
November (Onwards)	Revision, Evaluation Tests, Pre-Board/Final Exams, Practicals	• Revise concepts and apply knowledge in examinations and practical assessments.
December	**Pre Board Examination**	

PUNJABI (104)

MONTH	Unit/Chapter/Topic	Learning Outcomes

ਅਪ੍ਰੈਲ	ਕਵਿਤਾ -ਟੁਕੜੀ ਜੱਗ ਤੋਂ ਨਯਾਰੀ	ਕੁਦਰਤੀ ਸੁੰਦਰਤਾ ਦਾ ਆਨੰਦ ਮਾਨਣਾ,ਕਵਿਤਾ ਉਚਾਰਨ
	ਕਹਾਣੀ- ਸਾਂਝ	ਪਹਿਲੀ ਮੁਲਾਕਾਤ ਵਿੱਚ ਹੀ ਕਿਸੇ ਪ੍ਰਤੀ ਕੋਈ ਰਾਏ ਨਾ ਬਣਾਉਣੀ, ਹਮਦਰਦੀ ਦੀ ਭਾਵਨਾ
	ਵਾਰਤਕ -ਪੰਜਾਬ ਦੇ ਮੇਲੇ ਅਤੇ ਤਿਉਹਾਰ	ਸੰਸਕ੍ਰਿਤਿਕ ਤੇ ਧਾਰਮਿਕ ਮਹੱਤਤਾ ਨੂੰ ਸਮਝਣਗੇ ਅਤੇ ਪਰੰਪਰਾਵਾਂ ਤੋਂ ਜਾਣੂ,ਮੇਲਿਆਂ ਬਾਰੇ ਜਾਣਕਾਰੀ
	ਅਖਾਣ (1-10)	ਪ੍ਰਭਾਵਸ਼ਾਲੀ ਭਾਸ਼ਾ
ਮਈ	ਵਾਕ ਵਟਾਂਦਰਾ,	ਸ਼ੁੱਧ ਵਿਆਕਰਨ ਗਿਆਨ ਵਿੱਚ ਵਾਧਾ
	ਕਾਰ ਵਿਹਾਰ ਦੇ ਪੱਤਰ	ਵੱਖ-ਵੱਖ ਮੌਕਿਆਂ ਉੱਤੇ ਉਚਿਤ ਪੱਤਰ ਲਿਖਣ ਦੀ ਸਮਰੱਥਾ
ਜੂਨ	**ਗਰਮੀ ਦੀਆਂ ਛੁੱਟੀਆਂ**	
ਜੁਲਾਈ	ਕਵਿਤਾ- ਤਾਜ ਮਹਲ,ਚੁੰਮ ਚੁੰਮ ਰੱਖੇ	ਬਾਹਰੀ ਸੁੰਦਰਤਾ ਦੇ ਪਿੱਛੇ ਛੁਪੇ ਹੋਏ ਸੱਚ ਨੂੰ ਜਾਨਣਾ, ਮਾਂ ਦੀਆਂ ਭਾਵਨਾਵਾਂ ਸਮਝਣਾ
	ਕਹਾਣੀ--ਨੀਲੀ ,ਮਾੜਾ ਬੰਦਾ	ਜੀਵ ਜੰਤੂਆਂ ਪ੍ਰਤੀ ਰਹਿਮ ਦਿਲੀ ਅਤੇ ਸੁਰੱਖਿਆ ਦਾ ਮਹੱਤਵ,ਅਣਜਾਣ ਲੋਕਾਂ ਤੋਂ ਸਾਵਧਾਨ ਰਹਿਣਾ ਅਤੇ ਜਲਦੀ ਰਾਏ ਨਾ ਬਣਾਉਣੀ
	ਵਾਰਤਕ-ਪੰਜਾਬ ਦੇ ਰਸਮ ਰਿਵਾਜ	ਆਪਣੇ ਵਿਰਸੇ ਨੂੰ ਸੰਭਾਲਣਾ ਅਤੇ ਸੱਭਿਆਚਾਰ ਦਾ ਸਨਮਾਨ ਕਰਨਾ
	ਅਖਾਣ (ਸਾਰੇ)	ਭਾਸ਼ਾ ਦੀ ਸਮਝ ਅਤੇ ਸ਼ਬਦ ਭੰਡਾਰ ਵਿੱਚ ਵਾਧਾ
ਅਗਸਤ	ਕਵਿਤਾ-ਵਾਰਸ ਸ਼ਾਹ,ਮੇਰਾ ਬਚਪਨ	ਕਵਿਤਾ ਪੜ੍ਹਨ ਅਤੇ ਸਮਝਣ ਦੀ ਯੋਗਤਾ ਦਾ ਵਿਕਾਸ , ਫਿਰਕੂ ਫਸਾਦਾਂ ਦੇ ਦੁੱਖ ਅਤੇ ਹਾਲਤਾਂ ਬਾਰੇ ਸਮਝਣਾ, ਭਾਵਨਾਤਮਕ ਸਾਂਝ
	ਕਹਾਣੀ-ਘਰ ਜਾ ਆਪਣੇ	ਭੈਣ ਭਰਾ ਦਾ ਪਿਆਰ ਅਤੇ ਵਿਆਹ ਦੇ ਰੀਤੀ ਰਿਵਾਜ
	ਵਾਰਤਕ- ਪੰਜਾਬ ਦੀਆਂ ਲੋਕ ਖੇਡਾਂ	ਟੀਮ ਵਰਕ, ਸਹਿਯੋਗ, ਸਹਿਣਸ਼ੀਲਤਾ ਅਤੇ ਅਨੁਸ਼ਾਸਨ ਦੀ ਭਾਵਨਾ,ਲੋਕ ਖੇਡਾਂ ਤੋਂ ਜਾਣੂ
	ਅਣਡਿੱਠਾ ਪੈਰ੍ਹਾ, ਪੈਰ੍ਹਾ ਰਚਨਾ	ਲਿਖਣ ਕਲਾ ਦਾ ਵਿਕਾਸ
ਸਤੰਬਰ	**ਦੁਹਰਾਈ ਅਤੇ ਛਿਮਾਹੀ ਪਰੀਖਿਆ**	
ਅਕਤੂਬਰ	ਕਵਿਤਾ-ਗੀਤ	ਗੀਤ ਉਚਾਰਨ
	ਪੰਜਾਬ ਦੇ ਲੋਕ ਨਾਚ	ਲੋਕ ਨਾਚਾਂ ਦੀ ਮਹੱਤਤਾ
ਨਵੰਬਰ	**ਦੁਹਰਾਈ, ਪ੍ਰੀ ਬੋਰਡ -1**	
ਦਸੰਬਰ	**ਦੁਹਰਾਈ, ਪ੍ਰੀ ਬੋਰਡ -2**	

PAINTING (049)

MONTH	CHAPTER	LEARNING OUTCOMES
April	Ch-1 The Rajasthani School	1.Learning outcomes -foster intellectual curiosity, global knowledge, critical thinking, personal responsibilities, cultural awareness. Through paintings students learn team work towards a common goal life value. 2. Art integration- Students can know about the culture, costume, jewellery, lifestyle of Rajasthan through paintings of Rajasthani school of art.
May	Ch-2 The Pahari School	1. Learning outcomes: - establish framework for students to develop an aesthetic appreciation for fine arts. Prepare students to be responsible citizens, lifelong learner and ready leaders in their chosen fields. 2. Art integration-learning with art helps to increase knowledge and understanding of subject area.
June	**SUMMER VACATIONS**	
July	Ch-3 The Mughal School	1. Learning outcomes-21st century skill critical thinking, improved imagination, creativity, observation. 2. Art integration- They can learn human life values through great paintings like humanity, mutual harmony. 3. Experiential learning- Students will gain knowledge of different cultures and different artist like Haji Madini
	Ch-4 The Deccan School	1. Learning outcomes-Through art work of different types of artists, students can learn respect of gurus, seniors or juniors. All in all, mutual respect for each other. 2. Art integration-Through art they can learn different types of cultures, costumes, lifestyles, jewelleries and ethics of different people. 3. Experiential learning- students can see different types of religious influence on Indian art.
August	Ch-5 The Bengal School of Painting	1. Learning outcomes-Through great artists painting, children can learn human life values like loyalty to the master, do not in human or cruel towards animal. Through some paintings, they can see unconditional love of a mother, care of poor. 2. Art integration- Art is each and every step in human life. 3. Experiential learning- Students gain knowledge about paintings and its series, proves in the level of maturity and strength of expression. 4. Inter-disciplinary: - Bengal school paintings are illustrated on Hindi poetry. Best example can be seen in painting Meghdoot.
September	**Term-I Examination**	

October	Ch-6 The Modern Trends in Indian Art	1. Learning outcomes- care for the poor and destitute, mother unconditional love, responsibility and care for children. Human values from sculptures and graphics from famous artist like care for poor and destitute, importance of spiritual awakening, dignity of labour. 2. Art integration- Make learning joyful and engaging, encourage children to be aware of their changing world. 3. Inter-disciplinary: - Art inter disciplinary in modern trends with social study subjects. Some paintings are depicted on social evil.
November	**Revision and Evaluation Test**	
December	**Pre-Final / Pre-Board Examination**	

INFORMATICS PRACTICES (065)

MONTH	TOPIC	LEARNING OUTCOMES
April	Revision Tour XI; Database Query using SQL	Recall and apply Class XI concepts; Understand relational databases; Write SQL queries using SELECT, WHERE, ORDER BY; Use aggregate functions (SUM, COUNT, AVG); Retrieve and manipulate data; Apply logical operators and conditions
May	Data Handling using Pandas – I (Visualization)	Understand importance of data visualization; Use Pandas & Matplotlib; Create plots (line, bar, histogram, pie); Interpret graphical data; Choose appropriate visualization techniques
June	**SUMMER VACATIONS**	
July	Data Handling using Pandas – I (Series); Societal Impacts	Define and create Pandas Series; Perform indexing, slicing, and mathematical operations; Handle missing data; Understand societal impact of technology; Learn cyber safety, privacy, and ethical issues
August	Introduction to Computer Networks	Understand networking basics; Identify types of networks (LAN, WAN); Learn about devices (router, switch, modem); Understand transmission media; Basics of internet and protocols
September	**Term I Examination**	
October	Data Handling using Pandas – I (DataFrame)	Create and work with DataFrames; Perform row/column selection, filtering, sorting; Import/export CSV files; Handle missing values; Analyze structured data

November	**Revision & Evaluation Test**
December	**Pre Board Examination**

PHYSICAL EDUCATION (048)		
MONTH	**UNIT NAME**	**LEARNING OUTCOMES**
APRIL	**UNIT – 1 : MANAGEMENT OF SPORTING EVENTS.**	The students will be able to Classify responsibilities in the sports event, Differentiate the different types of tournaments, intramural and extramural sports events.
	UNIT – 2 CHILDREN & WOMEN IN SPORTS	The students will be able to classify 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.
MAY	**UNIT – 3 YOGA AS PREVENTIVE MEASURE FOR LIFESTYLE DISEASE**	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.
JUNE	**SUMMER VACATIONS**	

JULY	**UNIT – 4 PHYSICAL EDUCATION AND SPORTS FOR CWSN** **(CHILDREN WITH SPECIAL NEEDS – DIVYANG)**	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
	UNIT - 5 SPORTS & NUTRITION	The students will be able to: • Understand the concept of a balanced diet and nutrition. Classify Nutritive and Non-Nutritive components of the Diet • Identify the ways to maintain a healthy weight • Know about foods commonly causing food intolerance • Recognize the pitfalls of dieting and food myths
	UNIT – 6 TEST &MEASUREMENT IN SPORTS	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 the 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.
AUGUST	**UNIT - 7 PHYSIOLOGY & INJURIES IN SPORTS**	Recognize the physiological factors determining the components of physical fitness. • Comprehend the effects of exercise on the Muscular system and cardiorespiratory systems. • Figure out the physiological changes due to ageing • Classify sports injuries with its Management.

	UNIT – 8 BIOMECHANICS AND SPORTS	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
SEPTEMBER	**Term 1 Examination**	
OCTOBER	**UNIT - 9 PSYCHOLOGY AND SPORTS**	Classify different types of personality and their relationship with sports performance. • Recognise the concept of motivation and identify various types of motivation. • Identify various reasons to exercise, its associated benefits and strategies to promote exercise adherence. • Differentiate between different types of aggression in sports. • Explain various psychological attributes in sports.
	UNIT – 10 TRAINING IN SPORTS	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 & methods to develop strength, endurance, and speed in sports training.
NOVEMBER	**Complete thorough revision and conduct Evaluation Tests.**	
DECEMBER	**Pre Board / Final Examinations and Practicals as per the Academic schedule**	

MUSIC VOCAL (034)

MONTH	TOPICS	LEARNING OUTCOMES:-
April	अलंकार, कण, मीड ,खटका , मुर्की गमक . अलाप। संगीत रत्नाकर। राग परिचय:- राग भैरव, ताल परिचय लयकारी सहित :-धमार	परिभाषाओं से विद्यार्थी इन परिभाषाओं के बारे में यह सीखेंगे की इन्हें संगीत की भाषा में कैसे प्रयोग में लाया जाता है? अपनी गायन के हिसाब से बच्चे सीखेंगे की तबले पर जो ताले बजाई जाती है उन्हें हाथों पर हम कैसे उनका प्रयोग कर सकते हैं क्या हाथों पर भी वैसे ही वह बजाई जाती है जैसे तबले पर बजती है।
May	रागों का समय सिद्धांत जीवन परिचय ;-बड़े गुलाम अली खान, फैयाज खान। राग बागेश्वरी स्वरलिपि सहित।	रागों का समय सिद्धांत यह दर्शाता है कि रागों का जो गायन समय निर्धारित होता है वह किस आधार पर निर्धारित किया जाता है इससे बच्चे यह सीखेंगे उन्हें पता लगेगा कि अगर किसी राग में कोई कोमल स्वर है या शुद्ध स्वर है तो उसके आधार पर रागो का गायन समय कैसे निर्धारित किया जाता है
June	**SUMMER VACATIONS**	
July	परिभाषाएं:- ग्राम मूर्चना तान। पंडित कृष्ण राव जी, कौशिकी चक्रवर्ती जी राग भैरव, विलंबित ,व दुत्त ख्याल राग विस्तार, राग बागेश्री परिचय ताल धमार उपरोक्त सभी विषयों से संबंधित वस्तुनिष्ठ प्रश्न	यहां विद्यार्थी सभी संगीतकारों के जीवन परिचय के बारे में जानेंगे और उन्होंने अपनी संगीतिक जीवन में क्या कुछ हासिल किया कौन सी उपलब्धियां उन्हें मिली । इसके अलावा राग विस्तार करना स्वर समुदाय से रागों को कैसे पहचाना जाता है राग की क्या पहचान है
August	तानपुरे की व्याख्या और उसको मिलाने की विधि उसके अंगों सहित। बड़े गुलाम अली खान। संगीत पारिजात, स्वर विस्तार	यहां विद्यार्थी तानपुरा वाद्य के बारे में जानकारी प्राप्त करेंगे कि वह कैसा दिखता है और उसे कैसे प्रयोग में लाया जाता है शास्त्रीय संगीत में उसका क्या महत्व है और इसके अलावा संगीत परिजात नामक ग्रंथ का पूर्ण विस्तार से जानकारी प्राप्त करेंगे और तालों की लयकारी हाथ पर अभ्यास करेंगे।

	ताल रूपक, झपताल परिचय व लयकारी सहित।	
	राग मॉलकौस, भैरव, बागेश्वरी की स्वरलिपियां गायन और लिखित में और उनका अभ्यास। सभी रागों के आरोह ,अवरोह ,पकड़ ,वादी ,संवादी गायन समेत सभी की संपूर्ण जानकारी। राग पहचानना , तथा उपरोक्त सभी विषयों से संबंधित वस्तुनिष्ठ प्रश्न।	दिए गए सभी रागों की स्वरलिपि लेखन तथा गायन का अभ्यास विद्यार्थी गण करेंगे जिससे उनका स्वरलिपि लेखन तथा गायन परिपक्व होगा और उसमें वह दक्षता हासिल करेंगे।
September	**Term I Examination**	
October	विभिन्न विशेषताओं सहित रागो की ताने बनाना ,आधुनिक शास्त्रीय गायको का परिचय ,आधुनिक गायक जैसे कि वह ऋतिक सन्याल जी उदय भावलकर जी और रतन मोहन शर्मा जी।	इसके माध्यम से विद्यार्थी सीखेंगे की तानों का अभ्यास कैसे किया जाता है उन्हें लिखित रूप में लिखना कैसे हैं और आधुनिक कलाकारों की गायन शैली के बारे में वह ज्यादा से ज्यादा ज्ञान हासिल करेंगे
November	**Practice of full syllabus**	
December	**Revision & Evaluation Test, Pre Board Examination**	

COMPUTER SCIENCE (083)		
MONTH	**CHAPTER**	**LEARNING OBJECTIVES**

April	Ch-7: Relational Database & SQL	Understand database concepts, tables, keys, and relationships; learn SQL queries like SELECT, INSERT, UPDATE, DELETE; apply filtering, sorting, and grouping of data. Structured Query Language: introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key)
May	Ch-1: Review of Python Basics	Revise Python fundamentals such as variables, data types, operators, control structures (if, loops), and basic input/output Revision of Python topics covered in Class XI.
	Unit Test Examination	Assess understanding of initial concepts
June	**SUMMER VACATIONS**	
July	Ch-2: Functions	Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)
	Ch-6: Computer Networks	Understand networking concepts, types of networks, topologies, protocols, and basics of internet and communication
		Network protocols: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP; Web services: WWW, HTML, XML, domain names, URL, website, browsers, servers, hosting.
August	Ch-3: Exception Handling	Learn error types, handling exceptions using try-except blocks, and writing robust programs. Exception Handling: Introduction, handling exceptions using try-except-finally blocks.
	Ch-4: Data File Handling	Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths Understand file operations (read/write), text and binary files, file modes, and handling data storage.
	Ch-8: Interface Python with SQL	Learn to connect Python with databases, execute SQL queries via Python, and manage data dynamically. connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using connect(), cursor(), execute(), commit(),

		fetchone(), fetchall(), rowcount, creating database connectivity applications, use of %s format specifier or format() to perform queries
September	**Term-1 Examination**	
October	Ch-5: Data Structures in Python	Stack, operations on stack (push & pop), implementation of stack using lists.
November	**Revision & Evaluation Tests**	
December	**Pre Board Examination**	

TAXATION (822)

Month	**Part**	**Unit**	**Learning Outcomes** **Students will be able to:**
April	Part A: Employability Skills	Unit 1: Communication Skills-IV	Apply advanced communication, demonstrate verbal & non-verbal skills, and perform effectively in interviews/presentations.
	Part B: Taxation	Unit 1 Deductions from Gross Total Income	Understand and compute deductions under sections 80C to 80GGC.
May	Part A: Employability Skills	Unit 2: Self-Management Skills-IV	Manage stress, set goals, manage time, and develop personality.
	Part B: Taxation	Unit 1 Deductions from Gross Total Income (Contd.)	Compute deductions for special cases including disability, royalty, patents, and savings.
	UNIT 1 EXAMINATION		
June	**SUMMER VACATIONS**		
July	Part A: Employability Skills	Unit 3: ICT Skills-IV	Create digital documents, use spreadsheets, design presentations, and follow cyber safety.
	Part B: Taxation	Unit 2 Computation of Tax Liability of an Individual	Compute tax liability using slabs, rebate, surcharge, and cess.

August	Part A: Employability Skills	Unit 4: Entrepreneurial Skills-IV	Identify entrepreneurial traits, evaluate risks, and recognize opportunities.
	Part B: Taxation	Unit 3 TDS and Advance Payment of Tax	Explain TDS provisions, procedures, and responsibilities including defaults.
September	**TERM-I EXAMINATION**		
October	Part A: Employability Skills	Unit 5: Green Skills-IV	Explain sustainability and adopt eco-friendly practices.
	Part B: Taxation	Unit 3 TDS and Advance Payment of Tax (Contd.)	Compute advance tax and understand presumptive taxation and Assessing Officer role.
		Unit 4 Goods and Services Tax (GST)	Differentiate between direct and indirect taxes Understand Taxes prior to coming of GST on 1/7/2017 Understand the objectives, key features and structure of GST. Identify the different types of GST returns.
November	**Revision & Evaluation Tests**		
December	**Pre Board Examination**		

MARKETING (812)

MONTH	TOPICS	LEARNING OBJECTIVE
APRIL	EMPLOYBILITY SKILLS UNIT 1 COMMUNICATION SKILLS EMPLOYBILITY SKILLS	To enable the students to understand the concept of active learning, personality traits and communication skills

	Unit 2 SELF MANAGEMENT SKILLS IV	To enable the students to understand the self-management skills ,motivation ,needs and desires
MAY	MARKETING UNIT 1 PRODUCT MARKETING UNIT 5 EMERGING TRENDS IN MARKETING	To enable the students to understand the product life cycle, packaging process of product To enable the students to understand the concept of services, types of services, online marketing and social media platform
JUNE	**SUMMER VACATIONS**	
JULY	EMPLOYBILITY SKILLS UNIT 3 INFORMATION AND COMMUNICATION SKILLS IV MARKETING UNIT 2 PRICE DECISION	To enable the students to understand the technological changes, spreadsheets, copy, paste and presentation of data To enable the students to understand the pricing objectives and pricing policies
AUGUST	EMPLOYBILITY SKILLS UNIT 4 ENTREPRENEURSHIP SKILLS IV MARKETING UNIT 3 PLACE DECISION	To enable the students to understand the entrepreneurial skills, stress, management, and behavioural competencies To enable the students to understand the concept of functions performed by various channels of distribution
SEPTEMBER	**TERM 1 EXAMINATION**	

OCTOBER	EMPLOYBILITY SKILLS UNIT 5 GREEN SKILLS IV MARKETING UNIT 4 PROMOTION	To enable the students to understand the concept and importance of green jobs To enable the students to understand the concept of various promotional tools, their benefits and limitations, modes of promotion
NOVEMBER ONWARDS	**REVISION OF FULL SYLLABUS**	

DANCE (056)

MONTH	TOPICS	LEARNING OUTCOMES
April	A brief history of other classical dance styles of India – Kathak, Bharatanatyam, Kuchipudi, Odissi, Mohiniyattam, Kathakali, Sattriya	Students will be able to understand the origin and historical development of various classical dance styles of India. • Identify major classical dance forms of India. • Recognize the states/regions from which these dance styles originated. • Appreciate the diversity of Indian cultural heritage.
May	Basic understanding of the terms abhinaya and its four aspects angika, vachika, aharya and satvik.	Students will Understand the meaning and importance of Abhinaya in Kathak dance. • Define the four aspects of Abhinaya. • Apply Abhinaya elements in Kathak presentations effectively. • Develop expressive skills for storytelling and emotional communication through dance.
July	Gharanas – Detailed study of Lucknow, Jaipur and Banaras; historical background, characteristics, style and contribution	Students will Identify the three major gharanas of Kathak. • Compare styles and characteristics of each gharana. • Understand historical development of Kathak gharanas. • Appreciate contributions of different gharanas.
August	Rasa – Definition and explanation of Navarasas: Shringar, Hasya, Karuna, Raudra, Veera, Bhayanaka, Bibhatsa, Adbhuta, Shanta	They will learn that how to define Rasa and its importance in dance. • Identify all nine rasas with examples.

		• Express emotions through facial expressions and body language. •Develop creativity and emotional expression skills.
	Detailed explanation of Sangeet, Taal, Laya, Angahara, Bhramari, Lokdharmi, Natyadharmi, Rasa and Bhava with meanings and usage	• After studying this topic students will understand meanings of technical dance terms. • Demonstrate correct use of arms, legs and expressions. • Apply concepts in practical Kathak performance. • Improve theoretical and practical understanding.
September	**Term I Examination**	
October	Detailed study of Dadra, Keharwa and Roopak; Tali, Khali, Sam; Types of Laya (Vilambit, Madhya, Drut); Writing and recitation of Theka with hand gestures Chakardar compositions, Gat Nikas and Gat Bhav; Writing of Toda, Tukra and Paran In notation form; Traditional Kathak costumes (male and female) and stage makeup	• Define important Kathak terms clearly. • Understand their role in performance. • Write basic notation of compositions. • Improve practical presentation skills. Apprentices will understand Chakardar compositions and presentation. • Perform Gat Nikas and Gat Bhav with expression. • Write Toda, Tukra and Paran In notation form.' • Recognize traditional costumes and stage makeup.
November	Practice & Internal Assessment	Perform confidently In practical assessment. • Demonstrate learned skills effectively. • Improve stage confidence and discipline.
December	Final Exam Preparation	Revise complete syllabus systematically. • Strengthen theory and practical concepts. • Prepare confidently for final examination.

YOGA (841)		
MONTH	**TOPIC**	**LEARNING OUTCOMES**
April	Part-A Unit-1 Communication skills-4. _____	The students will be able to: • understand the concept of communication and its important in daily life • Identify and develop verbal and nonverbal communication skills

	Part-B Unit 1 Introduction to yoga and yogic practice -2	• There are various styles like hatha, vinyasa asana and more • Physical postures • Flexibility and strength • Reduce stress and anxiety • Improve focus and concentration
May	Part-B Unit 2 Introduction to yoga texts-2	• physical health • Mental clarity • Emotional balance • Spiritual growth(improved flexibility balance strength and overall physical well being.
July	Part-A Unit-2 Self management skills-4	• identify and set personal goals • Develop management develop time management strategies • Improve self awareness and self reflection
August	Part-A Unit-3 ICT skills -4	• Learning outcomes typically focus on developing problem solving, creativity and collaboration skills
September	**Term I Examination**	
October	Part-A Unit-4 Entrepreneurial skills -4	• identify and evaluate business opportunities • Develop a business idea developed a business idea and plan • Understand understanding I market research and analysis
	Unit-5 Green skills -4	• Understand sustainable practice and environmental conservation • Identify green technology is and their applications • Learn to promote environmental awareness and sustainability
	Part-B Unit-3 Yoga for health promotion -2	• understand the principle of yoga for stress management and relaxation • learn various yoga technique for promotion overall well being • apply yoga practice to improve flexibility , balance and strength
November	**Complete thorough revision and conduct evaluation test.**	
December	**Pre -board / final examination, and practical's as per the academic schedule.**	

INFORMATION TECHNOLOGY (802)

MONTH	TOPIC	LEARNING OUTCOME
APRIL	Employability Skills Unit 1: Communication Skills-IV ●Methods of communication ●Verbal & non-verbal communication ●Presentation skills Unit 1: RDBMS (Basics) ● Database concepts ● Types of databases ● Tables & keys	● Apply effective communication techniques ● Demonstrate speaking & listening skills ● Understand database fundamentals ● Identify components of RDBMS
MAY	Employability Skills Unit 2: Self-Management Skills-IV ● Self-motivation ● Stress & time management Subject Specific Skills Unit 1: RDBMS (SQL) ● SQL Queries (DDL, DML) ● Data handling Unit 2: Web Applications (Intro) ● Internet basics ● Web services	● Apply self-management strategies ● Improve productivity ● Write basic SQL queries ● Use web applications safely
JULY	Employability Skills Unit 3: ICT Skills-IV ● Digital tools ● Online collaboration Subject Specific Skills Unit 2: Web Applications (Advanced) ● Cloud computing ● Online transactions	●Use ICT tools effectively ●Manage digital data ● Apply cloud services ● Use secure online platforms

AUGUST (Term 2 – Part 2)	Employability Skills Unit 4: Entrepreneurial Skills-IV ● Entrepreneurship concepts ● Business planning Subject Specific Skills Unit 3: Fundamentals of Java (Basics) ● Java introduction ● Data types & operators ● Control statements	● Develop entrepreneurial thinking ● Identify business opportunities ● Write basic Java programs ● Understand syntax and logic
September	**Term I Examination**	
OCTOBER (Term 2 – Completion)	Employability Skills Unit 5: Green Skills-IV ● Sustainable development ● Environmental awareness Subject Specific Skills Unit 3: Java (Advanced) ● OOP concepts ● Arrays & classes ● Exception handling Unit 4: Work Integrated Learning (DMA) ● Project work ● Real-life applications	● Apply eco-friendly practices ● Understand sustainability ● Develop Java-based applications ● Apply IT skills in projects
NOVEMBER	**Revision & Evaluation Tests**	
DECEMBER	**Pre Board Examination**	