ACADEMIC CURRICULUM

XI-GULMOHAR

XI ENGLISH **Books Recommended – Course Book: Hornbill, Snapshots Grammar & Writing: As per CBSE Guidelines**

Month	No. of Working Days	Concepts / Chapters to be Covered	Learning Objectives	Activities / Practicals / SEA / SDG
April	**18**	Hornbill: Ch – A Portrait of a Lady, Poem – A Photograph Conversation Skills: Group Discussion on Importance of Language	Interpret narrative style and emotional depth in personal essays. Understand poetic imagery and the role of language insociety.	Group discussion on language and identityPoem analysis – symbolism SDG 4 – Quality Education
May	**25**	Hornbill: Ch – We're Not Afraid to Die… if We Can Be Together Snapshots: Ch – The Summer of theBeautiful White Horse Writing: Note Making, Classified Advertisements Grammar: Tenses	Enhance comprehensionand critical reflection on adventure and trust. Develop structured writingformats and verb tense accuracy.	Classified Ad collage Note making practicesheets
June	**-**	Summer Vacation		

July	**26**	Hornbill: Ch – Discovering Tut: TheSaga Continues, Poem – The Laburnum Top Snapshots: Ch – The Address Writing: Speech Grammar: Error Correction Periodic Test 1	Understand archaeologicaland historical themes. Identify tone and messagein poems. Develop speech writing anderror correction skills.	Speech delivery: 'Value of History' Grammar correction contest
August	**23**	Hornbill: Ch – The Adventure, Poem – The Voice of the Rain Snapshots: Ch – Mother's DayWriting: Poster Grammar: Reordering of Sent[1]ences	Explore alternate realitiesand natural symbolism. Strengthen visual and creative writing throughposters.	Poster design on environmental messagesRoleplay on Mother's Dayscene SDG 13 – Climate Action important than change?Clause identification exercises
November	**20**	Hornbill: Poem – Father to Son Snapshots: Ch – The Tale of MelonCity Grammar: Transformation of Sentences (Active-Passive, Reported Speech)	Interpret family dynamicsand satire. Master sentence transformation techniques.	Transformation challenge (oral/written) Theme-based poem discussion
December	**21**	**Revision of Whole SyllabusPeriodic Test 2**		
January	**24**	**Final Revisions**		
February	**-**	**Final Examination**		

Subject- Physics,		Grade- XI			Book: N.C.E.R.T.
Module	**Months**	**No. of Days**	**Chapters and Topics to be Taught**	**Learning Objectives**	**Activity Planned / Integration of Art/SDGs**
I.	**April**	**18**	Chapter-2 Units and Measurements Chapter-3 Motion in a Straight Line	Units and Measurements Understanding different units and their conversions, and the importance of accurate measurements in physics. Motion in a Straight Line Understanding and recognizing position- time and velocity-time graphs for uniform and non-uniform motion.	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. Drawing of different types of graph-on-graph paper
II.	**May**	**25**	Chapter-4 Motion in a Plane	Motion in a Plane **1.** Explain about Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors. **2.** Solve Multiplication of vectors by a real number; addition and subtraction of vectors, Unit vectors **3.** State the meaning of Resolution of a vector in a plane, rectangular components, Scalar and Vector product of vectors.	Calculation of scalar and vector product with help of examples Path of projectile with help of ball
June - Summer Vacations					
III.	**July**	**26**	Chapter-5 Laws of Motion Chapter-6 Work, Energy and Power	Laws of Motion To understand Newton's Laws of Motion, apply them to real-world scenarios, and analyze the relationship between force, mass, and acceleration. Work, Energy and Power 3 To make the students understand about Work done by a constant force and a variable force; kinetic energy, work energy theorem, power.	Law of conservation of momentum with help of coins

				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	
IV.	**August**	**23**	Chapter-7 System of Particles and Rotational Motion	System of Particles and Rotational To understand the concepts of rotational motion, including torque, angular momentum, and moment of inertia.	Rotational motion of different objects Calculation escape velocity and orbital velocity for earth -
			Chapter-8 Gravitation	Gravitation	
			Chapter-9 Mechanical Properties of Solids	understanding Newton's Law of Universal Gravitation, Kepler's Laws of Planetary Motion, and related concepts like gravitational potential energy, escape velocity, and orbital velocity Mechanical Properties of Solids To make the students understand about 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 (qualitative idea only).	
V.	**September**	**25**	**Half yearly exams**		
VI.	**October**	**21**	Chapter-10 Mechanical Properties of Fluids Chapter-11 Thermal Properties of Matter	Mechanical Properties of Fluids To understand the behavior of fluids under various conditions, including pressure, viscosity, and buoyancy, and to apply these concepts to real-world scenarios.	To determine Young's modulus of elasticity of the material of a given wire. Viscosity of different types of Liquids Surface tension with wire and soap solution

			Chapter-12 Thermodynamics	Thermal Properties of Matter Understanding the concept of heat and its relationship to temperature, exploring thermal expansion and its effects on solids, liquids, and gases, and examining the different methods of heat transfer. Thermodynamics Understand the fundamental principles governing energy transfer and conversion, particularly heat and work.	
VII.	**November**	**21**	Chapter-13 Kinetic Theory Chapter-14 Oscillations Chapter-15 Waves	Kinetic Theory To understand the microscopic nature of matter, the behavior of ideal gases, and the relationship between macroscopic properties and molecular motion Oscillations To understand periodic and oscillatory motions, define simple harmonic motion (SHM) and its characteristics, analyze the energy transformations during SHM, and examine the concepts of damping and resonance in oscillatory systems Waves Understanding wave motion, distinguishing between transverse and longitudinal waves, calculating wave speed, understanding superposition, reflection, and stationary waves, and analysing the Doppler effect.	To study the relationship between the temperature of a hot body and time by plotting a cooling curve. To study the relation between frequency and length of a given wire under constant between the temperature of a tension using sonometer. Production of sound using tuning fork
	December	**21**	**REVISION and PT-II**		
	January	**24**	**REVISION**		
	February	**23**	**ANNUAL EXAMINATION**		

Subject- Chemistry,			**Grade- XI**		**Book: N.C.E.R.T.**
Module	**Months**	**No. of Days**	**Chapters and Topics to beTaught**	**Learning Objectives**	**Activity Planned / Integration ofArt/SDGs**
I	April	18	Chapter-1 Some Basic Concepts ofChemistry	1) Understand laws of chemical combination 2) Know mole concept and solve numerical related to it 3) Learn to solve numerical related to empirical formula and molecular formula	Hands on various apparatus for the measuring instruments like burette, pipette, graduated cylinder and volumetric flask
II	May	25	Chapter-2 Structure of Atom Chapter - The Gaseous State of Matter (for formative assessment only)	1) Learn about atomic models, quantum numbers, and electron configuration 2) Derive de-Broglie equation 3) Solve numerical related to Heisenberg's uncertainty principle 4) Differentiate between orbit and orbital	Edit activity based on the four quantum numbers Draw diagrams related to Bohr's model of an atom
June- Summer Break					
III	July	26	Chapter-3 Classification of Elements and Periodicity in Properties	1) Understand Mendeleev's and modern periodic table 2) Identify periodic trends: atomic radius, ionization energy 3) Know about iso-electronic species	The activity of 'who am i' can beconducted by telling the properties of elements and guessing their name, group and period in periodic table
Periodic Test -I (Based on the Syllabus covered in April)					

IV	August	23	Chapter-4 Chemical Bondingand Molecular Structure Chapter-7 Redox Reactions	1) Explain ionic and covalent bonding,hybridization and molecular geometry 2) Draw the structure of different compounds on the basis of VSEPR Theory 3) Understand the concept of resonance and Hydrogen bonding	To make the shapes of different molecules using clay and toothpick
				4) Balance chemical equation using oxidation number method 5) Calculation of oxidation number of the given element 6) Solve numerical related to cell	To show the redox reaction between copper and aqueous solution of silver nitrate
	September	**25**	**Term-I**		
V	October	21	Chapter-8 Organic ChemistryChapter-9 Hydrocarbons	1) Understand IUPAC nomenclature, functional groups, and isomerism 2) Study structure, classification and reactions of alkane, alkene and alkye 3) Learn Markownikov's Rule and Anti-Markownikov's Rule 4) Differentiate between cis and trans isomers 5) Recognize on the basis of Huckel's rule that the given organic compound is aromatic 6) Know nomenclature, physical and chemical properties of arenes	To demonstrate the different type of branching in organic compounds using ball and stick model Prepare a chart showing different functional groups and their uses Activity to show the arrangement of cis and trans isomers by taking the students of the class as the different substituent groups around double bond
VI	November	21	Chapter-6 Equilibrium Chapter-5 Chemical Thermodynamics Chapter - s and p block elements (for formative assessment only)	1) Learn types of equilibria and factors affecting chemical equilibrium 2) Differentiate between different concepts of acid and bases 3) Know buffer action 4) Define enthalpy, entropy and Gibbs free energy	Activity to show open closed and isolated system using thermostat, ordinary bottle and an open cup. To determine the pH value of different solutions by using pH paper

				5) Understand spontaneity and heat changes in reactions 6) Solve numerical related to Gibb's Free Energy 7) Recognize different laws of Thermodynamics
	December	**21**	**Periodic Test-2 (Based on the Syllabus covered in October)**	8)
	January	**24**	**Revision**	9)
	February	**23**	**Revision**	10)
	March	**Term-II**		11)

Subject- BIOLOGY			Grade- XI		Book: N.C.E.R.T.
S. No	**Month**	**Number of Working Days**	**Chapter Number and ChapterName**	**Learning objectives**	**Practical's/ activity planned/ Integration of Art/SDGs**
1.	**April**	**25**	Unit: Diversity Of LivingOrganism. CHP:1. The Living World CHP:2. Biological ClassificationKingdom. CHP:3. Plant KingdomCHP:4. Animal Kingdom	.Define biodiversity and explain its importance in maintaining ecological balance. .Apply binomial nomenclature to identify organisms and use binomial nomenclature for the classification of organisms in examples. .Illustrate the hierarchy of classification and their importance in classification. .List the five kingdoms of classification and Classify organisms with their characteristics in each kingdom: Monera, Protista, Fungi, Plantae, and Animalia. .Distinguish between prokaryotes and eukaryotes based on cellular structure and characteristics. .Explain the role of viruses. .Classify plants into groups based on the presence or absence of vascular tissue i.e. Thallophytes, Bryophytes, Pteridophytes, Gymnosperms, and Angiosperms. .Describe the characteristics of each plant group such as structure, reproduction, and habitat. .Understand the reproductive processes Angiosperms and gymosperms .Identify the economic and ecological importance of different plant groups in ecosystems and human life. .Classify animals based on their body symmetry	· Study the Parts of a compound microscope. · Identification of SPECIMENS of Bacteria, Oscillatoria, spirogyra, rhizopus, Mushroom, Yeast, Liverwort, Moss, Fern, Pinus, onemonocot and one dicot and one lichen. · Identification of SPECIMENS of - Amoeba, Hydra, Liverfluke, Ascaris,Leech, Earthworm, Prawn, Silkworm, Honeybee, Snail, Starfish, Shark, Rohu, Frog, Lizard, Pigeon and Rabbit. SDG 15: Life on Land SDG 14: Lifebelow water. SDG 13: Climate Action SDG 2: Zero Hunger

				and organization into different phyla (e.g., Porifera, Coelenterata, Arthropoda). .Identify characteristics of each animal phylum.	
2.	**May**	**27**	Unit: Cell Structure and Function CHP:8. Cell – The Unit of Life CHP:9. Biomolecule s CHP:10. Cell Cycle and Cell Division.	.Describe the structure and functions of the cell membrane and the processes involved in the movement across the membrane. .Identify and explain the functions of various cell organelles. .Distinguish between prokaryotic and eukaryotic cells based on their structure and organization. .Define and classify biomolecules (carbohydrates, proteins, lipids, and nucleic acids) .Understand enzyme structure and function. .Describe the structure and role of nucleic acids .Define and explain the stages of the cell cycle .Understand and describe mitosis and meiosis.	· Study of osmosis by potato osmometer. · Study of plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or flashy scale leaves of onion bulb) SDG 3: Good Health and Well-being SDG 4: Quality Education
3.	**June**	**Summer Vacations**			
4.	**July**	**27**	Periodic Test-1 Unit: Human Physiology CHP: Digestion CHP:17. Breathing and Exchange of Gases CHP:18. Body Fluids and Circulation CHP 19. Excretory Products and Their Eliimination	. Explain the process of digestion (from ingestion to absorption.) .Explain gas exchange in the alveoli (through diffusion) .Understand the transport of oxygen and carbon dioxide in the blood .Analyze the regulation of breathing and its disorders .Describe the composition and functions of blood .Understand the structure and function of the heart, .describe the sequence of events in one complete cardiac cycle (diastole and systole). Understand the structure and functioning of blood vessels .Explain the concept of blood pressure and its regulation and its disorders.	· Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials. · Demonstrate CO_2 in exhaled air using lime water. · Blood group testing · Demonstration of clotting time · Measuring pulse rate and heart rate before and after exercise. · Test for presence of sugar/salt/proteins in urine · SDG 3: Good Health and Well- being · SDG 4: Quality Education ·

				.Understand the structure and function of the nephron .Explain the formation of urine. .Understand the role of the kidneys in osmoregulation	
5.	**August**	**24**	Unit: Human Physiology Chp-20: Locomotio n and Movement Chp-21: Neural Control and Coordinati on. Chp-22: Chemical Coordinatio n and Integration	. Describe the structure and function of human skeletal system. .Explain the structure of muscle. .Understand the mechanism of muscle contraction (Sliding filament theory). .Understand the structure and function of the human nervous system and neuron cell. .Understand the role of synapses in nerve impulse transmission. .Describe the structure and function of endocrine glands. .Understand the role of hormones in regulating body functions .Analyze disorders related to hormonal imbalances	· Human skeleton and different types of joints with the help of virtual images/models only. · Study of Brain by 3D model · Study of endocrine glands and their hormones using charts · SDG-6: Clean Water and Sanitation · SDG 2: Zero Hunger
6.	**Septem ber**	**26**	Unit: Structural Organizatio n in Plants and Animals Chp-7: Structural Organization in Animals (frog) Half Yearly Examinatio n	.Identify and describe the external features and significance of body adaptations. .Study the Anatomy of Frog (such as digestive, circulatory, respiratory, nervous, excretory and reproductive systems)	· Group discussion: Relate frog organ systems to human systems for comparative biology. · SDG 15: Life on Land · SDG 14: Life below water.
7.	**October**	**21**	Chp-5: Morphology of Flowering Plants. Chp-6: Anatomy of Flowering Plants.	.Understand the morphological features of the root, stem, and leaf. .Describe the structure and types of inflorescences. Venation and phyllotaxy .Identify and compare anatomical features of monocot and dicot stems, roots, and leaves.	· Study of distribution of stomata on the upper and lower surfaces of leaves. · Comparative study of the rates of transpiration in the upper and lower surfaces of leaves. · Different types of inflorescence (cymose and racemose).

					· SDG 15: Life on Land · SDG 14: Life below water.
8.	**November**	**25**	Unit: Plant Physiology Chp-13: Photosynthes is in Higher Plants. Chp-14: Respiration in Plants Chp-15: Plant - Growth and Development	.Describe the structure of chloroplasts and locate the sites of light and dark reactions. .Explain the light reaction – including photolysis of water, formation of ATP and NADPH (photophosphorylation). .Understand the Calvin cycle and outline the steps of C3 pathway. .Compare C3 and C4 pathways, and understand how they adapt to different environmental conditions. .Understand the process of cellular respiration – aerobic and anaerobic. .Explain the steps of glycolysis, link reaction, Krebs cycle (TCA cycle), and electron transport system (ETS). .Calculate energy yield (ATP) from glucose breakdown in different stages. .Explain respiratory quotient (RQ) and its significance. .Classify and explain plant growth regulators (PGRs) – auxins, gibberellins, cytokinins, ethylene, and abscisic acid.	Separation of plant pigments through paper chromatography. · Dissection and display of floral whorls, anther and ovary, type of root (tap and adventitious); type of stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound) · SDG 15: Life on Land · SDG 14: Life below water.

Subject- MATHEMATICS			Grade- XI		Book: N.C.E.R.T.
S.No	**Month**	**Number of Working Days**	**Chapter Number and Chapter Name**	**Learning Objectives**	**Practical's/Activities Planned**
1	April	25	Chapter 1: Sets	- Define sets and their representations. - Understand types of sets (empty, finite, infinite). - Perform operations on sets (union, intersection, complement). - Apply Venn diagrams to solve problems.	- Group activity: Create Venn diagrams for real-life scenarios (e.g., students playing sports). - Quiz on set operations.
			Chapter 2: Relations and Functions	- Define relations and functions. - Classify functions (one-one, onto, bijective). - Understand composite and inverse functions.	- Plot graphs of functions (linear, quadratic). - Worksheet on identifying function types.
2	May	27	Chapter 3: Trigonometric Functions	- Understand angles, degrees, and radians. - Learn trigonometric identities and ratios.	- Measure angles using protractors. - Activity: Derive trigonometric identities geometrically.
			Chapter 4: Complex Numbers	- Solve equations using trigonometric functions	- Solve real-world problems using quadratic equations.

			& Quadratic Equations	- Define complex numbers and their properties. - Solve quadratic equations with complex roots. Represent complex numbers on the Argand plane.	
3	**June**	**Summer Vacations**			
4	July	27	Chapter 5: Linear Inequalities Chapter 6: Permutations & Combinations Chapter 7: Binomial Theorem	- Solve linear inequalities algebraically and graphically. - Understand the solution set of inequalities. - Differentiate between permutations and combinations. Solve problems using factorial notation and formulas. - Expand binomials using the - theorem. - Find general and middle terms in expansions.	- Graph inequalities on coordinate planes. - Activity: Count arrangements of letters/objects. - Real-life examples (e.g., password combinations).
5	August	24	Chapter 8: Sequences & Series	- Identify arithmetic and geometric sequences. -Calculate sums of finite/infinite series -Apply series to real-world problems (e.g., loans, investments).	- Worksheet on finding sums. - Case study: Growth of bacteria/population

			Chapter 9: Straight Lines Chapter 11: Introduction to 3D Geometry	- Find slopes, equations, and angles between lines. - Understand distance formulas and section formulas. - Locate points in 3D space. - Calculate distances and section ratios	- Plot lines and find intersections. - Activity: Create geometric shapes using lines. - Model 3D shapes using straws/clay - Visualize planes.
6	**September**	**26**	**Half-Yearly Examination**	**- Revise all chapters covered till August.**	**- Mock tests and doubt-clearing sessions.**
7	October	21	Chapter 10: Conic Sections Chapter 12: Limits & Derivatives	- Identify and graph circles, parabolas, ellipses, hyperbolas. - Derive standard equations. - Understand limits intuitively and algebraically. - Learn differentiation rules (power, chain, product).	- Draw conic sections using threads/pins. - Real-world applications (e.g., satellite dishes). - Calculate derivatives of simple functions. - Activity: Rate of change in physics problems.
8	November	25	Chapter 13: Statistics Chapter 14: Probability	- Calculate mean, median, mode, and standard deviation. Understand variance and analysis of frequency distributions - Define sample space and events. - Solve problems	- Collect and analyze class data (e.g., heights, scores). - Graphical representation (histograms, box plots). - Dice/card experiments to demonstrate probability. - Case study: Weather forecasting.

Subject – Hindustani Music Vocal;

Books recommended - Sangeet Aanand

Sr.no:	Month	No. Of working days	Concepts / chapters to be covered	Learning objectives	Activities / practicals / sea / sdg
1	March	9	1)definitions-sangeet,dhwani. 2)decription of raag bihag	Introduction of swar raag bihagchota khayal.	Students will sing a swarraag bihag only aaroh - avroh with harmonium.
2	April	18	**1)** definition -. Shruti, swar, naad, saptak, thaat, raag, laya. **2)** description of taal tintaal. **3)** biography - tansen	Introduction of taal tintaal tolearn notation system	Ability to recite the tintaal with ekgun, dogun keeping taal with hand beat.
3	May	25	**1)** brief study of natya shastra **2)** definition of margi sangeet - desi sangeet 3) raag bihag chota khayal notation with taans.	Raag bihag bandish notations with taan 8 matra and 16 matra.	Students will sing a bandish notation with harmonium.
4	June	**Summer break**			
5	July	26	**1)** life sketch and contributionof pt.vn bhathkhande. **2)** description of raag bhimplasi.	introduction of raag bhimplasi notations system as well as taans.	Students will sing a raag bhimplasi with harmonium.
6	August	23	**1)** brief study of the following dhrupad, khayal, **2)** introduction of taal ektaal ekgun, dogun, tingun. **3)** brief study of the following tarana and gharana.	Introduction of taal ektaal (and tolearn notation system	Ability to recite the ektaal with ekgun, dogun keeping taal with hand beat.

7	**September**	**25**	**1)** description of raag bhairavi **2)** introduction of taal chotaal **3)** vilampit khayal of raag bihag	Introduction of raag bhairavi tolearn notation system and taal chotaal taal notation system. .	Ability to recite the chotaal with ekgun, dogun keeping taal withhand beat.
8	**October**	**21**	**1)** life sketch and contribution of vd pluskar. **2)** vilampit khayal of raag bhimplasi 16	Inroduction of raag bhimplasi tolearn notation system and taal chotaal taal notation system. .	-students playing raag bhimplasi with tarana. with harmonium and hand beat taals.
9	**December**	**21**	**Revision through worksheet.**		
10	**January**	**24**	**Revision through worksheet.**		
11	**February**	**--**	**Revision through worksheet.**		

XI PAINTING					
Sr.no:	**Month**	**No of working days**	**Concepts / chapters to be covered**	**Learning objectives**	**Activities/practicals**
1	**April**	**18**	The miniature paintings origin anddevelopments of · Jain school · Pala school · Central school	To depict royal life, battle and significantevents	Free hand sketches with pencil shading

2	**May**	**25**	Rajasthani school · Origin and development · Sub schools mewar, bundi jodhpur Bikaner, Kishangarh and Jaipur · Main features of the Rajasthani school · Rajasthani painting	To understand how the Rajasthani school ofpainting started in 16th century influenced byMughal art	Nature study
3	**June**		**Summer Break**		
4	**July**	**26**	The Pahari school ofart · Origin and development · Sub schools · Main features · Pahari school painting	To understand that the Pahari school beginning in the himalyan hills (17th-18th century) influenced by Rajput and Mughalstyle	Nature study with colours
5	**August**	**23**	Mughal school of art painting · Origin and development · Main features of the Mughal school of art	To understand how the Mughal started in the16th century under emperor akhbar, combining Indian and persian art	Imagination painting basedon subjects from life and nature in water colours and poster colours

SUBJECT: XI PHY.EDU
BOOK NAME: S.P.

Month	Period	Lessons / Chapters	Learning Objectives	Activities / Practicals
March	7	Unit I: Management of Sporting Events- Unit X:Training in Sports	Understand planning & conducting sporting eventsLearn principles of training	
April	18	Unit II: Children & Women inSportsUnit III: Yoga as a Preventive Measure for Lifestyle Diseases	Recognize challenges in sports for children and womenUnderstand yoga's role in preventing lifestyle diseases	Physical Fitness Test: SAI Khelo IndiaTest, BPFTPractice (Unit I)Yoga Practice (Unit II)
May	25	Unit IV: Physical Education& Sports for CWSNUnit IX:Psychology & Sports Periodic Test-1 Syllabus: Unit I, II, & X	Understand inclusivity and adaptive sports for CWSNLearn psychological principles in sports	Skill Practice (Unit III)
June	10	Unit V: Sports & NutritionUnit VIII: Biomechanics & Sports	Understand balanced diet and nutrition for athletesLearn biomechanics principles and techniques in sports	Physical Fitness Test: SAI Khelo India Test, BPFTPracticeYoga PracticeSkill PracticeRecord File (Unit I)Practical (Unit II)

July	26	Unit V: Sports & Nutrition(Continued)Unit VI: Test & Measurement in Sports	Continue understanding athlete nutritionLearn various testing and measurement techniques	
August	23	Unit VI: Test & Measurement in Sports (Continued)Unit VII: Physiology & Injuries in Sports	Reinforce knowledge of sports testingLearn human physiology and injury management	
September	25	Unit VII: Physiology & Injuries in Sports (Continued) Half-Yearly Exam Syllabus: Unit I, II, IV, V, VI & VIII	Continue understanding body functions during sports and injury recovery	Record File – Practical 3
October	21	Unit VIII: Biomechanics &Sports Unit IX: Psychology& Sports	Deepen biomechanical understanding Apply sports psychology in reallife scenarios	Physical Fitness Test: SAI Khelo IndiaTest, BPFT Practice Yoga Practice Skill Practice
November	**Revision**		**Reinforce concepts for Pre-Board exams**	
December	**Revision**		**Prepare for CBSE board pattern and question styles**	
January	**Revision**		**Prepare for CBSE board pattern and question styles**	

SUBJECT: XI SUBJECT — COMPUTER SCIENCE

Book Recommended — N.C.E.R.T., SUMITA ARORA, PREETI ARORA

Month	No. of Working Days	Concepts / Chapters to be Covered	Learning Objectives	Activities / Practical / SDG
April	**25**	Unit 2: Computational Thinking and Programming-I 1. Introduction to Problem-solving 2. Basics of Python programming 3. Knowledge of data types	Understand problem-solving techniques and basicPython syntax.	Practical: Write simple Python programs to solvebasic problems.
May	**27**	4. Operators 5. Expressions, statements, type conversion,and input/output 6. Errors	Learn to use operators and handle input/outputoperations. Identify and debug errors.	Activity: Debugging exercises and simplecalculator program.
June	**-**	**Summer Break**		
July	**27**	7. Flow of Control: Conditional and Iterative statements	Master control structures in Python.	Practical: Programs using loops and conditionalstatements.
		Periodic Test-1		
August	**24**	8. Strings manipulation 9. Lists manipulation 10. Tuples manipulation	Learn to manipulate strings, lists, and tuples.	Activity: String and list manipulation exercises.

Sept	**26**	**Half Yearly Examination**		
Oct	21	11. Dictionary manipulation 12. Introduction to Python modules Unit 1: Computer Systems and Organization 1. Basic computer Organization	Understand dictionaries, modules, and computerfundamentals.	Practical: Programs using dictionaries andmodules.
Nov	25	2. Boolean logic 3. Number System 4. Encoding Schemes	Learn Boolean algebra, number systems, andencoding.	Activity: Conversion exercises (binary, decimal,etc.).
Dec	-	**Revision of whole syllabus**		
Jan	-	**Revision and Preboard Exams**	Reinforce learning through practice.	Quizzes and mock tests.
Feb	-	**Final Examinations**		