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ENGLISH

Hornbill - Text book in English for Class XI (Core Course)

Snapshots - Supplementary Reader for Class XI (Core Course)

The Canterville Ghost by Oscar Wilde - Crossbill

MONTH	TOPIC
March	FIRST TERM <div> 1. Letter to The Editor 2. Integrated Grammar 3. Narrative 4. Comprehension Passage </div>
April	<div> 5. The Portrait of a Lady 6. A Photograph 7. Canterville Ghost Ch. 1 8. Report Writing 9. Article Writing </div>
May	<div> 10. Summer of the Beautiful White Horse 11. Factual Description 12. Canterville Ghost Ch. 2 13. Notice </div>
July	<div> 14. We're Not Afraid to Die..... 15. Discovering Tut 16. Canterville Ghost Ch. 3 17. Tenses, Modals and Determiners 18. The Address 19. Posters 20. Advertisements </div>

MONTH	TOPIC
August	21. Voice of the Rain 22. Canterville Ghost Ch. 4 23. Ranga's Marriage 24. Letter to the School and College Authorities 25. Note Making / Summary
September	SECOND TERM 1. Ailing Planet 2. Letters of Enquiry and Reply
October	3. Albert Einstein 4. Browning Version 5. Placing Orders and Cancellation 6. Speech Writing
November	7. Mother's Day 8. Childhood 9. Canterville Ghost Ch. 5 10. Job Application

MONTH	TOPIC	
December	11. Canterville Ghost Ch. 6 12. Father to Son 13. Clauses 14. Grammar Revision	
January	FINAL TERM	1. Birth 3. Tale of Melon City 2. Canterville Ghost Ch. 7
February	Revision 4. Writing Skills : Term I and II 5. Grammar : Term I and II 6. Comprehension 7. Note Making	

Reading Projects (10 Marks)

Term 1 – Pygmalion by G.B. Shaw

Term 2 – To Kill A Mocking Bird by Harper Lee

Listening and Speaking Skills (10 Marks)

Note : Students should be asked to read the ‘Pygmalion’ during the Summer Vacation and ‘To Kill a Mocking Bird’ during the Autumn Break.

MATHEMATICS

Mathematics for Class XI (NCERT)

MONTH	TOPIC	SUB TOPIC
April	Ch. 1 : Sets	<ul style="list-style-type: none">• Sets and their representatives, type of sets, power set, Venn diagram, operation as sets.
	Ch. 2 : Relations and Functions	<ul style="list-style-type: none">• Ordered pairs, Cartesian product of sets, relations, functions, domain and range of a function, types of functions, binary operation.
May	Ch. 4 : Mathematical Induction	<ul style="list-style-type: none">• Principle of M.I. and simple equation.
	Ch. 6 : Linear Inequalities	<ul style="list-style-type: none">• Algebraic and graphical solutions of linear inequalities in one and two variables.
July	Ch. 3 : Trigonometric Functions	<ul style="list-style-type: none">• Trigonometric functions of sum and difference of two angles, trigonometric equation.
	Ch. 5 : Complex No. and Quadratic Equation	<ul style="list-style-type: none">• Algebraic properties, argand plane, polar representation of complex numbers.• Solving of quadratic equations having complex roots.
August - September	Ch. 9 : Sequences and Series	<ul style="list-style-type: none">• A.P., G.P., sum to n terms of special series Σx, Σx^2, Σx^3.

MONTH	TOPIC	SUB TOPIC
October	Ch. 7 : Permutations and Combinations Ch. 8 : Binomial Theorem	<ul style="list-style-type: none"> Fundamental principle of counting, Factorial, Simple applications on permutations and combinations. Binomial theorem for positive integral, general and middle terms in binomial expression, simple application.
November	Ch. 16 : Probability Ch. 10 : Straight Lines	<ul style="list-style-type: none"> Random experiments, type of events, algebra of events, probability of different events. Slope of a line and angle between two lines, various forms, distance of a point from a line, distance between two lines.
December	Ch. 11 : Conic Sections Ch. 12 : 3D Geometry	<ul style="list-style-type: none"> Sections of a cone, circle, parabola, ellipse, hyperbola, application of conic section. Co-ordinates of a point in space, distance between two points, section formula.
January	Ch. 13 : Limits and Derivatives Ch. 15 : Statistics	<ul style="list-style-type: none"> Limits, limits of trigonometric function, algebraic functions, derivatives by first principle, derivative of polynomials. Mean deviation, variance and standard deviation.
February	Ch. 14 : Mathematical Reasoning	<ul style="list-style-type: none"> Statements, implications, valid statements, understanding of 'If and only If', Implies, 'AND', 'OR', etc.

PHYSICS

Physics Class XI NCERT (Part 1 and Part 2), Comprehensive Practicals

MONTH	CHAPTER / TOPIC	SUB TOPIC	EXPERIMENT / ACTIVITY
March - April	Units and Measurement, Dimensional Analysis and Error Analysis	<ul style="list-style-type: none"> Measurement : Need for Measurement System and Units, Accuracy and Precision of Measurements, Significant figures Dimensional analysis and its applications 	<ul style="list-style-type: none"> To measure diameter of a small spherical / cylindrical body using vernier callipers. To measure internal diameter and depth of a given Beaker / Calorimeter using Vernier Callipers and hence find it's volume. To measure diameter of a given wire using screw gauge.
May	Vectors	<ul style="list-style-type: none"> Scalar and vector quantities, Position and Displacement vectors, General vectors, Equality of vectors, Multiplication of vectors by a real number, Addition and Subtraction of vectors, Relative velocity, Unit vector, Resolution of a vector in a plane (Rectangular components) 	<ul style="list-style-type: none"> To measure thickness of a given sheet using screw gauge. To determine the radius of curvature of a given spherical surface by a spherometer.

MONTH	CHAPTER / TOPIC	SUB TOPIC	EXPERIMENT / ACTIVITY
July	Motion in One and Two-Dimension	<ul style="list-style-type: none"> • Frame of reference, Motion in a straight line. Position-time graph, Speed and Velocity, Uniform and Non-uniform motion, Average Speed and Instantaneous velocity. • Uniformly accelerated motion, Velocity-time, Position-time graphs, Relations for uniformly accelerated motion (graphical treatment) • Elementary concepts of differentiation and integration for describing motion, Motion in a plane, Cases of uniform velocity and Uniform acceleration, Projectile motion, Uniform circular motion. 	<ul style="list-style-type: none"> • To find the weight of a given body using parallelogram law of vectors. • Using a simple pendulum, plot L - T and L - T² graphs. Hence find the effective length of Second's Pendulum using appropriate graph.
	Law of Motion	<ul style="list-style-type: none"> • Intuitive concept of force, Inertia, Newton's laws of motion (I, II and III) Impulse, Law of conservation of linear momentum and their applications. 	<ul style="list-style-type: none"> • To study the relationship between force of limiting friction and normal reactions and to find the coefficient of friction between a block and horizontal surface.
August	Law of Motion (Contd.) Work, Energy, Power	<ul style="list-style-type: none"> • Friction : Static, Kinetic, Rolling friction, Dynamics of uniform circular motion, examples of circular motion. 	

MONTH	CHAPTER / TOPIC	SUB TOPIC	EXPERIMENT / ACTIVITY
August	Centre of Mass	<ul style="list-style-type: none"> • Work done by a constant and variable force, Work-energy theorem, Power, Potential energy of a spring, Conservative and Non-conservative forces, Elastic and Inelastic collisions. • Centre of mass of two particle system, C.M. of rigid body and uniform rod. 	<ul style="list-style-type: none"> • To determine Young's Modulus of Elasticity of the material of a given wire. • To find the force constant of a helical spring by plotting a graph between load and extension.
September	Rotational Motion	<ul style="list-style-type: none"> • Vector product of vectors, moment of a force, torque, angular momentum, conservation of angular momentum with examples, Equilibrium of rigid bodies, equations of rotational motion. 	
October	Rotational Motion (contd.) Gravitation	<ul style="list-style-type: none"> • Moment of Inertia, radius of gyration, M.I. of simple geometrical objects, Statement of parallel and perpendicular axes theorems. • Kepler's laws of planetary motion, universal law of gravitation, Acceleration due to gravity and its variation with altitude and depth Gravitational potential energy, Escape velocity, orbital velocity, Geo-stationary satellites. 	<ul style="list-style-type: none"> • To determine the surface tension of water by capillary rise method.

MONTH	CHAPTER / TOPIC	SUB TOPIC	EXPERIMENT / ACTIVITY
November	Mechanics of Solids and Fluids	<ul style="list-style-type: none"> Elastic behaviour, Stress-strain relation, Young's modulus, Bulk modulus and modulus of rigidity. Pressure due to a fluid column, Pascal's law and its applications, Effect of gravity on fluid pressure viscosity, Stoke's law, terminal velocity streamline and turbulent flow, Bernoulli's theorem and its applications, Surface energy and Surface tension and Its applications, Capillary rise. 	<ul style="list-style-type: none"> To determine coefficient of viscosity of a given viscous liquid by measuring terminal velocity of a given spherical body. To study the relationship between the temperature of a hot body and time by plotting a cooling curve.
December	Thermal Properties of Matter Thermodynamics Behaviour of Perfect Gas and Kinetic Theory	<ul style="list-style-type: none"> Heat, Temperature, Thermal expansion, specific heat, Latent heat, Calorimetry heat transfer – conduction, convection and radiation, thermal conductivity, Newton's law of cooling. Thermal equilibrium and Zeroth law of thermodynamics. Heat, Work and Internal energy, First and Second law of thermodynamics, reversible and irreversible processes, Heat engines and refrigerators. 	<ul style="list-style-type: none"> To study the relation between length of a given wire and tension for constant frequency using sonometer.

MONTH	CHAPTER / TOPIC	SUB TOPIC	EXPERIMENT / ACTIVITY
December		<ul style="list-style-type: none"> Equation of state of a perfect gas, work done during compression, Kinetic theory of gases – assumptions, concept of pressure, Kinetic energy and Temperature, r.m.s. speed of gas molecules, degrees of freedom, Law of equi-partition of energy, Applications of specific heats of gases, Mean free path, Avogadro's number. 	
January - February	Oscillations and Waves	<ul style="list-style-type: none"> Periodic motion – Period, Frequency, Displacement as a function of time, Periodic functions, Simple harmonic motion and its equation, Oscillations of a spring, restoring force, Energy in S.H.M. – Kinetic and potential energy, simple pendulum – derivation of expression of its time period, free and forced oscillations, Resonance damped oscillations Wave motion, Longitudinal and transverse waves, Equation of progressive wave, principle of superposition of waves, Reflection of waves, standing waves in strings and organ pipes; normal modes, Beats and Doppler effect. 	<ul style="list-style-type: none"> To study the relation between frequency and length of a given wire under constant tension using sonometer.

CHEMISTRY

Chemistry Class XI NCERT (Vol. 1 and Vol. 2), Comprehensive Practicals

MONTH	CHAPTER / TOPIC	SUB TOPIC	PRACTICAL / ACTIVITIES
April	■ Some Basic Concepts of Chemistry	<ul style="list-style-type: none">• Law of Chemical Combination• Dalton's Atomic theory• Atomic and Molecular Masses• Mole Concept• Percentage Composition• Empirical Formula• Stoichiometry and Stoichiometric calculations	<ul style="list-style-type: none">• Basic laboratory techniques.
	■ Redox Reactions	<ul style="list-style-type: none">• Classical idea of redox reaction• Redox reaction in terms of electron transfer reactions• Oxidation number	
May	■ Structure of Atom	<ul style="list-style-type: none">• Sub atomic particles• Rutherford's Nuclear Model of Atom• Developments leading to Bohr's model of Atom	<ul style="list-style-type: none">• Crystallization – Prepare crystals of CuSO_4.

MONTH	CHAPTER / TOPIC	SUB TOPIC	PRACTICAL / ACTIVITIES
May	■ Environmental Chemistry	<ul style="list-style-type: none"> Environmental Pollution Water Pollution Industrial Waste Strategies to control environmental pollution Green Chemistry Atmospheric Pollution Soil Pollution 	
	■ Hydrogen	<ul style="list-style-type: none"> Position of Hydrogen Preparation of dihydrogen Hydrides Physical and Chemical properties of water Hydrogen peroxide Dihydrogen Properties of H₂ 	
July	■ Structure of Atom (Contd.)	<ul style="list-style-type: none"> Bohr's Model of Hydrogen Atom Towards Quantum Mechanical Model of the atom Quantum Mechanical Model of atom 	<ul style="list-style-type: none"> Volumetric Analysis 1
	■ Classification of Elements and Periodicity in Properties	<ul style="list-style-type: none"> Why do we need to classify Elements ? Genesis of Periodic Classification 	<ul style="list-style-type: none"> Salt Analysis

MONTH	CHAPTER / TOPIC	SUB TOPIC	PRACTICAL / ACTIVITIES
July	<ul style="list-style-type: none"> ■ Classification of Elements and Periodicity in Properties (Contd.) 	<ul style="list-style-type: none"> • Modern Periodic Law and the present form of the periodic table • Nomenclature of elements with atomic numbers > 100 • Electronic Configurations of elements and the periodic table • Electronic Configurations and types of elements : s-, p-, d-, f- Blocks • Periodic Trends in Properties of Elements 	<ul style="list-style-type: none"> • Volumetric Analysis (contd.)
August	<ul style="list-style-type: none"> ■ Chemical Bonding and Molecular Structures 	<ul style="list-style-type: none"> • Kossel Lewis Approach to Chemical Bonding • Ionic Bond • Bond Parameters • VSEPR theory • Valence Bond Theory • Hybridisation • Molecular Orbital Theory • Bonding in some homonuclear diatomic molecules • Hydrogen Bonding 	<ul style="list-style-type: none"> • Volumetric Analysis (contd.)

MONTH	CHAPTER / TOPIC	SUB TOPIC	PRACTICAL / ACTIVITIES
August	■ States of Matter	<ul style="list-style-type: none"> • Intermolecular forces • Intermolecular forces vs thermal interactions • The gaseous state • Ideal gas equation • Kinetic Molecular Theory of gases • Behaviour of real gases : Deviation from ideal gas behaviour • Liquification of gases • Thermal Energy • The gas Laws • Liquid state 	• Salt Analysis (Contd.)
September	■ Thermodynamics	<ul style="list-style-type: none"> • Thermodynamic state • Measurement of U and H • Calorimetry • Enthalpy change 	
October	■ Thermodynamics (Contd.)	<ul style="list-style-type: none"> • $\Delta_r H$ of a reaction • Enthalpies for different types of reactions • Spontaneity • Gibb's energy change and equilibrium 	• Salt Analysis (Contd.)

MONTH	CHAPTER / TOPIC	SUB TOPIC	PRACTICAL / ACTIVITIES
November	<ul style="list-style-type: none"> Organic Chemistry – Some Basic Principles and Techniques 	<ul style="list-style-type: none"> General Introduction Shapes of organic compounds Structural representation of organic compounds Classification Isomerism Reaction Mechanisms Quantitative Analysis Tetravalence of Carbon Nomenclature Fundamental Concepts Qualitative Analysis 	<ul style="list-style-type: none"> Salt Analysis (Contd.)
December	<ul style="list-style-type: none"> Hydrocarbons 	<ul style="list-style-type: none"> Classification Alkenes Aromatic Hydrocarbons Carcinogenicity and Toxicity Alkanes Alkynes 	<ul style="list-style-type: none"> Chromatography
January	<ul style="list-style-type: none"> s - Block Elements 	<ul style="list-style-type: none"> Group I elements General characteristics Anomalous properties of Lithium Group II elements 	<ul style="list-style-type: none"> Practical Revision

MONTH	CHAPTER / TOPIC	SUB TOPIC	PRACTICAL / ACTIVITIES
January	<ul style="list-style-type: none"> s - Block Elements (Contd.) 	<ul style="list-style-type: none"> General characteristics Anomalous properties of Beryllium Biological importance of sodium, potassium, magnesium and calcium 	
	<ul style="list-style-type: none"> p - Block Elements 	<ul style="list-style-type: none"> Group 13 : The Boron family Important trends and anomalous properties of Boron Compounds of Boron Uses of Boron and Aluminium and their compounds 	
February	<ul style="list-style-type: none"> p - Block Elements (Contd.) 	<ul style="list-style-type: none"> Group 14 : The Carbon family Important trends and anomalous behaviour of Carbon Allotropes of Carbon Some important compounds of carbon and silicon 	

BIOLOGY

Biology - Textbook of Class XI (NCERT), Comprehensive - Laxmi Publication

MONTH	CHAPTER / TOPIC	SUB TOPIC	PRACTICAL / ACTIVITIES
April - May	Cell Structure and Function	<p>Cell : cell wall, cell membrane and cell organelles (plastids, mitochondria, endoplasmic reticulum, golgi complex dictyosomes, ribosomes, lysosomes, vacuoles, centrioles) and nuclear organisation.</p> <p>Mitosis, Meiosis, Cell Cycle, Basic chemical constituents of living bodies, structure and functions of carbohydrate, proteins, lipids and nucleic acids).</p> <p>Enzymes : Types properties and function.</p>	<ul style="list-style-type: none"> • Study of Ascaris leech, earthworm Prawn silk worm, Honeybee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit. • To study rate of respiration in germinating seeds. • To study effect of different temperatures on the activity of salivary amylase on starch • Study of tissue and diversity in shapes and sizes of plants and animals cell.
July	Structural organisation in Animals and Plants	<p>Tissue in animals and plants Morphology, anatomy and function of different parts of flowering plants root, stem, leaf, inflorescence, flower, fruit and seed.</p>	<ul style="list-style-type: none"> • Study of Moss, Fern, Pine, One monoco-tyledon and one dico-tyledon and one lichen • Study of distribution of stomata in upper and lower epidermis of leaves.

MONTH	CHAPTER / TOPIC	SUB TOPIC	PRACTICAL / ACTIVITIES
July	Structural organisation in Animals and Plants (Contd.)	Structural Organisation in Animals (upto tissues), Morphology and anatomy of cockroach.	<ul style="list-style-type: none"> • Comparative study of rate of transpiration on lower and upper surfaces of leaves. • Study of specimens and identification with reasons Amoeba, Hydra, liver fluke. • To separate plant pigments through paper chromatography.
August	Plant Physiology Transport in Plants Mineral Nutrition	Movement of water food, nutrients and gases	<ul style="list-style-type: none"> • Study of mitosis in onion root tip cells and animal cells from permanent slide. • Study of different modifications in root, stem and leaves. • To test the presence of urea in urine. • To detect the presence of sugar in urine/ blood sample. • To detect the presence of Albumin in urine. • To detect the presence of bile salts in urine. • To test the presence of sugar, starch, proteins and fats.
September	Revision and First Term Exam		

MONTH	CHAPTER / TOPIC	SUB TOPIC	PRACTICAL / ACTIVITIES
October	Plant Physiology (Contd.)	Respiration in plants, Photosynthesis in plants Plant-growth and development	<ul style="list-style-type: none"> • Study of different types of inflorescence.
November	Human Physiology	Digestion and Absorption Breathing and Respiration Body fluid and circulation	<ul style="list-style-type: none"> • Imbibition in seeds / basic observations and comments on the experimental set up- Anaerobic respiration, phototropism • Study of external morphology of cockroach through models. • Apical bud removal, human skeleton and types of joints
December	Human Physiology (Contd.)	Excretory product and elimination, locomotion and movement Neural control (control and coordination)	
January - February	Diversity in Living World Chemical Control and Coordination	Diversity of living organisms, Classification of living organisms, Five Kingdom Classification, Major groups and principles of classification with each kingdom.	<ul style="list-style-type: none"> • Study of parts of a compound microscope. • T.S. of dicot and mono-cot root and stem. • Study of the specimens and identification with reasons. • Bacteria, oscillatoria, spirogyra. • Rhizopus mushroom yeast.

MONTH	CHAPTER / TOPIC	SUB TOPIC	PRACTICAL / ACTIVITIES
January - February		Systematics and Binomial system of nomenclature, Salient features of animal (non chordates upto phylum level and chordates upto class level.)	<ul style="list-style-type: none">• Study of osmosis by potato osmometer.• Plasmolysis in epidermal peel.
February	Diversity in Living World (Contd.)	Plants (Major groups, Angiosperms up to subclass) classification.	
	Neural Control and Coordination	Neural system and Sense Organs, Reflex arc and action, CNS and Endocrine glands and Hormones	
	Revision and Final Term Exam		

ACCOUNTANCY

Double Entry And Book Keeping - T. S. Grewal

MONTH	TOPIC	SUB TOPIC
April	Unit 1 : Introduction to Accounting	<ul style="list-style-type: none">• Accounting - Meaning, Objectives, Accounting as source of information, internal and external users of Accounting information and their needs.• Qualitative characteristics of Accounting information - reliability, relevance, understandability and comparability.• Basic Accounting Terms - Asset, Liability, Capital Expense, Income, Expenditure, Revenue, Debtors, Creditors, Goods, Cost, Gain, Stock, Purchase, Sales, Loss, Profit, Voucher, Discount, Transaction, Drawings.
	Unit 3 : Theory Base of Accounting	<ul style="list-style-type: none">• Accounting Principles meaning and nature.• Accounting concepts : Entity, Money Measurement, Going concern, Accounting Period, Cost concept, Dual Aspect, Revenue Recognition, Matching Accrual, Full Disclosure, Consistency, Conservatism, Materiality.• Accounting Standards : Concepts and Utility• Process of accounting from recording of business transactions to preparation of Trial Balance.• Basis of Accounting Cash Basis, Accrual Basis, IFRS

MONTH	TOPIC	SUB TOPIC
May	Unit 2 : Recording of Business Transactions (Accounting Equation)	<ul style="list-style-type: none"> • Voucher and Transaction : Origin of Transactions, Source Documents and Vouchers, Preparation of Accounting Vouchers, Accounting Equation, Meaning and Analysis of transactions using Accounting Equation : Rules of Debit and Credit.
July - August	Unit 2 : Recording of Business Transactions (Contd.)	<ul style="list-style-type: none"> • Recording of Transactions : Books of original entry - Journal, Special purpose Books (1) Cash Book - Simple, Cash Book with Bank Column and Petty Cash Book, Purchases Book, Sales Book, Purchase Returns Book, Sales Return Book, Ledger : Meaning, utility, format, posting form Journal and Subsidiary books, Balancing of Accounts. • Bank Reconciliation Statement : Meaning, need and preparation.
September	BRS (contd.), 1st Term Exams. Provision and Reserves	
October	Unit 5 : Depreciation, Provisions and Reserves	<ul style="list-style-type: none"> • Depreciation : Meaning, Need for charging depreciation, factors affecting depreciation, methods : Straight Line Method, Written, Down Value Method, Method of recording depreciations : Charging to asset account, Creating to provision for depreciation account, Treatment of disposal of asset. • Provisions and Reserves : Meaning, importance, difference between provisions and reserves, types of reserves : Capital Reserve, General Reserve, Revenue Reserve, Specific Reserve and Secret Reserve.

MONTH	TOPIC	SUB TOPIC
October	Unit 4 : Accounting for Bills of Exchange Transactions	<ul style="list-style-type: none"> • Bills of Exchange and Promissory, Note Definition, features, parties, Specimen and distinction. • Important Terms : Term of Bill, Accommodation Bill, Days of Grace, Date of Maturity, Bill at Sight, Negotiation, Endorsement, Discounting of Bill, Dishonour, Retirement and Renewal of bill. • Accounting treatment of trade bills.
November	Unit 6 : Financial Statements	<ul style="list-style-type: none"> • Financial Statements meaning and users. • Distinction between capital expenditure and revenue expenditure. • Trading and Profit and Loss Account : Gross Profit, Operating Profit, Net Profit, Balance Sheet : Need, Grouping and Marshalling of Assets and Liabilities, Vertical Presentation of Financial Statements. • Adjustments in the preparation of financial statements : Closing Stock, Outstanding expenses, prepaid expenses, accrued income, Income received in advance, depreciation, Bad Debts, Provision for Doubtful Debts, Provision for discount on debtors, manager's commission. Preparation of Trading and Profit and Loss A/C and Balance Sheet of sole proprietorship. Loss by fire, theft.

MONTH	TOPIC	SUB TOPIC
December	Unit 7 : Trial Balance and Rectification of Errors	<ul style="list-style-type: none"> • Trial Balance : meaning, objectives and preparation • Errors : Types of Errors, errors affecting, Trial Balance, errors not affecting Trial Balance. • Detection and Rectification of Errors, use of Suspense Account.
January	Unit 9 : Computers in Accounting – Single Entry – Not for Profit organisation	<ul style="list-style-type: none"> • Introduction of computer and Accounting Information systems. Application of computers in accounting. • Automation of accounting process, designing accounting reports, MIS reporting, data exchange with other information systems. • Comparison of accounting process in manual and computerised accounting, advantages and limitations of automation. • Sources of Accounting system ready made and customized and tailor made accounting system. Merits and demerits of each option. • Subscription Fund based Accounting, Preparation of Income and Expenditure Accounts Project Work

BUSINESS STUDIES

Business Studies for Class XI (NCERT)

MONTH	TOPIC	SUB TOPIC
April	Part - A : Foundation of Business Unit 1 : Nature and Purpose of Business	<ul style="list-style-type: none">• Concept and characteristics of Business.• Business, Profession and Employment – distinctive features.• Objectives of Business – economic and social, Role of profit in business.• Classification of business activities : Industry and commerce.• Industry – types : primary, secondary, tertiary• Commerce : Trade and Auxiliaries.• Business risks – nature and causes.
	Unit 2 : Forms of Business Organisations	<ul style="list-style-type: none">• Sole proprietorship; Joint Hindu Family Business – meaning, features, merit and limitations.• Partnership – meaning, types, registration, merit, limitations, types of partners.
May	Unit 2 : (Continued)	<ul style="list-style-type: none">• Cooperative societies – types, merits and limitations.• Company : Private Ltd., Public Ltd., merits and limitations.• Choice of form of Business Organisation• Starting a business – Basic Factors

MONTH	TOPIC	SUB TOPIC
July	Part B : Corporate Organisation, Finance and Trade Unit 7 : Formation of Company	<ul style="list-style-type: none"> • Stages in the formation of a company • Promotion • Incorporation • Commencement of Business
	Unit 3 : Private, Public and Global Enterprises	<ul style="list-style-type: none"> • Private Sector and Public Sector • Forms of Organising Public Sector enterprises • Departmental Undertaking • Statutory Corporations • Government Company • Changing role of Public Sector • Global Enterprises (Multinational Companies) Meaning and features, Joint ventures (meaning and benefits) and Public Private Partnership (features)
August	Unit 4 : Business Services	<ul style="list-style-type: none"> • Nature and types of Business Services – Banking, Insurance, Communication • Banking – types of Banks, Functions of Commercial Banks, E-banking • Insurance – Principles, types : life, fire and marine • Postal and Telecom Services.
September	Revision	

MONTH	TOPIC	SUB TOPIC
October	Unit 5 : Emerging modes of Business	<ul style="list-style-type: none"> • E-business – Meaning, scope and benefits, resources required for successful e-business implementation. On-line transactions, payment mechanism, security and safety of business transactions. • Outsourcing – concept, need and scope (BPO and KPO)
October - November	Unit 6 : Social responsibility of Business and Business ethics	<ul style="list-style-type: none"> • Concept of social responsibility • Case for social responsibility • Responsibility towards owners, investors, employees, consumers, government, community and public in general • Business and environmental protection • Business Ethics : Concept and elements
November	Unit 8 : Sources of Business Finance	<ul style="list-style-type: none"> • Nature and significance. • Owner's funds and borrowed funds • Sources of raising finance • Equity and Preference shares • Global Depository Receipt, American Depository Receipt

MONTH	TOPIC	SUB TOPIC
November		<ul style="list-style-type: none"> • Debentures and Bonds • Retained Profits • Public Deposits • Loan from financial institutions • Loan from commercial banks • Trade Credit • ICD
	Unit 9 : Small Business	<ul style="list-style-type: none"> • Small Scale Industry (Micro, Small and Medium) • Role of small business in India • Problems of small business in India • Government assistance and special schemes for industries in rural, backward and hilly areas
December	Unit 10 : Internal Trade	<ul style="list-style-type: none"> • Meaning and types of Internal Trade : Wholesale and Retail Trade • Services of a wholesaler and a retailer • Types of Retail Trade : <ol style="list-style-type: none"> 1. Itinerant retailers and fixed shops 2. Departmental Stores, Super Markets, Malls, Chain stores

MONTH	TOPIC	SUB TOPIC
January	Unit 10 : (Continued)	3. Mail order Business, Consumers Cooperative store 4. Automatic Vending Machine 5. Role of chambers of commerce and Industry in promotion of Internal Trade. 6. Main documents used in Internal Trade
	Unit 11 : International Business	<ul style="list-style-type: none"> • Nature, Importance and Complexities involved in International business.
February	Unit 11 : (Continued)	<ul style="list-style-type: none"> • Export - Import procedures and documentation.
	Unit 12 :	<ul style="list-style-type: none"> • Role of WTO
	Revision for Final Term.	

MONTH	TOPIC	SUB TOPIC
February	Unit 12 : Project Work	<p>Any one of the following :</p> <ul style="list-style-type: none"> • Find out from local sample business unit of the various objectives they pursue. • Problems of setting up and running business unit. • Enquiry into the ethics of running business through questionnaire. • Survey of quality of bank services in the local branch office. • Study of postal and courier mail services. • Availability and use of agency services, advertising, packaging, investment in saving schemes. • Survey of popularity of credit cards issued by different banks. • Study of profile of a sole trader / partnership. • Study of Joint Hindu Family Business. • Study of Working of any Cooperative Society. • Study of small business unit regarding source of finance.

ECONOMICS

Statistics for Economics : T.R. Jain and V.K. Ohri

Indian Economics Development : NCERT

MONTH	TOPIC	SUB TOPIC
April	Statistics for Economics Unit - 1 : Introduction Unit - 2 : Collection and Organisation of Data	<ul style="list-style-type: none">• Sources of Data, Methods of Collection, Organisation of Data
May	Unit - 2 : Presentation of Data Unit - 4 : Project Work in Economics Activity : Project Work	<ul style="list-style-type: none">• Tabular, Diagrammatic and Graphic Presentation of Data, Ogives, Polygons
July	Unit - 3 : Measures of Central Tendency	<ul style="list-style-type: none">• Mean, Median, Mode, Quartiles

MONTH	TOPIC	SUB TOPIC
August	Indian Economic Development Unit - 1 : Development Policies and Experience Unit - 2 : Economic Reforms Since 1991	Ch. - 1 : Indian Economy on the eve of Independence Ch. - 2 : Indian Economy 1950 - 1990 <ul style="list-style-type: none"> • Need and Main features • An appraisal of LPG
September	Revision for First Term Exams	
October	Unit - 3 : Measures of Dispersion, Correlation	<ul style="list-style-type: none"> • Till quartile deviation • Mean Deviation, Standard Deviation • Lorenz Curve, Karl Pearson, Rank Correlation
November	Part B Unit - 3 : Challenges Facing Indian Economy – Poverty, Human Capital Formation	<ul style="list-style-type: none"> • Poverty • Human capital formation

MONTH	TOPIC	SUB TOPIC
December	Part B Ch. 6 and Inflation	<ul style="list-style-type: none"> Rural Development Inflation – Problems, Policies
January	Part A Unit - 3 : Index Numbers and some mathematical tools in economics. Part B Employment, Infrastructure	<ul style="list-style-type: none"> Methods (Laspeyre's Paasche's and Fisher's Method) Definition and types, Problem in construction of Index No., Features of Index No., Uses and limitations of Index No., Construction of Consumer Price Index
	I week of II Term exam preceded by revision	
February	Unit - 7 : Current Challenges facing Indian Economy Unit - 8 : Development Experience of India	<ul style="list-style-type: none"> Environment India / China / Pakistan
	Revision For Final Exams.	

COMPUTER SCIENCE

Introduction to Computer Science by A.K. Sharma (Vol I)

Computer Science by Sunita Arora (XI)

APRIL

Software Concepts

- Types of Software, System Software, Operating System, Memory Management
- LINUX Commands
- Microprocessor, Memory Concepts, Units, Primary and Secondary Memory
- Microprocessors and Memory concepts, Internal Storage encoding of Characters : ASCII, Interchange), and UNICODE;
- Microprocessor : Basic concepts, Clock speed (MHz, GHz), 16 bit, 32 bit, 64 bit processors; Types of CISC, RISC;
- Types of Ports

Programming Methodology

- General Concepts
- Names for identifiers, Comments, Indentation; Documentation and Program maintenance;
- Running and Debugging programs

MAY

- Problem Solving Methodology and Techniques : Understanding of the problem, Identifying minimum number of inputs required for output, Step by step solution for the problem, breaking down solution into simple steps, Identification of arithmetic and logical operations required for solution.

Introduction to C++

- C++ character set, C++ Tokens (Identifiers, Keywords, Constants, Operators), Structure of a C++ Program (include files, main function); Header file - iostream.h, iomanip.h; cout, cin; Use of I/O operators (<< and >>), Use of endl and setw(), Cascading of I/o operators, Error Messages; Use of editor, basic commands of editor, compilation, linking and execution; standard input/output operations from C language : gets(), puts() of stdio.h header file.
-

JULY

Data Types, Variables and Constants

- Concept of Data types; Built-in Data types : char, int, float and double; Constants :
- Integer Constants, Character Constant (Backslash character constants -\n,\t), Floating Point Constants, String Constants; Access modifier : const; Variables of built-in data types, Declaration / Initialisation of variables, Assignment statement; Type modifier : signed, unsigned, long

Operators and Expressions

- Operators: Arithmetic operators, Unary operators, Increment and Decrement Operators, Relational operators, Logical operators, Conditional operators : Precedence of Operators; Expressions; Automatic type conversion in expressions, Type casting; C++ shorthands's
 - Conditional statements : **if-else**, Nested **if**, **switch..case..default**, Nested **switch..case**, break statement (to be used in switch..case only);
-

AUGUST

Flow of Control

- Loops : **while**, **do-while**, **for** and Nested loops;
-

SEPTEMBER

String Functions:

- Header File : string.h

Character Functions:

- Header File : ctype.h

Mathematical Functions:

- Header File-math.h, stdlib.h;

Other Functions:

- Header File-stdlib.h;

Revision for Term I, Exams

OCTOBER

Structured Data Type : Array

- Declaration/initialization of One-dimensional array, Inputting array elements, Accessing array elements, Manipulation of Array elements (sum of elements, product of elements, average of elements, linear search, finding maximum/minimum value);
- Declaration/Initialization of a String, string manipulations (counting vowels/consonants/digits/special characters, case conversion, reversing a string, reversing each word of a string);

Two-dimensional Array :

- Declaration/Initialization of a two-dimensional array, inputting array elements Accessing array elements, Manipulation of Array elements (sum of row element, column elements, diagonal elements, finding maximum/minimum values);
-

NOVEMBER

Two Dimensional Arrays (contd.) :

- Operations on 2-D arrays;

User Defined Functions :

- Defining a function; function prototype, Invoking/calling a function, passing arguments to function, specifying argument data types, default argument, constant argument, call by value, call by reference, returning values from a function, calling functions with arrays, scope rules of functions and variables; local and global variables;

DECEMBER

- #define, typedef.
- Library func, console function, random function

II Term Exams

JANUARY

User-defined Data Types

Structures :

- Defining a Structure, Declaring structure variables, Accessing structure elements, Passing structure of Functions as value and reference argument/parameter, Function returning structure, Array of structures, passing an array of structure as an argument/a parameter to a function.

Number System

- Binary, Octal, Decimal, Hexadecimal and conversion between two different number systems;
-

FEBRUARY

User Defined Data type :

- Need for User defined data type :
- Defining a symbol name using typedef keyword and defining a macro using #define directive;

Final Term Exams

INFORMATICS PRACTICES

Text Book for Class XI - Sunita Arora, Dhanpat Rai

Text Book for I.P. - CBSE

APRIL

Computer System Organization

- Evolution of Computers
- Functioning of Computers
- Generations of Computers
- I/O Devices
- Memory Devices
- USB Drive, Memory cards - Comparative properties

Software Concepts

- Types of Software : System and Application software
- Software Concepts :
- Operating system, Need for operating system, major functions of Operating System, Memory Management;
- Language Processors : compilers, Interpreters.
- Application Softwares : Packages, utilities, customized packages, developer tools

MAY

Software Concepts (Contd.)

- Specific Purpose Application software (for example : Inventory Management System, Purchasing System, Human Resource Management System, Payroll System, Financial Accounting, Hotel Management and Reservations System, etc.);
- Developer Tools : Compilers and Interpreters, Integrated Development Environment

Network and Security

- Security of system : sources of attack and possible damages, virus and related entities - worms, propagation of these entities, virus detection using a tool,
 - Desktop security, Digital certificates, Digital signature, cookies, firewall, password, file access permissions.
-

JULY

Introduction to Programming using IDE

- Introduction, Rapid Application Development using IDE - Integrated Development Environment;
- Familiarization of IDE using basic Interface components;
- Basic component handling methods/attributes

Programming Fundamentals

- Data Types : Concept of data types; Built-in data types - byte, short, int, long, float, double, char, String (or any object), Boolean; Concept of a Class and Instance as user-defined datatypes.
- Variables : Need to use variable, Declaring Variables, Variable Naming Convention, Assigning value to Variables;

AUGUST

Flow of Control

- Control Structures :
Assignment Statement
Decision Structure - if, if-else, switch;
Looping Structure - while, do-while, for;

Java GUI Programming using Swing - I

- Understanding Swing components, Starting GUI Programming. Using HTML in Swing Components
- Working with push buttons.

Java GUI Programming using Swing - II

- Control for simple output. Control for obtaining input. Understanding Focus
-

SEPTEMBER

Java GUI Programming using Swing - II (contd.), First Term Exam.

Java GUI Programming using Swing - III

- List type controls, Working with lists, Working with combo boxes. Working with swing timers.
 - Generating random numbers.
-

OCTOBER

Programming Methodology

- General Concepts : Modular approach; Stylistic Guidelines : Clarity and Simplicity of Expressions, Characteristics of a good program, Problem Solving Methodology and Techniques - Stages of program development, Errors - types of errors
-

NOVEMBER

Data Base Concepts

- Database Management System - Introduction to database concepts, Database Abstraction, Different data models relational, network and hierarchical.
- Relational data model - relation/Table, attribute, Tuple/Rows, field, Data, views

Introduction to MySQL

- MySQL database system,
- Starting MySQL
- Comparing SQL and MySQL, Processing capabilities, Classification of SQL statements.

Simple Queries

- SQL and MySQL elements - variables, Literals, data types, null values, comments.
- SQL command syntax,
- Simple queries - select command, selecting all columns, reordering columns, displaying all data ALL, Use of DISTINCT,
- Use of Dual Table, Scalar expressions, handling null, concatenating strings, Where clause, use of operators, sorting results.

DECEMBER

MySQL Functions

- Types of MySQL functions, Single row functions - Character, Numeric, Date and time

- Functions in MySQL
 - String Function - CHAR(), CONCAT(), INSTR(), LCASE(), LEFT(), LOWER(), LENGTH(), LTRIM(), MID(), RIGHT(), RTRIM(), SUBSTR(), TRIM(), UCASE(), UPPER().
 - Mathematical Functions - POWER(), ROUND(), TRUNCATE(),
 - Date and Time Functions - CURDATE(), DATE(), MONTH(), YEAR(), DAYNAME(), DAYMONTH(), DAYOFWEEK(), DAYOFYEAR(), NOW(), SYSDATE().
-

JANUARY

Table creation and data manipulation commands.

- Creating, opening and removing database in MySQL.
- Manipulating Data of a Table/Relation : Inserting New Rows, Inserting New Rows with Null Values, Inserting NUMBER, CHAR and DATE Values, Update Statement to Change Existing Data of a Table, Updating Rows in A Table, Delete statement - removing row/rows from a Table;
- Creating Table using CREATE TABLE, ALTER TABLE for adding a new column, using naming conventions for column names;
- Revision for Second Term Exams.

IT Applications

- e-governance,
 - e-business and e-learning
-

FEBRUARY

- Project Work
 - Revision for the Final Exams.
-

PHYSICAL EDUCATION

Physical Education - Health Education by A.K. Uppal
Health and Physical Education by Saraswati Publications

MONTH	TOPIC	SUB TOPIC
April	<ul style="list-style-type: none">• Concept of Physical Education	<ol style="list-style-type: none">1. Meaning and definition of Physical Education, its aims and objectives.2. Need and importance of Physical Education.3. Misconception about Physical Education and its relevance in inter disciplinary context.4. Philosophies of Physical Education.5. Fundamental concept of Biomechanics in Physical Education and sports.
May	<p>Part B – Unit I</p> <ul style="list-style-type: none">• Given Sub Topics relate to any one game / sport of student's choice : Basketball / Volleyball, Football / Cricket• Career aspect in Physical Education	<ol style="list-style-type: none">1. History of Game / Sport.2. Latest General1. Physical Education as a Profession.2. Professional Ethics.3. Physical Education and career options.4. Avenues for Career preparation.5. Self assessment for career choice.

MONTH	TOPIC	SUB TOPIC
May	Part B – Unit I	<ol style="list-style-type: none"> 1. Specifications of play fields and related sports equipments. 2. Important tournaments and venues.
July	<ul style="list-style-type: none"> • Health Concept of Physical Education Part B – Unit I	<ol style="list-style-type: none"> 1. Role of Physical Education programmes on individual and family. 2. Community Health Programme. 3. Effects of alcohol, tobacco and drugs on sports performance. 4. Life-style management and sports. <ol style="list-style-type: none"> 1. Sports personalities 2. Proper sports gears and their importance
August	<ul style="list-style-type: none"> • Olympic Movement 	<ol style="list-style-type: none"> 1. Ancient Olympic Games (Before 1896) 2. Modern Olympic Games (After 1896) 3. Olympic ideals and objectives 4. Development of values through Olympic movement 5. Olympic symbol or emblem.
October	<ul style="list-style-type: none"> • Sociological aspects of Physical Education 	<ol style="list-style-type: none"> 1. Meaning of Sociology 2. Concept of Sports Sociology and its importance. 3. Games and sports as man's cultural heritage. 4. Socialization in sports at Home, school and community. 5. Leadership through Physical Education programmes.

MONTH	TOPIC	SUB TOPIC
October	Part B – Unit II <ul style="list-style-type: none"> Given Sub Topics related to any one game / sport of student's choice : Basketball / Volleyball / Football / Cricket 	<ol style="list-style-type: none"> Fundamental skills of the game / sport. Specific exercises of warm-up and conditioning.
November	<ul style="list-style-type: none"> Measurement in Sports Part B – Unit II <ul style="list-style-type: none"> Physiological aspects of Physical Education 	<ol style="list-style-type: none"> Meaning of measurement and its importance in Physical Education and sports. Calculation of Body Mass Index (BMI) AAPHER Physical Fitness Test Measurement of Heart Rate (Resting and after Exercise) <ol style="list-style-type: none"> Related sports technologies Sports Awards. <ol style="list-style-type: none"> Warming up : General and specific and its physiological basis. Function and effects of exercise on muscular and circulatory systems. Factors affecting the physical fitness components.

MONTH	TOPIC	SUB TOPIC
December	<ul style="list-style-type: none"> Changing Trends in Physical Education and sports <p>Part B – Unit II</p>	<ol style="list-style-type: none"> 1. Concept and principles of integrated Physical Education. 2. Concept and principles of adapted Physical Education. 3. Concept and components of occupational health hazards. 4. Concept and components of health related fitness 5. Sports for all. <ol style="list-style-type: none"> 1. Common sports injuries and their prevention. 2. SGFI and its organisational set-up.

PSYCHOLOGY

Psychology Text Book for Class XI (NCERT)

MONTH	TOPIC	SUB TOPIC	PRACTICAL / ACTIVITY
April	1. Introduction to Psychology	<ul style="list-style-type: none">• Nature, basic concept• Similarities / Variations in Psychological attributes• Evolution of Psychology• Development of Psychology in India• Psychology and other disciplines• Linkages across psychological processes	<ul style="list-style-type: none">• Use of different methods of enquiry and related skills (Projects)• Interview schedule• Movie Analysis• Book Review• Survey
May	2. Methods of Psychology	<ul style="list-style-type: none">• Goals of psychological enquiry• Methods of Psychology• Psychological tools• Data analysis• Computation of measures of central tendency• Graphical presentation of data• Ethical issues in study of Psychological processes	

MONTH	TOPIC	SUB TOPIC	PRACTICAL / ACTIVITY
July	3. The Bases of Human Behaviour	<ul style="list-style-type: none"> • Evolutionary perspective • Nervous and Endocrine system • Relationship of behaviour and experience • Brain and behaviour • Neurotransmitters • Genetic and cultural basis of human behaviour 	
August	4. Human Development	<ul style="list-style-type: none"> • Meaning • Factors influencing and contexts of development • Developmental stages (Detailed) 	
October	5. Sensory and Perceptual Processes	<ul style="list-style-type: none"> • Nature of stimuli • Sense modalities • Sensory adaptation • Attention - Nature and determinants • Perceptual organisation • Perceptual phenomena • Socio-cultural influence on perception 	Practical 1 : Perception

MONTH	TOPIC	SUB TOPIC	PRACTICAL / ACTIVITY
November	6. Learning	<ul style="list-style-type: none"> • Nature, learning curve • Paradigms of learning • Conditioning • Observational learning • Cognitive, Verbal, Concept, Skill learning • Factors affecting learning • Transfer of learning • Learning styles / disabilities • Applications of learning principles 	Practical 2 : Learning
December	7. Human Memory	<ul style="list-style-type: none"> • Nature of Memory • Info. processing, Levels of processing • Memory systems • Representation and organisation in memory • Memory - Constructive process • Nature and Causes of forgetting • Enhancing memory • Pathologies 	

MONTH	TOPIC	SUB TOPIC	PRACTICAL / ACTIVITY
December (contd.)	Thinking	<ul style="list-style-type: none"> • Inter-relationship • Cognitive development stages • Language development • Reasoning, Problem solving, Decision making • Creative thinking 	Practical 3 : Memory
January	Thinking (Contd.) 9. Motivation And Emotion	<ul style="list-style-type: none"> • Motivation - Nature • Biological needs • Social / Psychological Motives • Competence, Self efficacy • Nature of emotions • Physiological / Cognitive / Cultural bases of emotions • Positive emotions and its development • Managing negative emotions 	

FINE ARTS

MONTH	TOPIC	SUB TOPIC
April - May	Theory : Pre-Historic Rock Paintings and Art of Indus valley Practical : Still life and composition	<ul style="list-style-type: none"> • Introduction, period and location. • Study of following paintings : <div style="display: flex; justify-content: space-between; margin-left: 40px;"> 1. A Roaring Animal 2. Wizard's Dance </div> • Indus Valley sculptures and Terracottas : <div style="display: flex; justify-content: space-between; margin-left: 40px;"> 1. Dancing Girl 2. Male Torso </div> • Seal : Bull • Earthen wares : Painted Earthen-ware (Jar) • Still life and composition.
July	Theory : Buddhist, Jain and Hindu Art Practical : Still life and composition	<ul style="list-style-type: none"> • General introduction to Mauryan Art, Shunga and Kushana Art, Gandhara Art. • Study the following sculptures : <div style="display: flex; justify-content: space-between; margin-left: 40px;"> 1. Lion Capital 2. Chauri Bearer </div> 3. Bodhisattva Head from Taxila 4. Seated Buddha from Katra Tila 5. Seated Buddha from Sarnath 6. Jain-Tirathankara • Still life and composition.

MONTH	TOPIC	SUB TOPIC
August	Theory : Ajanta Cave Paintings Practical : Still life and composition	<ul style="list-style-type: none"> • Introduction, location, period, number of caves, Chaitya and Vihara Paintings and sculptures, subject matters and techniques. • Study the following : Painting : Padmapani Bodhisattva Sculpture : Mara Vijay • Still life and composition.
September	Theory : Revision Practical : Completion of Portfolio	
October	Theory : Temples Sculpture Practical : Still life and composition	<ul style="list-style-type: none"> • Artistic aspects of Indian temples. • Still life and composition.
November	Theory : Temples Sculpture Practical : Still life and composition	<ul style="list-style-type: none"> • Study of following Temple sculptures : 1. Descent of Ganga. 2. Ravana Shaking Mount Kailash 3. Trimurti

MONTH	TOPIC	SUB TOPIC
November		4. Lakshmi Narayana Temple 5. Cymbal Player 6. Mother and Child • Still life and composition
December	Theory : Indian Bronzes Practical : Still life and composition	• Introduction, method of casting • Study the following : 1. Natraj 2. Devi (Uma) • Still life and composition
January	Theory : Indo-Islamic Architecture	• Introduction, artistic aspects of Indo-Islamic Architecture. • Study the following architectures : 1. Qutub Minar 2. Taj Mahal 3. Gol Gumbaj

HOME SCIENCE

A Text Book of Home Science by Puja Gupta, Ava Banerjee and Asha Das

MONTH	CHAPTER / TOPIC	SUB TOPIC	PRACTICAL / ACTIVITY
April	Unit - 1 Concept of Home Science and Its Scope Unit - 2 Know Myself 1. Understanding Adolescent	<ul style="list-style-type: none">• Meaning of Home Science, Basic areas of Home Science.• Scope and potential of the study of Home Science. • Adolescence, Meaning,• Early (12-15 yrs) and later (16-18 yrs) adolescence, Early and late maturers.	<ul style="list-style-type: none">• Observe and test your own strengths and weaknesses.• Discuss about them in class with your teachers and fellow students.• Take decision about maximum utilization of strength and improvement of weaknesses.

MONTH	TOPIC	SUB TOPIC	PRACTICAL / ACTIVITY
April	2. Cognitive Development among Adolescents	<ul style="list-style-type: none"> • Physical growth spurt and sexual development • Social and emotional development • Importance of peer groups • Interest in other sex. • Period of storm and stress. • Cognitive-transition. • Varied and changing interests. • Concern about future. 	
May	3. Social and Emotional Development during Adolescence	<ul style="list-style-type: none"> • Accepting one's physique; • Achieving new and more mature relations with age mates of both sexes; • Achieving a masculine / feminine social sex role. • Achieving emotional independence from parents. • Preparing for career; preparing for marriage and family life. Interaction with family, peers and members of community, nutrition, and exercise. 	<ul style="list-style-type: none"> • Report situations from your life to indicate your interaction with in the family, with peers and with members of the community.

MONTH	TOPIC	SUB TOPIC	PRACTICAL / ACTIVITY
May	4. Heredity and Environment 5. Problems of Adolescents	<ul style="list-style-type: none"> • Inter-difference between same sex and opposite sex. • Early and late matures • Differences due to heredity and environment. • Awkwardness due to growth, freedom and control. • Depression, alcohol, drugs and smoking • Delinquency • Problem related to sex; ignorance and increased curiosity. 	
July	6. Preparing for Career 7. Population Education	<ul style="list-style-type: none"> • Meaning and definition of career. • Understanding the various factors that influence the choice for a successful career. • Some problems of over population. • Neglect of girl child, nutrition and education desire for male child. • Small family norms. 	

MONTH	TOPIC	SUB TOPIC	PRACTICAL / ACTIVITY
August	Unit - 3 Nutrition for Self and Family 1. Definition and Relationship between Food, Nutrition and Health.	<ul style="list-style-type: none"> • Definition of health, definition of food. • Definition of nutrition and nutritional status. • Classification of foods on the basis of nutrients and functions. • Nutritional status and calorie intake as a basis of poverty line. • Functions of food • Body building, energy giving, productive, regulatory; • Physiological, psychological and socio-cultural; • Signs of good health • Physical status psychological status, mental ability, mortality and longevity. 	<ul style="list-style-type: none"> • Look for sign of good health within your family.

MONTH	TOPIC	SUB TOPIC	PRACTICAL / ACTIVITY
August	2. Role of Nutrients - Proteins, Carbohydrates and Fats 3. Vitamins and Minerals	<ul style="list-style-type: none"> • Selection of food for optimum nutrition and good health. • Basic knowledge of nutrients (sources, function and effects of deficiency) – Protein, carbohydrates and fats. • Vitamin A, D, B₁, B₂ folic acid and Vitamin C. • Minerals, calcium, iron and iodine. 	<ul style="list-style-type: none"> • Make a list of foods available in the local market according to food groups.
September	4. Food groups and Balance Diet	<ul style="list-style-type: none"> • Basic food groups (ICMR) and their contribution; concept of balance diet; food and nutrition requirement for family (ICMR Tables) 	<ul style="list-style-type: none"> • Observe how different food stuffs are stored at home and evaluate the effectiveness of the method, practice skills to preserve and optimist nutrients by preparing meals and snacks. • Preparing meals and snacks.
October	5. Selection and storage of foods.	<ul style="list-style-type: none"> • Factors influencing selection of food. • Cultural, family food values, media, peer group and availability of foods. • Enhancing nutritive value of foods. • Selection and storage of foods. • Reasons for spoilage. 	

MONTH	TOPIC	SUB TOPIC	PRACTICAL / ACTIVITY
November	6. Principles and Reasons of cooking food	<ul style="list-style-type: none"> • Loss of nutrients during preparation of food and their minimisation. • Cooking, principles of cooking, methods of cooking. • Effect of cooking on the nutritive value of food. 	
December	7. Food Preservation Unit - 3 1. My Resources	<ul style="list-style-type: none"> • Methods of food preservation, dehydration, refrigeration, use of chemicals and household preservatives. • Resources, meaning, types human, knowledge skills, time energy attitudes. • Material, money, goods, property • Community facilities; school parks hospitals, etc. • Need to manage the resources. • Methods of conservation of shared resources. 	<ul style="list-style-type: none"> • Household methods of preservation of food. • Preparation of jam, squash, syrup, pickles/ chutney. • Observe and list resources available at home and in neighbourhood. Make a detail study on an available community resource and its management. Suggest improvement.

HISTORY

Themes in World History (NCERT)

MONTH	TOPIC	SUB TOPIC	
April - May	Section A : Early Societies	<ul style="list-style-type: none"> • Introduction to World History • Time Line I (6 MYA to I BCE) • Writing and City Life 	<ul style="list-style-type: none"> • Introduction to early societies • From the beginning of Time
July - August	Section B : Empires	<ul style="list-style-type: none"> • Introduction • An Empire across three continents • Nomadic Empires 	<ul style="list-style-type: none"> • Time Line II (100 BCE to 1300 CE) • The Central Islamic Lands
September	Revision, First Term Examination		
October - November	Section C : Changing Traditions	<ul style="list-style-type: none"> • Introduction • The Three Orders • Confrontation of Cultures 	<ul style="list-style-type: none"> • Time Line III (1300 to 1700) • Changing Cultural Tradition
December - January	Section D : Towards Modernization	<ul style="list-style-type: none"> • Introduction • The Industrial Revolution • Paths of Modernisation 	<ul style="list-style-type: none"> • Time Line IV (1700 to 2000) • Displacing Indigenous People
February	Revision, Final Examination		

POLITICAL SCIENCE

Indian Constitution At Work Political (NCERT), Political Theory

MONTH	TOPIC	SUB TOPIC
April - May	<ol style="list-style-type: none">1. Constitution why and how ?2. Rights in the Indian constitution3. Election and Representation	<ul style="list-style-type: none">• Why do we need a constitution ?• Authority of a constitution• Fundamental Rights in the Indian constitution• Directive principles of state policy• Relationship between Directive Principles and Fundamental Rights.• Election and Democracy• Election systems in India• Reservation of constituencies• Election Commission and Reforms
July	<ol style="list-style-type: none">1. Executive	<ul style="list-style-type: none">• What is an Executive ?• Different types of Executives• Parliamentary Executive in India.• Permanent Executive

MONTH	TOPIC	SUB TOPIC
August	4. The Philosophy of the Constitution	<ul style="list-style-type: none"> • Meaning of the philosophy of constitution • Political philosophy of Indian constitution • Criticisms of Indian constitution
September	Revision, First Term Examination	
October	1. Political Theory : An Introduction 2. Freedom	<ul style="list-style-type: none"> • What is politics ? • What do we study in political theory ? • Why should we study political theory ? • What is freedom ? • Why do we need constraints ? • Harm principle • Negative and Positive Liberty • Freedom of Expression
November	1. Equality 2. Social Justice	<ul style="list-style-type: none"> • What is Justice ? • Rawl's theory of justice • Free market vs State Intervention

MONTH	TOPIC	SUB TOPIC
December	1. Rights 2. Citizenship 3. Nationalism	<ul style="list-style-type: none"> • Meaning and history of Rights • Kinds of Rights • Rights and Responsibilities • Different approaches to citizenship • Citizen and Nation • Universal Citizenship • Nations and Nationalism • National self-determination • Nationalism and Pluralism
January	1. Development 2. Peace	<ul style="list-style-type: none"> • Meaning and challenge of development • Criticisms of development models • Meaning of peace • Forms of structural violence • Different approaches to peace • Contemporary challenges
February	Final Exam.	
