

CLASS XI ENGLISH CORE

Books: Hornbill

Month	Topics	Sub Topics	Activity
April	1. The Portrait of a Lady 2. A Photograph (Poem)		
May	1. The Summer of the Beautiful White Horse 2. Writing Skills: Advertisement 3. The Address	Advertisement: Situation Wanted Situation Vacant	
June	1. We're Not Afraid to Die...If we Can All be Together 2. Advertisement 3. Integrated Grammar Exercises 3. Class Test 4. Revision	Advertisement: Sale and Purchase of Property Grammar: Rearranging Do As Directed Fill-in-the blanks	
June - July	Unit I Examination		
July	1. The Laburnum Top (Poem) 2. Note-Making and Summarisation 3. Mother's Day		
August	1. Discovering Tut...The Saga Continues. 2. Writing Skill: Speech Writing 3. The Voice of the Rain (Poem) 4. Advertisement 5. Integrated Grammar Exercises 6. Class Test 7. Revision	Advertisement: Sale and Purchase of Goods Grammar: Rearranging Do As Directed Fill-in-the blanks	
September	Half Yearly Examination		
September	1. Writing Skill: Debate Writing 2. The Adventure 3. Writing Skill: Poster Making 4. Silk Road	Posters: Social Poster Commercial Poster	

October	1.Silk Road (Continued) 2. Father to Son (Poem) 3. Writing Skill: Advertisement 4. The Tale of Melon City (Poem)	Advertisement: Sale and Purchase of Vehicles	
November	1. The Tale of Melon City (Continued) 2. Childhood (Poem) 3. Birth 4. Integrated Grammar Exercises 5.Class Test 7.Revision	Grammar: Rearranging Do As Directed Fill-in-the blanks	Interdisciplinary Project: Silk Road : A Technopresentation (PPT) Mixed Media Magazine Cuttings Sketches
December	Unit II Examination		
December	1.Advertisement	Advertisement: To Let Lost and Found	
January	1.Reading Comprehension Exercises 2.Debate Writing (Practice) 3.Speech Writing (Practice) 4. Poster Making (Practice) 5.Exercises on Advertisement (All Categories)		
February	Revision		
February - March	Annual Examination		

CLASS XI PHYSICS

Books: NCERT + SL ARORA

Month	Topics	Sub Topics	Practicals/ Viva
April	Units and Measurements + Motion in a Straight Line	Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. significant figures, Determining the uncertainty in result. Dimensions of physical quantities, dimensional analysis and its applications. Frame of reference, Motion in a straight line, Elementary concepts of differentiation and integration for describing motion	To measure diameter of a given wire and thickness of a given sheet using screw gauge.
May	Motion in a Straight Line + Motion in a Plane	uniform and non- uniform motion, average speed and average velocity and instantaneous velocity, uniformly accelerated motion, velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical and calculus treatment). Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors, Unit vector; resolution of a vector in a plane, rectangular components, Scalar and Vector product of vectors.	To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume. + To determine radius of curvature of a given spherical surface by a spherometer.
June	Projectile + UCM	Motion in a plane, cases of uniform velocity and uniform acceleration- projectile motion, uniform circular motion. Dynamics of uniform circular motion: Centripetal force, examples of circular motion	Using a simple pendulum, plot its graph and use it to find the effective length of second's pendulum.
June - July	Unit I Examination		

<p>July</p>	<p>Laws of Motion + Work, Energy and Power</p>	<p>Intuitive concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion.</p> <p>Law of conservation of linear momentum and its applications.</p> <p>Equilibrium of concurrent forces, Static and kinetic friction, laws of friction, rolling friction, lubrication. Work done by a constant force and a variable force; kinetic energy, work- energy theorem, power.</p> <p>Notion of potential energy, potential energy of a spring, conservative forces: non-conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.</p>	<p>To study the relationship between force of limiting friction and normal reaction and to find the co- efficient of friction between a block and a horizontal surface. + To find the force constant of a helical spring by plotting a graph between load and extension.</p>
<p>August</p>	<p>System of Particles and Rotational Motion + Gravitation</p>	<p>Centre of mass of a two-particle system, momentum conservation and Centre of mass motion.</p> <p>Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications.</p> <p>Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions.</p> <p>Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation). Kepler's laws of planetary motion, universal law of gravitation.</p> <p>Acceleration due to gravity and its variation with altitude and depth.</p> <p>Gravitational potential energy and gravitational potential, escape speed, orbital velocity of a satellite, energy of an orbiting satellite.</p>	<p>To determine the surface tension of water by capillary rise method. + To study the relationship between the temperature of a hot body and time by plotting a cooling curve.</p>
<p>September</p>	<p>Half Yearly Examination</p>		

September	Mechanical Properties of Solids AND Mechanical Properties of Fluids	Elasticity, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), Poisson's ratio; elastic energy. Application of elastic behavior of materials Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), effect of gravity on fluid pressure. Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its simple applications (Torricelli's law and Dynamic lift).	
October	Mechanical Properties of Fluids AND Thermal Properties of Matter	Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise. Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; Cp, Cv - calorimetry; change of state - latent heat capacity.	To determine mass of a given body using a metre scale by principle of moments.
November	Thermal Properties of Matter AND Thermodynamics	Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law. Thermal equilibrium and definition of temperature, zeroth law of thermodynamics, heat, work and internal energy. First law of thermodynamics, Second law of thermodynamics:	To make a paper scale of given least count, e.g., 0.2cm, 0.5 cm.
December	Unit II Examination		
December	Thermodynamics AND Kinetic Theory	Thermodynamic state variable and equation of state. Change of condition of gaseous state isothermal, adiabatic, reversible, irreversible, and cyclic processes. Equation of state of a perfect gas, work done in compressing a gas. Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom	To study the effect of detergent on surface tension of water by observing capillary rise.

<p>January</p>	<p>Kinetic Theory AND Oscillations</p>	<p>law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number. Periodic motion - time period, frequency, displacement as a function of time, periodic functions and their applications.</p> <p>Simple harmonic motion (S.H.M), uniform circular motion and its equations of motion; phase;</p> <p>oscillations of a loaded spring- restoring force and force constant; energy in S.H.M.</p> <p>Kinetic and potential energies; simple pendulum derivation of expression for its time period.</p>	
<p>February</p>	<p>Waves + Revision</p>	<p>Wave motion: Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats.</p>	
<p>February - March</p>	<p>Annual Examination</p>		

CLASS XI CHEMISTRY

Books: 1. Text book of Chemistry Class XI 2- Companion Chemistry 3-Comprehensive practical chemistry

Month	Topics	Sub Topics	Practical / Viva
April	Some Basic concept of chemistry	Relative molecular mass , laws of chemical combinations, empirical formula, stoichiometry and mole concept	Basic instruments and their uses.
May	Structure of atom	Discovery of electron, proton and neutron. Bohr's atomic model and its defect.	Preparation of standard solutions. Acid Base Titration.
June	Structure of atom	Pauli's exclusion principle, Aufbau principle, Hund's rule, electronic configuration, orbitals (s, p, d and f) concept of orbital and quantum theory	
	Periodic Classification of elements	Mendeleev's and modern periodic table, Radio types, IE, Electronegativity, Electron gain energy,	
June - July	Unit I Examination		
July	Chemical Bonding & Molecular Structure	Lewis dot structure, Fajan's rule, Valence bond theory, VSEPR theory Dipole moment and hydrogen bonding, MOT .	Salt Analysis (Carbonate ion, chloride ion, sulphite ion, sulphide ion, acetate ion).
August	Organic chemistry : Some basic principles and techniques	Nomenclature, Inductive effect, mesomerism, resonance and applications, free radicals, carbo cation and anion, types of organic reactions. Nomenclature.	
September	Half Yearly Examination		
September	Organic chemistry : Some basic principles and techniques	Inductive effect, mesomerism, resonance and applications, free radicals, carbo cation and anion, types of organic reactions. Reaction mechanism, SN1, SN 2 , EAS, FRS, additiin and elimination, nucleophilic addition with example	Salt Analysis (Ammonium ,Lead , copper , aluminium , iron , barium ions).
October	Hydrocarbon	Types, alkanes, alkene and alkyne preparations, reactions	Flame Test & Salt Analysis practice
November	Redox Reaction	Basic concept, ion electron method of balancing by oxidation number ,	
	Thermodynamics	System and types of system, surroundings, extensive and intensive , work and state functions, 1st law of thermodynamics,	

December	Unit II Examination		
December	Thermodynamics	Heat, enthalpy, internal energy, Thermochemistry, 2nd law of thermodynamics,	Lassaigne Test
January	Equilibrium	Physical equilibrium , Chemical equilibrium , Kp , Kc relation , Le Chatelier's law , Application. Degree of ionisation of acids and bases, strong and weak electrolytes, concept of pH, hydrolysis of salts, buffer solution, Henderson equation, solubility, common ion effect with example	
February	Sample question papers	Revision for Annual examination	
February - March	Annual Examination		

CLASS XI MATHEMATICS

Books: 1. Mathematics by N.C.E.R.T. 2. Mathematics by R.S.Aggarwal 3. Mathematics Lab Manual by Rachna Sagar .

Month	Topics	Sub Topics	Practical / Viva
April	Sets	Sets and their representations, Empty set, Finite and Infinite sets, Equal sets, Subsets, Subsets of a set of real numbers especially intervals (with notations). Universal set. Venn diagrams. Union, Intersection Difference, Complement of a set. Properties of Complement	To verify distributive law for three given non-empty sets A, B and C, that is, $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$
May	Relations and Functions	Ordered pairs. Cartesian product of sets. Number of elements in the Cartesian product of two finite sets. Cartesian product of the set of reals with itself (up to $R \times R \times R$). Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function as a special type of relation. Pictorial representation of a function, domain, co-domain and range of a function. Real valued functions, domain and range of these functions, constant, identity, polynomial, rational, modulus, signum, exponential, logarithmic and greatest integer functions, with their graphs. Sum, difference, product and quotients of functions.	To distinguish between a Relation and a Function.
June	Trigonometric Functions	Positive and negative angles. Measuring angles in radians and in degrees and conversion from one measure to another. Definition of trigonometric functions with the help of unit circle. Truth of the identity. Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. and their simple applications. Deducing identities like the following: Allied angles, Compound angles, transformation from sum into product etc.	
June - July	Unit I Examination		
July	Trigonometric Functions	Deducing identities like the following: Multiple angles and Sub-multiple.	To plot the graphs of $\sin x$, $\sin 2x$, $2\sin x$ and $\sin x/2$, using same coordinate axes.

July	Complex numbers and Quadratic Equations	Need for complex numbers, especially $\sqrt{-1}$, to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers. Argand plane.	To obtain a quadratic function with the help of linear functions graphically.
	Linear Inequalities	Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line.	
	Permutations and combinations	Fundamental principle of counting. Factorial n. (n!)	
August	Permutations and combinations	Permutations and combinations, derivation of Formulae for nPr & nCr and their connections , simple applications.	
September	Half Yearly Examination		
September	Binomial theorem	Historical perspective, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, simple applications.	To construct a Pascal's Triangle and to write binomial expansion for a given positive integral exponent.
	Statistics	Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/grouped data.	
October	Sequence and Series	Sequence and Series. Arithmetic Mean (A.M.) Geometric Progression (G.P.), general term of a G.P., sum of n terms of a G.P., infinite G.P. and its sum, geometric mean (G.M.), relation between A.M. and G.M	To demonstrate that the Arithmetic mean of two different positive numbers is always greater than the Geometric mean.
	Introduction to 3D	Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points.	To explain the concept of octants by three mutually perpendicular planes in space.
November	Limit and Derivative	Derivative introduced as rate of change both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions trigonometric, exponential and logarithmic functions. Definition of derivative relate it to slope of tangent of the curve, derivative of sum, difference, product and quotient of functions of polynomial and trigonometric functions.	Verification of the geometrical significance of derivative.

December	Unit II Examination		
December	Probability	Events; occurrence of events, 'not', 'and' and 'or' events, exhaustive events, mutually exclusive events, Axiomatic (set theoretic) probability, connections with other theories of earlier classes. Probability of an event, probability of 'not', 'and' and 'or' events	
January	Straight Lines	Brief recall of two-dimensional geometry from earlier classes. Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point - slope form, slope-intercept form, two-point form, intercept form. Distance of a point from a line.	To verify that the equation of a line passing through the point of intersection of two lines $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$ is of the form $(a_1x + b_1y + c_1) + \lambda (a_2x + b_2y + c_2) = 0$.
	Conic Sections	Sections of a cone: circles, ellipse, parabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.	To construct an ellipse when two fixed points are given.
February	Revision		
February - March	Annual Examination		

CLASS XI COMPUTER SCIENCE

Books: Computer Science with Python by Sumita Arora

Month	Topics	Sub Topics	Practical / Viva
April	Computer system and organisations, Boolean Logic	Basic computer organisation: Introduction to Computer System, hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory (bit, byte, KB, MB, GB, TB, PB) <ul style="list-style-type: none"> Types of software: System software (Operating systems, system utilities, device drivers), programming tools and language translators (assembler, compiler, and interpreter), application software Operating System(OS): functions of the operating system, OS user interface 	
May	Boolean Logic	Boolean logic: NOT, AND, OR, NAND,	
June	Data Representation, Python Fundamentals	Number System: Binary, Octal, Decimal and Hexadecimal number system; conversion between number systems <ul style="list-style-type: none"> Encoding Schemes: ASCII, ISCII, and Unicode (UTF8, UTF32) 	<ul style="list-style-type: none"> Input a welcome message and display it. Input two numbers and display the larger / smaller number. Input three numbers and display the largest / smallest number.
June - July	Unit I Examination		
July	Data Handling , Flow of Control	<ul style="list-style-type: none"> Knowledge of data types.Operators. Expressions, statement, type conversion, and input/output: precedence of operators, expression, evaluation of an expression, type-conversion (explicit and implicit conversion), accepting data as input from the console and displaying output. Errors- syntax errors, logical errors, and run-time errors . Flow of Control: introduction, use of indentation, sequential flow, conditional and iterative flow Conditional statements: if, if-else, if-elif-else, flowcharts, simple programs: e.g.: absolute value, sort 3 numbers and divisibility of a number. Iterative Statement .jump statements. 	<ul style="list-style-type: none"> Programs on series, Determine whether a number is a perfect number, an Armstrong number or a palindrome. Input a number and check if the number is a prime or composite number. Display the terms of a Fibonacci series etc.

August	Strings	<p>Strings: introduction, string operations (concatenation, repetition, membership and slicing), traversing a string using loops, built-in functions/methods—len(), capitalize(), title(), lower(), upper(), count(), find(), index(), endswith(), startswith(), isalnum(), isalpha(), isdigit(), islower(), isupper(), isspace(), lstrip(),rstrip(), strip(), replace(), join(), partition(), split()</p>	<p>Count and display the number of vowels, consonants, uppercase, lowercase characters in string.</p> <ul style="list-style-type: none"> ● Input a string and determine whether it is a palindrome or not; convert the case of characters in a string etc.
September	Half Yearly Examination		
September	Lists	<p>Lists: introduction, indexing, list operations (concatenation, repetition, membership and slicing), traversing a list using loops, built-in functions/methods—len(), list(), append(), extend(), insert(), count(), index(), remove(), pop(), reverse(), sort(), sorted(), min(), max(), sum(); nested lists, suggested programs: finding the maximum, minimum, mean of numeric values stored in a list; linear search on list of numbers and counting the frequency of elements in a list</p>	<ul style="list-style-type: none"> ● Find the largest/smallest number in a list/tuple ● Input a list of numbers and swap elements at the even location with the elements at the odd location etc.
October	Tuples	<p>Tuples: introduction, indexing, tuple operations (concatenation, repetition, membership and slicing); built-in functions/methods – len(), tuple(), count(), index(), sorted(), min(), max(), sum(); tuple assignment, nested tuple; suggested programs: finding the minimum, maximum, mean of values stored in a tuple; linear search on a tuple of numbers, counting the frequency of elements in a tuple.</p>	<p>Input a list/tuple of elements, search for a given element in the list/tuple etc.</p>
November	Dictionary	<p>Dictionary: introduction, accessing items in a dictionary using keys, mutability of a dictionary (adding a new term, modifying an existing item), traversing a dictionary, built-in functions/methods – len(), dict(), keys(), values(), items(), get(), update(), del, clear(), fromkeys(), copy(), pop(), popitem(), setdefault(), max(), min(), sorted(); Suggested programs: count the number of times a character appears in a given string using a dictionary, create a dictionary with names of employees, their salary and access them.</p>	<ul style="list-style-type: none"> ● Create a dictionary with the roll number, name and marks of n students in a class and display the names of students who have marks above 75 etc.
December	Unit II Examination		

December	Introduction to python modules,Society-Law-Ethics	<u>Introduction to Python modules.</u>	To create user defined modules
January	Society-Law-Ethics	<u>Digital Footprints</u> <ul style="list-style-type: none"> ● Digital Society and Netizen, ● Data Protection● Technology and society. 	
February	Revision	revision of all chapters	practicals on above chapters.
February - March	Annual Examination		

CLASS XI BIOLOGY

Books: 1. Text book of Biology Class XI 2- Companion Biology 3-Comprehensive practical biology

Month	Topics	Sub Topics	Practical / Viva
April	The Living World	Biodiversity; Need for classification; three domains of life; taxonomy and systematics; concept of species and taxonomical hierarchy; binomial nomenclature	CORE 1. Study and describe locally available common flowering plants 2. To study the parts of a compound microscope.
	Biological Classification	Five kingdom classification; Salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroids.	3. Specimens/slides/ models and identification with reasons - Bacteria, Oscillatoria,
May	Plant Kingdom	Classification of plants into major groups; Salient and distinguishing features and a few examples of Algae, Bryophyta,	4. Specimens/slides/models and identification with reasons - , Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.
June	Animal Kingdom	Salient features and classification of animals, non-chordates up to phyla level and chordates upto class level	5. Virtual specimens/slides/model s and identifying features of - Amoeba, Hydra, liverfluke, Ascaris, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.
June - July	Unit I Examination		
July	Morphology of Flowering Plants	Morphology of different parts of flowering plants: root, stem, leaf, inflorescence, flower, fruit and seed. Description of family Solanaceae	6. Different types of inflorescence (cymose and racemose).
	Anatomy of Flowering Plants	Anatomy and functions of tissue systems in dicots and monocots.	7. Preparation of slide of T.S of monocot dicot stem and root

July	Structural Organisation in Animals	Morphology, Anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of frog.	8. Study of osmosis by potato osmometer.
August	Cell-The Unit of Life	Cell theory and cell as the basic unit of life, structure of prokaryotic and eukaryotic cells; Plant cell and animal cell; cell envelope; cell membrane, cell wall; cell organelles - structure and function; endomembrane system, endoplasmic reticulum, golgi bodies, lysosomes, vacuoles, mitochondria, ribosomes, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus.	9. Study of plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or flashy scale leaves of onion bulb).
	Cell Cycle and Cell Division	Cell cycle, mitosis, meiosis and their significance.	10. Study of distribution of stomata on the upper and lower surfaces of leaves.10.Mitosis in onion root tip cells and animals cells (grasshopper) from permanent slides.
September	Half Yearly Examination		
September	Biomolecules	Chemical constituents of living cells: biomolecules , structure and function of proteins, carbohydrates, lipids, and nucleic acids; Enzyme - types, properties, enzyme action. (Topics excluded: Nature of Bond Linking Monomers in a Polymer, Dynamic State of Body Constituents Concept of Metabolism, Metabolic Basis of Living, The Living State)	11. Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials . 12. Comparative study of the rates of transpiration in the upper and lower surfaces of leaves
September	Photosynthesis in Higher Plants	Photosynthesis as a means of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; factors affecting photosynthesis.	13. Separation of plant pigments through paper chromatography.

<p>October</p>	<p>Respiration in Plants</p>	<p>Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient</p>	<p>14. Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.</p>
<p>November</p>	<p>Plant Growth and Development</p>	<p>Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; plant growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA.</p>	
	<p>Breathing and Exchange of Gases</p>	<p>Respiratory organs in animals (recall only); Respiratory system in humans; mechanism of breathing and its regulation in humans - exchange of gases, transport of gases and regulation of respiration, respiratory volume; disorders related to respiration - asthma, emphysema, occupational respiratory disorders.</p>	
	<p>Body Fluids and Circulation</p>	<p>Composition of blood, blood groups, coagulation of blood; composition of lymph and its function; human circulatory system - Structure of human heart and blood vessels; cardiac cycle, cardiac output, ECG; double circulation; regulation of cardiac activity; disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure.</p>	

December	Unit II Examination		
December	Excretory Products and their Elimination.	Modes of excretion - ammonotelism, ureotelism, uricotelism; human excretory system – structure and function; urine formation, osmoregulation; regulation of kidney function - renin - angiotensin, atrial natriuretic factor, ADH and diabetes insipidus; role of other organs in excretion; disorders - uremia, renal failure, renal calculi, nephritis; dialysis and artificial kidney, kidney transplant	14. Test for presence of urea , sugar , albumin and bile salts in urine
January	Locomotion and Movement	Types of movement - ciliary, flagellar, muscular; skeletal muscle, contractile proteins and muscle contraction; skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.	15. Human skeleton and different types of joints with the help of virtual images/models only.
	Neural Control and Coordination	Neuron and nerves; Nervous system in humans - central nervous system; peripheral nervous system and visceral nervous system; generation and conduction of nerve impulse .	
	Chemical Coordination and Integration	Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads; mechanism of hormone action (elementary idea); role of hormones as messengers and regulators, hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's disease. Note: Diseases related to all the human physiological systems to be taught in brief.	
February	Revision		
February - March	Annual Examination		

CLASS XI PSYCHOLOGY

Books: NCERT Psychology Textbook for Class XI

Month	Topics	Sub Topics	Practical / Viva
April	What is Psychology?	Introduction, Psychology-nature, discipline, natural science & social science	
		Psychology as natural science and social science. Understanding mind and behaviour	
		Development of psychology in India, Branches, Psychology in everyday life	
May	Methods of Enquiry in Psychology	Evolution of psychology & Psychology and other disciplines, Popular notions about the discipline of psychology	Experiment 1:- On Memory
		Goals of Psychological Enquiry-Steps in Conducting Scientific Research, Alternative Paradigms of Research, Nature of psychological data	
June	Methods of Enquiry in Psychology	Methods- Observational Method, Experimental, Correlational Research, Survey Research, Psychological Testing, Case Study	Project work: - Effect of Social Media Addiction on adolescences (Survey sheets & data collection)
June - July		Unit I Examination	
July	Methods of Enquiry in Psychology	Analysis of Data, Quantitative & Qualitative Method, Limitations of Psychological Enquiry, Ethical Issues	Project work: - Effect of Social Media Addiction on adolescences (Calculation of data, interpretation & graphical representation)
	Human Development	Meaning of Development, Life-Span Perspective on Development, Factors & overview of developmental stages	
August	Sensory, attentional & perceptual processes	Knowing the world, Sense Modalities, functional limitation of sense organs	
	Learning	Nature & paradigms of Learning, Classical conditioning and its determinants, Operant/Instrumental Conditioning, Determinants, Key Learning Processes	
		Observational, cognitive, verbals & skill, factors facilitating learning and learning disabilities	
September		Half Yearly Examination	

September	Human Memory	Nature of memory, Stage model, sensory, short term & long term memory, levels of processing, Declarative-procedural, episodic-semantic	Experiment 2:- On Attention
October	Human Memory	Nature and Causes of Forgetting, Trace Decay, Interference and Retrieval Failure, Enhancing Memory, Mnemonics using Images and Organisation	
	Thinking	Nature of thinking, Building blocks of thought, process of thinking	
November	Thinking	Problem solving, reasoning, decision making, Nature and Process of Creative Thinking, strategies of Creative Thinking	
December	Unit II Examination		
December	Motivation & Emotion	Nature of motivation, Biological & psychosocial motive, Maslows hierarchy of needs	
January		Nature of emotions, emotional expression, culture & emotional labelling	
February		Enhancing positive emotions	
February - March	Annual Examination		

CLASS XI ACCOUNTANCY

Books: APC Accountancy for CBSE class11 by DK Goel

Month	Topics	Sub Topics	Practical / Viva
April	Financial Accounting Part I – Theoretical Framework	1. Introduction to Accounting 2. Basic Accounting Terms	
May	Financial Accounting Part I – Theoretical Framework	2. Basic Accounting Terms 3. Accounting Principles 4. Process and Bases of Accounting	
June	Financial Accounting Part I – Theoretical Framework	5. Accounting Standards 6. Accounting Equations 7. Double Entry System 8. Origin of Transactions: Source Documents of Accountancy 9. Books of Original Entry – Journal	
June - July	Unit I Examination		
July	Financial Accounting Part I – Theoretical Framework	Journal 10. Accounting for GST 11. Books of Original Entry – Cash Book	
August	Financial Accounting Part I – • Theoretical Framework • Accounting Process	9. Books of Original Entry – Journal 10. Accounting for GST 11. Books of Original Entry – Cash Book	PRACTICAL INCLUDES PROJECT FILE (JOURNAL+LEDGER+TRIAL BALANCE) + VIVA VOCE
September	Half Yearly Examination		
September	Financial Accounting Part I – • Theoretical Framework • Accounting Process	7. Bank Reconciliation Statement 8. Depreciation	

October	Financial Accounting Part I – • Theoretical Framework • Accounting Process	9. Provision and Reserves 10. Capital and Revenue	
November	Financial Accounting Part I – • Theoretical Framework • Accounting Process	11. Rectification of Errors	
December	Unit II Examination		
December	Financial Accounting Part II – • Financial Statements of Sole Proprietorship	21. Financial Statements 22. Financial Statements – with Adjustments	
January	Financial Accounting Part II – • Financial Statements of Sole Proprietorship	22. Financial Statements – with Adjustments 23. Accounts from Incomplete Records	
February	Revision	Revision of Full Syllabus Oriented Practical Problems	PRACTICAL INCLUDES PROJECT FILE 1 +FINAL ACCOUNTS + VIVA VOCE
February - March	Annual Examination		

CLASS XI BUSINESS STUDIES

Books: 1. NCERT BUSINESS STUDIES

Month	Topics	Sub Topics	Practical / Viva
April	Evolution and Fundamentals of Business	History of Trade and Commerce in India: Indigenous Banking System, Rise of Intermediaries, Transport, Trading Communities: Merchant Corporations, Major Trade Centres, Major Imports and Exports, Position of Indian Sub-Continent in the World Economy Business – meaning and characteristics Business, profession and employment – Concept	
May	Evolution and Fundamentals of Business	Objectives of business Classification of business activities - Industry and Commerce Industry-types: primary, secondary, tertiary Meaning and subgroups Commerce-trade: (types- internal, external; wholesale and retail) and auxiliaries to trade; (banking, insurance, transportation, warehousing, communication, and advertising) – meaning Business risk-Concept	
June	Forms of Business organizations	Sole Proprietorship- Concept, merits and limitations Partnership-Concept, types, merits and limitation of partnership, registration of a partnership firm, partnership deed. Types of partners Hindu Undivided Family Business: Concept Cooperative Societies- Concept, merits, and limitations. Company - Concept, merits and limitations; Types: Private, Public and One Person Company – Concept	
June - July	Unit I Examination		
July	Public, Private and Global Enterprises	Public sector and private sector enterprises – Concept Forms of public sector enterprises: Departmental Undertakings, Statutory Corporations and Government Company Global Enterprises – Feature Joint venture Public private partnership – concept	

July	Business Services	Business services – meaning and types. Banking: Types of bank accounts - savings, current, recurring, fixed deposit and multiple option deposit account Banking services with particular reference to Bank Draft, Bank Overdraft, Cash credit. E- Banking: meaning, types of digital payments	
August	Business Services	Insurance – Principles. Types – life, health, fire and marine insurance – concept Postal Service - Mail, Registered Post, Parcel, Speed Post, Courier - meaning	
	Emerging Modes of Business	E - business: concept, scope	PROJECT + VIVA VOCE (Business services + Auxiliaries to trade)
September	Half Yearly Examination		
September	Emerging Modes of Business	Benefits of E-Business	
October	Social Responsibility of Business and Business Ethics	Concept of social responsibility Case of social responsibility Responsibility towards owners, investors, consumers, employees, government and community Role of business in environment protection Business Ethics - Concept and Elements	
	Formation of a Company	Formation of company - stages, important documents to be used in formation of a company	
November	Formation of a Company	Choice of form of business organization	

	Business Finance and Arithmetic	Concept of business finance Owners' funds- equity shares, preferences share, retained earnings Borrowed funds: debentures and bonds, loan from financial institution and commercial banks, public deposits, trade credit, Inter Corporate Deposits (ICD)	
December	Unit II Examination		
December	Small Business and Enterprises	<p>Entrepreneurship Development (ED): Concept, Characteristics and Need. Process of Entrepreneurship Development: Start-up India Scheme, ways to fund start-up.</p> <p>Intellectual Property Rights and Entrepreneurship Small scale enterprise as defined by MSMED Act 2006 (Micro, Small and Medium Enterprise Development Act) Role of small business in India with special reference to rural areas Government schemes and agencies for small scale industries: National Small Industries Corporation (NSIC) and District Industrial Centre (DIC) with special reference to rural, backward areas</p>	
January	Internal Trade	<p>Internal trade - meaning and types services rendered by a wholesaler and a retailer Types of retail-trade- Itinerant and small scale fixed shops retailers Large scale retailers- Departmental stores, chain stores – concept GST (Goods and Services Tax): Concept and key- features</p>	
February	International Trade	<p>International trade: concept and benefits Export trade – Meaning and procedure Import Trade - Meaning and procedure Documents involved in International Trade; indent, letter of credit, shipping order, shipping bills, mate's receipt (DA/DP) World Trade Organization (WTO) meaning and objectives</p>	PROJECT + VIVA VOCE (Visit to a Departmental Store/ Industry)
February - March	Annual Examination		

CLASS XI HOME SCIENCE

BOOK: NCERT, PART 1 & 2

MONTH	TOPICS	SUB TOPICS	PRACTICAL
APRIL	CH 1: INTRODUCTION TO HOME SCIENCE CH 2A: UNDERSTANDING ONESELF	Definition, areas of home science What makes me I	Practical 1: Contributions of three eminent personalities in the field of home science
MAY	CH 2B : UNDERSTANDING ONESELF	Development & characteristics of self	---
JUNE	CH 3: FOOD & NUTRITION	Introduction, definition, dietary pattern in adolescence	Practical 2: Planning of Dietary pattern & presentation of adolescence diet.
JUNE - JULY	UNIT 1 EXAMINATION		
JULY	CH 2C: INFLUENCE ON IDENTITY CH 4: MANAGEMENT OF RESOURCES	Personal & social identity Definition, classification, managing three resources.	Practical 3: Making a time plan of activities of a day.
AUGUST	CH 5: FABRIC AROUND US CH 10: NUTRITION, HEALTH & HYGIENE	Yarns, fibres, textile products, fibre properties, three natural fibres Introduction, health terminologies' health & its dimensions, Health care facilities in India.	Practical 4: Identification of fibres Practical 5: Calculation of BMI
SEPTEMBER	HALF YEARLY EXAMINATION		
SEPTEMBER	CH 12: NUTRITION, HEALTH & WELLBEING	Nutrition & diet for infants , complementary feeding.	
OCTOBER	CH 12: NUTRITION, HEALTH & WELLBEING CH 14: OUR APPAREL	Diet for pre school & school going child. Clothing functions & selection of clothes.	Practical 6: Diet for pre school & school going child.
NOVEMBER	CH 14: OUR APPAREL	Factors affecting selection of clothes Clothing needs for special children	Practical 7: Designing & construction of clothes for a special child.
DECEMBER	CH 16: FINANCIAL MANAGEMENT	Money income, financial planning, savings, investment	
DECEMBER	UNIT II EXAMINATION		
JANUARY	CH 17: CARE & MAINTENANCE OF FABRICS CH 18: COMMUNICATION METHODS	Laundering, mending, stain removal Types & uses, methods	
FEBRUARY	REVISION & PROJECT		
FEB - MARCH	ANNUAL EXAMINATION		

CLASS XI FINANCIAL MARKETS MANAGEMENT

Books: Financial Markets Management - Class XI - NCERT (NSE Academy); Employability Skills - Textbook for Class XI

Month	Topics	Sub Topics	Practical / Viva
April	Markets & Financial Instruments Employability Skills	Investments, Options available for Investments, Stock Exchange, Depository, Securitiers, Regulators, Participants Communication Skills	
May	Primary & Secondary Market	Primary Market, Issue of Shares, Issue Price, IPO, Prospectus, Listing of	
June	Primary & Secondary Market	SEBI's Role in an issue, Foreign Capital Issuance, Introduction to Secondary Market, Stock Exchange, Depository, Stock Trading	
June - July	Unit I Examination		
July	Primary & Secondary Market Employability Skills	Precautions before investing in Stock Markets, Products in Secondary Market, Equity Investments, Debt Investments, Miscellaneous Self Management Skills	
August	Mutual Funds Products and Features	Introduction, Mutual Funds: Structure in India, Manages Investor's Money, Custodian, Role of the AMC, NFO(New Fund Offer), Role of a registrar and transfer agents, Procedure for investing in an NFO, Investor's rights & obligations	
September	Half Yearly Examination		
September	Mutual Funds Products and Features	Different schemes offered by Mutual Funds, Category wise funds, Open ended and close ended funds, Equity Oriented Funds, Index Fund, Diversified large cap funds, Midcap funds, Sectoral Funds, Other Equity Schemes, Basic offer documents (SID and SAI), Key information document, NAV(Net Asset Value), Expenses incurred in relation to a scheme, Expense Ratio, Portfolio Turnover, AUM affects portfolio turnover, Cash level in portfolios, Exit loads	

October	Employability Skills ETFs, Debt and Liquid Funds	Information and Communication Technology Skills Introduction to Exchange Traded Funds, Salient Features, REITS, Gold ETF, Sovereign Gold Bonds, Market Making by APS, Creation units, Port Folio deposit and cash component (an example).	
November	ETFs, Debt and Liquid Funds Employability Skills	Salient Features, Interest Rate Risk, Credit Risk, Debt Instrument Priced, Debt Mutual Fund Schemes, Features of Liquid Funds Entrepreneurship Skills	
December	Unit II Examination		
December	Taxation and Regulation	benefit, Dividend distribution tax, FMPs are popular, Overview, Industry association for the Mutual Fund Industry, Objectives of AMFI, Product labelling in mutual funds – Riskometer, Advantages of Mutual Funds, Systematic Investment Plan (SIP), Systematic Transfer Plan (STP), Systematic Withdrawal Plan (SWP), Choosing between dividend payout, dividend reinvestment and growth options. Which one is better for the	
January	Quantitative Evaluation Of Mutual Fund Schemes	Returns, Risk, Risk Adjusted Returns	
February	Employability Skills	Green Skills	
February - March	Annual Examination		

CLASS XI ECONOMICS			
Books: 1. Micro Economics- Sandeep Garg 2. Statistics for Economics(NCERT) 3. Microeconomics (NCERT)			
Month	Topics	Sub Topics	Practical / Viva
April	Statistics for Economics- Introduction	Introduction: What is Economics? Meaning, scope, functions and importance of statistics in Economics Collection, Organisation and Presentation of data Collection of data - sources of data - primary and secondary;	Effect on PPC due to various government policies OR Invisible Hand (Adam Smith) OR
May	Introductory Microeconomics	Introduction Meaning of microeconomics and macroeconomics; positive and normative economics	Effect of Price Change on a Substitute Good (taking prices from real life visiting local market) OR
	Statistics for Economics Collection of data	Collection of data - how basic data is collected, concepts of Sampling; methods of collecting data; some important sources of secondary data: Census of India and National Sample Survey Organisation.	Effect of Price Change on a Complementary Good (taking prices from real life visiting local market) OR
June	Introductory Microeconomics	What is an economy? Central problems of an economy: what, how and for whom to produce; concepts of production possibility frontier and opportunity cost	Solar Energy, a Cost-Effective Comparison with Conventional Energy Sources OR
June - July	Unit I Examination		
July	Consumer's Equilibrium and Demand	Consumer's equilibrium - meaning of utility, marginal utility, law of diminishing marginal utility, conditions of consumer's equilibrium using marginal utility analysis.	Bumper Production- Boon or Bane for the Farmer OR Any other newspaper article and its evaluation on basis of economic principles
	Indifference curve analysis of consumer's equilibrium-	Indifference curve analysis of consumer's equilibrium- consumer's budget (budget set and budget line), preferences of the consumer (indifference curve, indifference map) and conditions of consumer's equilibrium.	OR

August	Organisation of Data	Meaning and types of variables; Frequency Distribution Presentation of Data: Tabular Presentation and Diagrammatic (i) Geometric forms (bar diagrams and pie diagrams), Frequency diagrams (histogram, polygon and ogive) and (iii) Arithmetic line graphs (time series graph). (REVISION FOR HALF YEARLY EXAM)	Rain water harvesting OR
September	Half Yearly Examination		
September	Consumers Equilibrium and Demand :-	Demand, market demand, determinants of demand, demand schedule, demand curve and its slope, movement along and shifts in the demand curve; price elasticity of demand - factors affecting price elasticity of demand; Measurement of price elasticity of demand – percentage-change method and total expenditure method.	
	Statistical tools and Interpretation Measures of Central Tendency-	Arithmetic Mean Median and mode.	
October	Producer Behaviour and Supply	Meaning of Production Function – Short-Run and Long-Run Total Product, Average Product and Marginal Product. Returns to a Factor	ANY OTHER TOPIC RELEVANT TO THE SYLLABUS
November	Producer Behaviour and Supply(contd...)	Cost: Short run costs - total cost, total fixed cost, total variable cost; Average cost; Average fixed cost, average variable cost and marginal cost meaning and their relationships.- Revenue: total, average and marginal revenue - meaning and their relationship. Producer's equilibrium-meaning and its conditions in terms of marginal revenue- marginal cost. Supply, market supply, determinants of supply, supply schedule, supply curve and its slope, movements along and shifts in supply curve, price elasticity of supply; measurement of price elasticity of supply percentage- change method.	

December	Unit II Examination		
December	Statistical tools and Interpretation (Contd.....)	Correlation – meaning and properties, scatter diagram Measures of correlation - Karl Pearson's method (Two variables ungrouped data) Spearman's rank correlation. Repeated Ranks and Repeated Ranks) Forms of Market and Price Determination under Perfect Competition with simple application Perfect competition - Features;	
January	Forms of Market and Price Determination under Perfect Competition with simple application	Determination of market equilibrium and effects of shifts in demand and supply. (Short run only) Simple Applications of Demand and Supply: Price ceiling, price floor.	
February	Introduction to Index Numbers-	Meaning, types - wholesale price index, consumer price index and Index of industrial production, uses of index numbers; Inflation and index numbers. Simple Aggregative method OVERALL REVISION	
Feb - Mar	Annual Examination		

CLASS XI ENTREPRENEURSHIP

Books: Entrepreneurship class XI (NCERT)

Month	Topics	Sub Topics	Practical / Viva
APRIL	An Entrepreneur	Entrepreneurship – Concept, Functions and Need <ul style="list-style-type: none"> • Why Entrepreneurship for You • Myths about Entrepreneurship • Advantage and Limitations of Entrepreneurship • Process of Entrepreneurship • Entrepreneurship – The Indian Scenario 	
May	An Entrepreneur	Types of Entrepreneurs	
June	An Entrepreneur	<ul style="list-style-type: none"> • Competencies and characteristics • Entrepreneurial Values, Attitudes and Motivation • Intrapreneur: Meaning and Importance 	
June - July	Unit I Examination		
July	Entrepreneurship Journey	<ul style="list-style-type: none"> • Idea generation. • Feasibility Study and opportunity assessment • Business Plan: meaning, purpose and elements • Execution of Business Plan 	Know your State Handicraft and Handlooms as a means of economic activity for the livelihood of people and intellectual property rights attached to them for the promotion of local specific skills)
AUGUST	Entrepreneurship as Innovation and Problem Solving	<ul style="list-style-type: none"> • Entrepreneurs as problem solvers • Innovations and Entrepreneurial Ventures – Global and Indian • Role of Technology – E-commerce and Social Media • Social Entrepreneurship - Concept 	
	Understanding the Market	<ul style="list-style-type: none"> • Market: Concept, Types • Micro and Macro Market Environment 	
September	Half Yearly Examination		
September	Understanding the Market	<ul style="list-style-type: none"> • Market Research - Concept, Importance and Process • Marketing Mix 	
October	Business Finance and Arithmetic	Unit of Sale, Unit Price and Unit Cost - for single product or service	
November	Resource Mobilization	Types of Resources – Physical, Human, Financial and Intangible.	
December	Unit II Examination		
December	Resource Mobilization	<ul style="list-style-type: none"> • Selection and utilization of human resources and professionals like Accountants, Lawyers, Auditors, Board Members, etc. 	

<p style="text-align: center;">January</p>	<p>Revision</p>		<p>: Visit any business firm near your locality; interact with the owner of the business firm and prepare a field report on parameters like: type of business, scale of business, product/service dealing in, target customer, problems faced and measures to solve the faced challenges.)</p>
<p style="text-align: center;">February</p>	<p>Revision</p>		
<p>February - March</p>	<p>Annual Examination</p>		

CLASS XI GEOGRAPHY

Books: 1. Fundamentals of Physical Geography 2. India- Physical Environment 3. Practical work in Geography-Part I

Month	Topics	Sub Topics	Practical / Viva
April	Geography as a Discipline (Bk 1)	Geography as an integrating discipline, Physical geography and Natural sciences, Geography and social sciences, Branches of geography, Physical geography and its importance Sources of information about the interior, Earthquakes, Structure of the earth, Volcanoes.	Longitude and time sums
	Interior of the earth (Bk 1)		
May	India: location and Extent (Bk 2)	Location, Size, India and its neighbours. Map work - Latitudinal & Longitudinal extent of India, Standard Meridian of India, Tropic of Cancer, Southernmost Point of mainland of India (Kanya Kumari)	Scale- Conversion from RF to Statement, Conversion of Statement to RF.
June	Distribution of oceans and continents (Bk 1) Geomorphologic Processes (Bk 1)	Continental Drift, Ocean floor configuration, Sea floor spreading, Plate Tectonics, Endogenic and exogenic processes, Weathering, Mass movement MAP WORK-Political Map of all continents of the world, Major Oceans of the world: Indian Ocean, Pacific Ocean, Atlantic Ocean, Arctic Ocean, Southern Ocean · Major & Minor lithospheric plates, Ring of fire (Pacific Ocean), Mid Atlantic Ridge.	Scale- Drawing of Linear scale

June - July		Unit I Examination	
July	Landforms and their evolution:	running water- erosional and depositional landforms, Winds-	Projection - Simple Conical Projection, Cylindrical Projection
	Running water and Wind (Bk1) Structure and	Erosional and depositional	
August	Drainage System (Bk 2)	Himalayan and Peninsular drainage system. Rivers: Brahmaputra, Indus, Satluj, Ganga, Yamuna, Chambal, Damodar, Mahanadi, Krishna, Kaveri, Godavari, Narmada, Tapti and Luni Lakes: (Identification) Wular, Sambhar, Chilika, Kolleru, Pulicat & Vembanad Straits, Bays, Gulfs: Palk Strait, Rann of Kachch, Gulf of Kachch, Gulf of Mannar & Gulf of Khambat	Weather Map Interpretation
September		Half Yearly Examination	
September	Composition and Structure of Atmosphere (Bk 1)	Composition of atmosphere, structure of atmosphere	
October	Solar Radiation, Heat Balance and Temperature (Bk 1)	Conduction, radiation and convection	Topographical Sheet
November	Atmospheric Circulation and Weather System (Bk 1)	Factors affecting velocity and direction	Topographical Sheet
	Climate (Bk 2)	Factors affecting climate of India, 4 seasons, Monsoon and economic life of India. Area with highest temperature in India Area with lowest temperature in India Area with highest rainfall in India Area with lowest rainfall in India	
December		Unit II Examination	
December	Water in the Atmosphere (Bk 1)	Types of Condensation, clouds and rainfall. Major Seas: Black sea, Baltic sea, Caspian Sea, Mediterranean Sea, North Sea, Red sea Bay of Fundy (Canada)-Famous for the highest tides in the world	Topographical Sheet

<p>January</p>	<p>Water (Oceans) (Bk 1) Movements of ocean water (Bk 1)</p>	<p>Division of the ocean floor, Factors affecting Temperature distribution, Salinity, Waves, Tides and Ocean currents.</p> <p>Cold Currents: Humboldt c. California c. Falkland c. Canaries c. West Australian c. Oyashio c. Labrador c</p> <p>Warm Currents: Alaska c. Brazilian c. Agulhas c. Kuroshio c. Gulf stream c.</p>	<p>Project on Field Survey</p>
<p>February</p>	<p>Natural Vegetation (Bk 2)</p>	<p>Tropical evergreen, Tropical deciduous, Tropical thorn, Montane and Littoral/ Swamp forests.</p> <p>Wildlife reserves: (locating and labeling)</p> <p>National Parks: Corbett, Kaziranga, Ranthambore, Shivpuri, Simlipal</p> <p>Bird Sanctuaries: Keoladev Ghana and Ranganathitto</p> <p>Wild life Sanctuaries: Periyar, Rajaji, Mudumalai, Dachigam</p>	
<p>February - March</p>	<p>Annual Examination</p>		

CLASS XI HISTORY

Book: Themes in World History for class XI

Month	Topics	Sub Topics	Practical / Viva
April	MESOPOTAMIA AND ITS GEOGRAPHY	Significance of urbanism, movement of goods into cities	
	DEVELOPMENT OF WRITING	System of writing, Literacy, Uses of writing,	
	URBANISATION IN SOUTHERN MESOPOTAMIA	Temples and kings	
May	URBANISATION IN SOUTHERN MESOPOTAMIA	Life in the city	Allotment of Art Integrated Activity topics: Ancient Civilisations
June	TRADING TOWN IN PASTORAL ZONE	Cities in Mesopotamian culture, The legacy of writing	Map Pointing on Mesopotamian Civilisation
	THE EARLY EMPIRE	3rd century Crisis	
June - July	Unit I Examination		
July	GENDER, LITERACY, CULTURE	Economic Expansion, Controlling Workers	Art Integrated Activity: Table Calendar, Wall hanging, Poster, Slogan, Chart, Travel Brochure
	SOCIAL HIERARCHIES	Late Antiquity, Decline	
	NOMADIC EMPIRE	Introduction, Social and Political Background	
August	GENGHIS KHAN	Career of Chenghis Khan, Mongols after Chenghis Khan, Social political and military organization	Map Pointing : Roman Empire and Nomadic Empire
	CONCLUSION	Situating Chenghiz Khan and the Mongols in World History	Viva on Art Integrated Project Topic
REVISION FOR HALF YEARLY EXAMINATION			
September	Half Yearly Examination		
September	THREE ORDERS	Feudalism, France and England,	Discussion and allotment of Project Topic on Renaissance, Reformation, Industrial Revolution, Genghis Khan, Aborigines, Contribution of ancient Civilisations,
	THREE ORDERS	Second Order, Manorial Estate, The Knights, First Order, Monks, Church and Society, Third Order	
	FACTORS AFFECTING SOCIAL AND ECONOMIC RELATIONS	The Environment, Land Use, New Agricultural Technology, New Towns and Towns People	
October	FACTORS AFFECTING SOCIAL AND ECONOMIC RELATIONS	Cathedral Towns, Crisis of Fourteenth Century, Political Changes	
	CHANGING CULTURAL TRADITION	Revival of Italian Cities, Universities and Humanism	

November	HUMANISM	Humanist view of History, Science and Philosophy, Artists and Realism, Architecture, First printed books	Map Pointing on Western Europe, Italian States,
	NEW CONCEPT OF HUMAN BEINGS	Aspirations of Women, Debates within Christianity, Copernican Revolution, Debates on Renaissance	
December	Unit II Examination		
December	DISPLACING INDEGENOUS PEOPLE	European Imperialism, North America, Mutual Perception	Map Pointing on Central America and Caribbean Island, USA, Australia
	NORTH AMERICA	Native People lose their land, Gold Rush, Growth of Industries,	
January	AUSTRALIA	Winds of Change	Map Pointing on East Asia and China
	PATHS TO MODERNISATION: JAPAN	Political System, Meiji Restoration, Modernising the economy, Daily Life, Re-emergence of Global economic power	
February	PATHS TO MODERNISATION: CHINA	Establishing the Republic, Rise of Communist party of China, Establishing New Democracy,	Viva on Project Topics which were allotted after Half Yearly Exam
	STORY OF TAIWAN AND KOREA	Two Roads to Modernisation	
	REVISION FOR ANNUAL EXAMINATION		
February - March	Annual Examination		

CLASS XI POLITICAL SCIENCE

BOOK I: Political Theory			
BOOK II: Constitution at work (NCERT) BOOK 2 Political Theory			
Month	Topics	Sub Topics	Practical / Viva
April	Political theory and introduction	1. What do we study in political theory	Relevance of Indian Constitution in 21st century OR Upholding of human rights in India OR Political Theories and their applications-Democracy,Rights,Freedom (Any one)
		2. Why do we study political theory	
May	Constitution	1. What is democracy	
		2. Why democracy	
		3. Making of Indian constitution	
June	Rights in the Indian Constitution Freedom	1.Right to freedom	
		2. Right to equality	
		3. Right against exploitation	
		4. Cultural and educational right	
		5. Right to constitutional remedies	
		6. Right to education	
June - July		Unit I examination	
July	Election and Representation	1. Importance of elections in a democracy	A case study of recent elections in India (Lok Sabha & Bidhan Sabha)
		2. FPTP System	
		3. Reforms in electoral system in India	
		4. Independent election commission	
August	Legislature	1. Parliament	A comparative study between the Legislature and the Executive in India
		2. Lok Sabha and Rajya Sabha	
		3. Importance of parliament in a democracy	
	Executive	1. Definition	
		2. President	
		3. Prime minister and council of ministers	
		4. Government	

September	Half yearly examination		
September	Judiciary	1. Composition	Judicial Review and it's Overreach in India OR Social Justice gives way to equality in society OR Nationalism - boon and bane
		2. Functions	
		3. Original, apellate and advisory jurisdictio	
October	Equality	1. Social Equality	
		2. Political Equality	
		3. Economic Equality	
		4. Absolute Equality	
November	Social Justice	1. Economic dimension of justice	
		2. Political dimension of justice	
		3. Social dimension of justice	
	Nationalism	1. Definition	
2. Nation and State			
December	Unit II examination		
December	Citizenship	1. Natural Citizenship	Federalism in India-it's Importance and Challenges OR Comparative study between Indian model of secularism & Western model
		2. Acquired Citizenship	
		3. When do we lose Citizenship	
		4. Dual and Plural Citizenship	
	Local Government	1. 73rd Ammendment Act	
		2. 74th Ammendment Act	
3. Purpose and Functions			
Secularism	1. Definition		
	2. Western Model of secularism		
	3. Eastern Model of secularism		
January	Federalism	1. Definition	
		2. Why India is a Federation with a strong centre	
		3. Features	
February	Philosophy of Indian Constitution	1. Value behind the making of Indian Constitution	
		2. Democracy, Republic, Secularism, Federa	
	Constitution, a living document	1. Flexible	
		2. Ammendments	
February - March	Annual Examination		

CLASS XI PHYSICAL EDUCATION

Books: V.K. SHARMA

Month	Topics	Sub Topics	Practical / Viva
April	Changing Trends & Career in Physical Education	<ul style="list-style-type: none"> * Concept, Aims & Objectives of Physical Education * Development of Physical Education in India Post Independence * Changing Trends in Sports-playing surface, wearable gear and sports equipment, technological advancements * Career options in Physical Education * Khelo-India Program and Fit-India Program 	TABLE TENNIS, KHOKHO PHYSICAL FITNESS TEST - PUSH UP(BOYS) MODIFIED PUSH UP(GIRLS) PARTIAL CURL UP
May	Olympic Value Education Yoga	<ul style="list-style-type: none"> * Olympism-Concept and Olympics Values (Excellence, Friendship & Respect) * Olympic Value Education - Joy of Effort, Fair Play, Respect for Others, Pursuit of Excellence, Balance Among Body, Will & Mind * Ancient and Modern Olympics <ul style="list-style-type: none"> o Olympics - Symbols, Motto, Flag, Oath, and Anthem * Olympic Movement Structure - IOC, NOC, IFS, Other members. * Meaning and importance of Yoga * Introduction to Astanga Yoga * Yogic Kriyas (Shat Karma) * Pranayama and its types. Active Lifestyle and stress management through Yoga 	PHYSICAL FITNESS TEST - PUSH UP(BOYS) MODIFIED PUSH UP(GIRLS) PARTIAL CURL UP,, TABLE TENNIS, KHOKHO <hr/> PHYSICAL FITNESS TEST - PHYSICAL FITNESS TEST - 50 M DASH SIT AND REACH YOGA - STANDING POSTURE

<p>June</p>	<p>Physical Education & Sports for CWSN (Children with Special Needs-Divyang)</p>	<ul style="list-style-type: none"> * Concept of Disability and Disorder * Types of Disability, its causes & nature (Intellectual disability, Physical disability). * Disability Etiquettes * Aim and objectives of Adaptive Physical Education * Role of various professionals for children with special needs (Counselor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist, and Special Educator) 	
<p>June - July</p>	<p>Unit I Examination</p>		
<p>July</p>	<p>Physical Fitness, Health and Wellness</p>	<p>Meaning & importance of Wellness, Health, and Physical Fitness</p> <ul style="list-style-type: none"> * Components/Dimensions of Wellness, Health, and Physical Fitness * Traditional Sports & Regional Games for promoting wellness Leadership through Physical Activity and Sports * Introduction to First Aid - PRICE 	<p>BASKETBALL PHYSICAL FITNESS TEST - 50 M DASH SIT AND REACH</p>
<p>August</p>	<p>Test, Measurement & Evaluation</p>	<ul style="list-style-type: none"> * Define Test, Measurements and Evaluation.* Importance of Test, Measurements and Evaluation in Sports ◦ Calculation of BMI, Waist _ Hip Ratio, Skin fold measurement (3-site) * Somato Types (Endomorphy, Mesomorphy&Ectomorphy) * Measurements of health related fitness 	<p>BASKETBALL PHYSICAL FITNESS TEST - 50 M DASH SIT AND REACH</p>

September	Half Yearly Examination		
September	Fundamentals of Anatomy, Physiology in Sports	<ul style="list-style-type: none"> * Definition and importance of Anatomy and Physiology in Exercise and Sports. ◦ Functions of Skeletal System, Classification of Bones, and Types of Joints * Properties and Functions of Muscles. * Structure and Functions of Circulatory System and Heart. ◦ Structure and Functions of Respiratory System 	BASKETBALL YOGA - SITTING POSITION
October	Fundamentals of Kinesiology	<ul style="list-style-type: none"> * Definition and Importance of Kinesiology and Biomechanics in Sports * Principles of Biomechanics * Kinetics and Kinematics in Sports * Types of Body Movements - Flexion, Extension, Abduction, Adduction, Rotation, Circumduction, Supination & Pronation * Axis and Planes - Concept and its application in body movements 	THROW BALL FOR GIRLS HANDBALL FOR BOYS
November	Psychology & Sports	<ul style="list-style-type: none"> * Definition & Importance of Psychology in Physical Education & Sports; * Developmental Characteristics at Different Stages of Development ◦ Adolescent Problems & their Management; ◦ Team Cohesion and Sports; * Introduction to Psychological Attributes: Attention, Resilience, Mental Toughness 	FOOTBALL BADMINTON PHYSICAL FITNESS TEST - 600M WALK OR RUN
December	Unit II Examination		
December	Training and Doping-in Sports	* Concept and Principles of Sports Training	VOLLEYBALL FOOTBALL

<p>January</p>	<p>REVISION(1TO 10)</p>	<p>REVISION</p>	<p>Max. Marks 30 01. Physical Fitness Test: SAI Khelo India Test, Brockport Physical Fitness Test (BPFT)*6 Marks2. Proficiency in Games and Sports (Skill of any one IOA recognised Sport/Game of Choice)** 7 Marks 3. Yogic Practices7 Marks 4. Record File *5 Marks 05. Viva Voce (Health/ Games & Sports/ Yoga) 5 Marks</p>
<p>February</p>	<p>REVISION</p>	<p>REVISION</p>	
<p>February - March</p>	<p>Annual Examination</p>		

CLASS XI FASHION STUDIES

Books: 1. CBSE STUDY MATERIAL FOR CLASS 11 2. PRACTICAL WORK BOOK FOR CLASS 11

Month	Topics	Sub Topics	Practical / Viva
April	CHAPTER 1 : Overview Of Fashion	UNDERSTANDING FASHION: INTRODUCTION AND DEFINITION	RELATING FASHION CYCLE THEORIES TO CONTEMPORARY FASHION
May		FACTORS INFLUENCING FASHION	EXPLAINING THE PENDULUM SWING THEORY FOR FASHION FORECASTING
June		MOVEMENT AND DIRECTION OF FASHION	
June - July	Unit I Examination		
July	CHAPTER 1 : Overview Of Fashion	CONSUMER SEGMENTATION	REFERENCING OF HISTORICAL COSTUMES AS INSPIRATION FOR INDIAN APPAREL DESIGN
		SALIENT CHARACTERISTICS OF FASHION DESIGNERS AND BRANDS	USE OF PRINT MEDIA AS A SOURCE OF INFORMATION FOR FASHION TRENDS
		REGULATORY BODIES IN FASHION AND TEXTILE SECTOR IN INDIA ROLE OF FASHION PROFESSIONALS	
August	CHAPTER 2 : Introduction to Fabric Printing & Dyeing	TEXTILE FIBERS– NATURAL AND MANMADE	IDENTIFICATION AND DISTINGUISHING BETWEEN THE DIFFERENT FIBRES THROUGH BURNING TEST
		YARNS	APPLICATIONS AND END USES OF DIFFERENT TEXTILE STRUCTURES
		WEAVING	IDENTIFICATION OF BASIC WEAVES IN FABRICS
		DYEING AND PRINTING	IDENTIFICATION OF DIFFERENT PRINTING TECHNIQUES ON FABRIC
September	Half Yearly Examination		
September	CHAPTER 3 : Design Fundamentals	DESIGN, DESIGNERS AND DESIGN PROCESS	ANALYSIS OF THE RELATIONSHIP BETWEEN FORM/SHAPE AND FUNCTION/USE AND TO DEVELOP SENSITIVITY TOWARDS COLOR, SHAPE AND TEXTURE.
		BASIC ELEMENTS OF DESIGN – POINT, LINE, SHAPE AND TEXTURE	
October		COLOUR THEORY – HUE, TINT, SHADE, TONE, COLOUR SCHEMES	ANALYSIS OF VARIED TEXTURES IN NATURE AND MAN-MADE ENVIRONMENT
		COLOUR PSYCHOLOGY	CONVERSION OF VERBAL LANGUAGE INTO DESIGN DEVELOPMENT
November		PRINCIPLES OF DESIGN – RHYTHM, BALANCE, EMPHASIS AND CONTRAST	USE OF BALANCE/SYMMETRY, EMPHASIS AND CONTRAST IN DESIGNING PRODUCTS AND SPACES
		SILHOUETTE AND PROPORTION IN APPAREL	
December	Unit II Examination		
December	CHAPTER 4 : Materials Tools and Process of Product Making	INTRODUCTION TO SEWING MACHINE - COMPONENT PARTS AND FUNCTIONS.	DEVELOP FAMILIARITY WITH THE MACHINE
January		SEWING TOOLS , SAFETY RULES AND SEWING AIDS	PREPARE SAMPLES OF SEAMS
February		HOME FASHION PRODUCTS	PREPARE SAMPLES OF SEAM FINISHES
		LEATHER FASHION PRODUCTS	PREPARE SAMPLES OF GATHERS, PLEATS AND TUCKS
February - March	Annual Examination		