



## Department of Mathematics

Annual Academic Plan-2024-25

### MATHEMATICS

Reference Text – **NCERT TEXT BOOK FOR MATHEMATICS - CLASS11**

IP for the term: (210 Periods)

Week & Date Range	# IP	Expected behaviour outcomes	Expected learning outcomes [students will be able to]	Topics to be covered during the week	Methodology to be used Activities/Project s/Practical's/Experiments/Art Integration (Mention the serial no. in the Daily Plan)	Assessment Tool(s) through various activities.
<p><b>Wk – 1</b></p> <p><b>Date</b> 3/06/24 to 7/06/24</p>	6	Develop confidence	<ul style="list-style-type: none"> <li>Describe memberships of sets, including the empty set, using proper notation, and decide whether given items are members and determine the cardinality of a given set.</li> <li>Describe the relations between sets regarding membership, equality, subset,</li> </ul>	<p><b>SETS</b> Types of sets</p> <p>Operations on Sets</p>	Explanation- Interpretation	<ul style="list-style-type: none"> <li>worksheet</li> </ul>

			<p>and proper subset, using proper notation.</p> <ul style="list-style-type: none"> <li>Perform the operations of union, intersection, complement, and difference on sets using proper notation.</li> <li>Be able to draw and interpret Venn diagrams of set relations and operations and use Venn diagrams to solve problems.</li> </ul>	Properties & Applications	<p>Problem Solving</p> <p>Representing data using Diagrams</p>	
<p><b>WK-2</b></p> <p>10-06-2024 to 14-06-2024</p>	7		<ul style="list-style-type: none"> <li>Recognize when set theory is applicable to real-life situations, solve real-life problems communicate real-life problems and solutions to others</li> </ul>	Venn Diagram	Chalk & Talk with geometrical interpretations	Hw from text book
<p><b>WK-3</b></p> <p>17-06-2024 to 21-06-2024</p>	7	Develop analytical thinking	<ul style="list-style-type: none"> <li>communicate real-life problems and solutions to others.</li> </ul>		Problem Solving & PPT	worksheet
<p><b>WK-4</b></p> <p>24-06-2024 to 28-06-2024</p>	8	Develop scientific temperament	<ul style="list-style-type: none"> <li>Acquire knowledge to form AXB and BXA</li> </ul>	<p><b>RELATIONS</b></p> <p>Cross Multiplication</p>	Problem solving	Hw from text book

<p style="text-align: center;"><b>WK-5</b></p> <p>01-07-2024 to 5-07-2024</p>	<b>6</b>	Develop confidence	<ul style="list-style-type: none"> <li>Identify the differences between a relation and a function.</li> <li>Determine whether or not a function is linear.</li> </ul>	Relations	PPT	
<p style="text-align: center;"><b>WK- 6</b></p> <p>08-07-2024 to 12-07-2024</p>	<b>7</b>	Develop analytical thinking	<ul style="list-style-type: none"> <li>calculate missing values for a stated function or function pattern.</li> <li>recognize multiple representations of linear functions.</li> </ul>	Different types of functions	PPT	MCQ & Descriptive test
<p style="text-align: center;"><b>WK-7</b></p> <p>15-07-2024 to 20-07-2024</p>	<b>8</b>	Develop analytical thinking	<ul style="list-style-type: none"> <li>Graphical Representations of different functions</li> </ul>	Applications	Problem Solving	HW from text book
<p style="text-align: center;"><b>WK-8</b></p> <p>22-07-2024 to 26-07-2024</p>	<b>7</b>	Develop analytical thinking	<ul style="list-style-type: none"> <li>Convert between decimal degrees, degree-minute-seconds, and radian measure of an angle.</li> <li>Evaluate the 6 trigonometric functions.</li> <li>Solve triangle (right, acute, obtuse), given various angles and sides.</li> <li>Demonstrate knowledge of several trigonometric identities and use them to verify other identities</li> </ul>	<p><b>TRIGONOMETRIC FUNCTIONS</b></p> <p>T-Ratios and values</p>	Graphical method & PPT	quizzes
<p style="text-align: center;"><b>WK-9</b></p> <p>29-07-2024 to 31-07-2024</p>	<b>8</b>	Develop deductive reasoning	<ul style="list-style-type: none"> <li>Graph trigonometric functions</li> </ul>	Functions	Activity_NCERT	Work sheet

<b>WK-10</b> 01-08-2024 to 02-08-2024	8	Develop analytical thinking	Problems using Identities	Properties and Applications	Problem solving	Hw from text book
<b>WK-11</b> 05-08-2024 to 09-08-2024	8	Develop scientific temperament	<ul style="list-style-type: none"> <li>Understand the Need of complex numbers to solve quadratic equations.</li> <li>Apply the algebraic properties of complex numbers.</li> </ul>	<b>Complex numbers</b> Imaginary Number & standard form of	Hueristic Method	worksheet
<b>WK-12</b> 12-08-2024 to 17-08-2024	8	Develop confidence	<ul style="list-style-type: none"> <li>Understand the Conjugate and modulus of complex numbers</li> </ul>	Algebra of Complex numbers	Chalk & Talk with problem solving	MCQ
<b>WK-13</b> 19-08-2024 to 24-08-2024	7	Develop skill in drawing and reading graph	<ul style="list-style-type: none"> <li>Identify different types of linear inequalities</li> <li>Understand the algebraic solutions of linear inequalities</li> <li>Skill to solve inequalities by graphical method</li> </ul>	<b>LINEAR INEQUALITIES</b> Algebraic method  Graphical method  Applications	Reading and Drawing Graph	Q & A
<b>WK-13</b> 27-08-2024 to 31-08-2024	7	Develop observation skill	<ul style="list-style-type: none"> <li>Define a permutation and explain how to calculate one.</li> <li>Explain what a factorial is and its relation to permutations.</li> <li>Identify some actual permutation and factorial problems and solve.</li> </ul>	<b>Permutations and combinations</b> <ul style="list-style-type: none"> <li>Counting principle</li> </ul>	Dialectical Method	
<b>WK-14</b> 02-09-2024 to	7	Develop analytical thinking	<ul style="list-style-type: none"> <li>Fundamental principle of counting. Factorial n. (n!)</li> </ul>	<b>Factorial Notation</b>	PPT	Hw from text Book

06-09-2024						
<b>WK-15</b> 09-09-2024 to 13-09-2024	8		<ul style="list-style-type: none"> <li>Derivation of Formulae for <math>nPr</math> and <math>nCr</math> and their connections, simple applications.</li> </ul>	<ul style="list-style-type: none"> <li>Arrangements-Permutations</li> </ul>	Problem solving	Hw from text book
<b>WEEK 16</b> 23-09-2024 to 28-09-2024		Develop analytical thinking and courage to face such situational questions	<b>Mixed questions from Case Study</b>	<ul style="list-style-type: none"> <li>Selection-Combinations</li> </ul>	Problem solving	worksheet
30-09-2024	8	Develop analytical thinking	<ul style="list-style-type: none"> <li>Historical perspective, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, simple applications.</li> </ul>	<b>Binomial theorem</b> Expansion Application	PPT Problem Solving	HW from text book
<b>WEEK 17</b> 01-10-2024 to 05-10-2024	7	Develop observation skill	<ul style="list-style-type: none"> <li>Brief recall of two dimensional geometry from earlier classes. Slope of a line and angle between two lines.</li> </ul>	<ul style="list-style-type: none"> <li><b>Straight Lines</b></li> <li>Introduction</li> <li>Slope</li> </ul>	Inductive method	
<b>WEEK 18</b> 07-10-2024 to 11-10-2024	6	Develop confidence	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Different equations of Straight Lines</li> </ul>	Problem solving	HW from Text book
<b>WEEK 19</b> 14-10-2024 to 19-10-2024	7	Develop analytical thinking	<ul style="list-style-type: none"> <li>Sequence and Series.</li> <li>Able to understand Arithmetic Mean (A.M.) Geometric Progression (G.P)</li> </ul>	<b>Sequences and Series</b>	Problem solving	
<b>WEEK 20</b> 21-10-2024 to	8	Develop confidence	<ul style="list-style-type: none"> <li>Able to apply the general term of a G.P., sum of <math>n</math> terms of a G.P., infinite G.P. and its sum. Geometric mean (G.M.),</li> </ul>	<ul style="list-style-type: none"> <li><b><math>n</math>th term of GP</b></li> <li><b>Sum of <math>n</math> terms of GP</b></li> </ul>	Problem solving	HW from text book

26-10-2024			relation between A.M. and G.M.formulae in different situations			
<b>WEEK 21</b> 28-10-2024 to 30-10-2024	8	develop scientific temperament	<ul style="list-style-type: none"> <li>Identify Sections of a cone: circles, ellipse, parabola, hyperbola</li> <li>Understand a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section.</li> <li>Apply Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle, in different problems</li> <li>Identify the different graphs and its equations</li> </ul>	<ul style="list-style-type: none"> <li>CONIC SECTION</li> <li>Circle</li> <li>Parabola</li> <li>Ellipse</li> <li>Hyperbola</li> </ul>	Visual Learning <a href="https://youtu.be/XLdIYhVwV0w?si=hOZZzxLepcs0Iqso">https://youtu.be/XLdIYhVwV0w?si=hOZZzxLepcs0Iqso</a> Problem solving	Work sheet
01-11-2024						
<b>WEEK 22</b> 04-11-2024 to 08-11-2024	7	Develop observation skill	<ul style="list-style-type: none"> <li>Coordinate axes and coordinate planes in three dimensions.</li> </ul> Coordinates of a point. Distance between two points.	<b>3 Dimensional Geometry</b> <ul style="list-style-type: none"> <li>Introduction</li> <li>Distance formula</li> <li>Mid point formula</li> <li>Section Formula</li> </ul>	Visual Learning <a href="https://youtu.be/yPysmMXI_Is?si=BqQ6PCKy76fp0gZB">https://youtu.be/yPysmMXI_Is?si=BqQ6PCKy76fp0gZB</a>	MCQ
<b>WEEK 23</b> 11-11-2024 to 16-11-2024	7	Develop confidence  Develop analytical thinking	<ul style="list-style-type: none"> <li>Know the terms Events; occurrence of events, 'not', 'and' and 'or' events, exhaustive events, mutually exclusive events.</li> <li>Understand and apply Axiomatic (set theoretic) probability, connections with</li> </ul>	<b>PROBABILITY</b> <ul style="list-style-type: none"> <li>Introduction</li> <li>Different terms and its definition</li> <li>Algebra of probability</li> </ul>	Problem Solving Comparing using the given data	Hw from Text Book

			<p>other theories of earlier classes.</p> <ul style="list-style-type: none"> <li>• Skill to do problems related to Algebra of Probability</li> </ul>			
<p><b>WEEK 24</b> 18-11-2024 to 22-11-2024</p>	7	<p>develop scientific temperament</p>	<ul style="list-style-type: none"> <li>• Understand the statistical measures</li> <li>• Apply the measures of dispersion in different cases</li> <li>• Understand the way to compare the data</li> </ul>	<p><b>STATISTICS</b></p> <ul style="list-style-type: none"> <li>• Measures of Dispersion:</li> <li>• Range, Mean deviation Variance and standard deviation of ungrouped/grouped data.</li> </ul>	Inductive method	Work sheet
<p><b>WEEK 25</b> 25-11-2024 to 30-11-2024</p>	7	<p>Courage to take up the new challenges</p>	<ul style="list-style-type: none"> <li>• Skill to assess and evaluate the data</li> </ul>		Problem Solving	Case Study Questions
DECEMBER 2024			REVISION FOR 2 <sup>nd</sup> Term Examination			
JANUARY 2024		<p>Develop scientific temperament</p>	<p>Understand and analyse Limit &amp; Derivatives</p>	<p>Limits First principle Derivatives with different formulae</p>	<p>PPT Visual Learning <a href="https://youtu.be/N2PpRnFqnqY?si=1lyLcPbDVFRcM2r">https://youtu.be/N2PpRnFqnqY?si=1lyLcPbDVFRcM2r</a> Problem Solving</p>	<p>Hw Text Book Work sheet</p>
FEBRUARY 2024			REVISION FOR Final Examination			
MARCH 2024			Final Examination 2025			







THE VILLAGE  
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## AAP CHEMISTRY

GRADE 11

2024-25

WEEK DATE	IP	EXPECTED BEHAVIOUR OUTCOME	LEARNING OUTCOME (STUDENTS WILL BE ABLE TO)	SUB TOPIC	METHODOL OGY TO BE USED	Assessment Tool through various activities. w.r.to NE 2020 & NCF 2023 [Ref Suggested Assessment Modes]
03-06-2024 to 07-06-2024	8	Critical thnking	Analyse the different models of atom Comparative study of different models of atoms	Atom models Thomson model Rutherfod model	presentation	worksheets
10-06-2024 to 14-06-2024	8	Analytical skills Thinking skills	<ol style="list-style-type: none"> <li>Understand the nature of EM waves and terminologies associated with it.</li> <li>Know and understand the black body radiations and photoelectric effect.</li> <li>Learn the study of atomic spectra and its types.</li> </ol>	<b>Wave</b> nature of EM radiations, photoelectric effect, black body radiation, atomic spectra, Bohr's model of atom,	Lecture method	Brain storming MCQ
17-06-2024 to 21-06-2024	8	Analytical skills Thinking skills	<ol style="list-style-type: none"> <li>The nature of EM waves and terminologies associated with it.</li> <li>The process of radioactivity.</li> </ol>	Dual nature of atom , Heisenberg's uncertainty principle, quantum mechanical	Discusssion Lecture	Worksheets

			<p>3. The black body radiations and photoelectric effect.</p> <p>4. The study of atomic spectra and its types.</p>	model , quantum numbers		
24-06-2024 to 28-06-2024	8	Analytical skills Thinking skills	<p>Able to understand</p> <p>1.factordeciding the filling of electrons</p> <p>2.theries behind the filling of electrons</p>	, Pauli's exclusion principle, Aufbau's principle, electronic configuration of ions, Hund's rule of maximum multiplicity	PPT	Worsheets
01-07-2024 to 5-07-2024	8	Analyticalskills	<p><b>After studying this unit students will be able to</b></p> <p>1. Know how the concept of grouping elements in accordance to their properties led to the development of Periodic Table.</p> <p>2. Compare the positive points and drawbacks of previous models of classification of elements e.g. laws of triads and octaves, Mendeleev's law</p> <p>3. Appreciate the utility of Mendeleev's periodic classification in designing of the modern periodic classification understand the Periodic Law;</p>	<p><b>Classification of elements</b> Modern periodic law and the present form of periodic table, periodic trends in properties of elements – atomic radii, ionic radii, inert gas radii,.</p>	Discussion method Presentation	Brain storming MCQ
15-07-2024 to 20-07-2024	8	Develop scientific temperame nt	IUPAC naming Naming of elements upto 120	Nomenclature of elements with atomic number greater than 100	PPT	Worksheets
22-07-2024 to 26-07-2024	8	Analytical skills Thinking skills	<p>trends in physical and chemical properties of elements;</p> <p>*compare the reactivity of elements and correlate it with their occurrence in nature;</p>	Ionization enthalpy, electron gain enthalpy, electronegativity, valency	Lecture method Discusion method	Assesments in NCERT textboo

			*explain the relationship between ionization enthalpy and metallic character; electronegativity, valency of elements.			
29-07-2024 to 31-07-2024	8	Analytical skills Thinking skills	<ol style="list-style-type: none"> <li>1. explain the characteristics of three states of matter</li> <li>2. classify different substances into elements, compounds and mixtures</li> <li>3. explain various laws of chemical combination</li> <li>4. appreciate significance of atomic mass, average atomic mass, molecular mass and formula mass</li> </ol>	<b>Some Basic concepts of chemistry</b> Importance and scope of chemistry, Law of conservation, Law of constant proportion, Law of multiple proportion Postulates of Daltons atomic theory, Relative atomic mass, calculation of molecular mass, formula mass,	PPT	Worksheets
01-08-2024 TO 02-08-2024		Analytical skills Thinking skills	To calculate the mass per cent of different elements constituting a compound; Perform stoichiometric calculations.	, molarity, molality, mass and volume percentage ,ppm ,mole fractions and stoichiometric calculation and limiting reagent	Numericals  Discussion	Quiz
05-08-2024 to 09-08-2024	8	Analytical skills Thinking skills	<ol style="list-style-type: none"> <li>1. Understand Kossel- Lewis approach to chemical bonding;</li> <li>2. Explain the octet rule and its limitations,</li> <li>3. Draw Lewis structures of simple molecules; •</li> <li>4. Explain the formation of different types of bonds;</li> <li>3. Describe the VSEPR theory and predict the geometry of simple molecules;</li> <li>4. Explain the valence bond approach for the formation of covalent bonds;</li> </ol>	Chemical bonding/ Ionic , covalent, coordinate bond. Lewis dot representation.	Discussion	Home work

			5.Predict the directional properties of covalent bonds;			
12-08-2024 to 17-08-2024	8	Reasoning skills Thinking skills	.Describe the VSEPR theory and predict the geometry of simple molecules; .Explain the valence bond approach for the formation of covalent bonds;	Various theories to explain geometry of molecules like VSEPR, VBT and MOT ,hybridization involving s,p,d,f orbital's, hydrogen Bonding	1.Drawing electron dot structure Predicting and drawing shapes of organic compounds using VSEPR theory	Questionnaire
19-08-2024 to 24-08-2024	8	Mathematical skills Reasoning skills	1.Define the terms oxidation , reduction, redox reaction, oxidizing agent, reducing agent	Redox reaction/ Oxidation reduction, redox reaction, oxidizing agent, reducing agent	Lecture method	Worksheets
27-08-2024 to 31-08-2024	8	Mathematical skills Reasoning skills	.Use the concept of oxidation number to identify oxidant and reductant. Classify redox reaction into various types	Classification of reactions	Solving examples	Quizes
02-09-2024 to 06-09-2024		Mathematical skills Reasoning skills	Develops an idea on how hybridization is used n *finding shape *stability	Hybridisation Sp Sp2 Sp3	Exercises NUmericals	Numerricals
09-09-2024 to 13-09-2024		Mathematical skills Reasoning skills	Understands the balancing of equations using half reacton method and oxdn no method	Balancing redox equations and Galvanic cell	Numericals	Worsheets
23-09-2024 to 28-09-2024	8	Critical thinking	Understands how redox reaction affects in the working of a cell. ApplyingElectrochemical series and its applications .	Electro chemical series Applications of electro chemical series	Discussion	NCERT textbook solution
30-9-24	1	Analytical skill	Explain Gibbs energy	Gibbs energy	---	-----
01-10-2024 to 05-10-2024	8	Scientific temperame nt	7. They can explain Gibbs energy change DG) and establish relationship betweenDG and spontaneity, DG and equilibrium	. Gibbs energy change G)and establish relationship between $\Delta G$ and spontaneity, $\Delta G$ and equilibrium constant	Lecture method	Worksheets

			constant.			
07-10-2024 to 11-10-2024	8	Reasoning skill Mathematical skill	1. Identify dynamic nature of equilibrium. 2. State the law of equilibrium. Write expression for eq. constant.	Equilibrium chemical equilibrium Dynamic nature of equilibrium involved in physical and chemical processes	Discussion PPT	Worksheets
14-10-2024 to 19-10-2024	8	Critical thinking	1. Identify dynamic nature of equilibrium. 2. State the law of equilibrium. 3. Write expression for eq. constant. Explain various factors that affect equilibrium.	law of equilibrium, characteristics of equilibrium involved in physical and chemical processes, expressions for equilibrium constants, establish a relationship between $K_p$ and $K_c$ ; various factors that affect the equilibrium state of a reaction,	PPT	Worksheets
21-10-2024 to 26-10-2024	8	Analytical skill Critical thinking	1. They will apply their knowledge of significance of pH in day to day life	Classify substances as acids or bases according to Arrhenius, Bronsted-Lowry and Lewis concepts, classify acids and bases as weak or strong in terms of their ionization constants,	Self directed learning	Exercises
01-11-2024	1	Analytical skill Critical thinking	to apply concept of common ion effect and solubility product in daily life like in purification of salt to apply their knowledge of significance of pH in daily life while choosing eatables, drinks, cosmetics and medicines.	Solubility product Common ion effect	Collaborative learning	Worksheets
4-11-24 to 08-11-2024	8	Analytical skill Critical thinking	describe ionic product ( $K_w$ ) and $pK_w$ for water Identify buffer solutions, apply it on real life calculate solubility product constant	Ionic product Buffer solution	Game based learning	Worksheets
11-11-2024 to 16-11-2024	8	Analytical skill Critical thinking	1. understand reasons for tetra valence of carbon and shapes of organic molecules;	Organic chemistry some basic concepts	Discussion method	Olab

			<p>2. Write structures of organic molecules in various ways and classify the organic compounds.</p> <p>3. Name the compounds according to IUPAC system of nomenclature and also derive their structures from the given names;</p> <p>4. Understand the concept of organic reaction mechanism.</p>			
18-11-2024 to 22-11-2024	8	Analytical skill Critical thinking	<p>To explain the influence of electronic displacements on structure and reactivity of organic compounds;</p> <p>*to recognize the types of organic Reactions.</p>	Organic reaction mechanism	PPT	Quizzes
25-11-2024 to 30-11-2024	8	Analytical thinking	<p>Student learns to Learn separating organic substances by using various techniques and appreciate the use of these technique in day to day life like separating drugs from blood, use of fractional distillation in separating crude oil in petroleum industry, use of TLC technique in forensic department in order to solve suspicious matter.</p>	Purification and separation of organic substances	PPT	Worksheets
02-12-2024 to 07-12-2024	8	Scientific attitude develops	<p>1. To name hydrocarbons according to IUPAC system of nomenclature.</p> <p>2. To recognize and write structures of isomers of alkanes, alkenes, alkynes and aromatic hydrocarbons.</p> <p>3. About various methods of preparation of hydrocarbons.</p> <p>4. to distinguish between alkanes, alkenes.</p>	Hydrocarbons *Alkanes *Alkenes	Collaborative learning	Assignments
09-12-2024 to 13-12-2024	8	Critical thinking	<p>5. to draw and differentiate between various conformations of ethane.</p> <p>6. to appreciate the role of hydrocarbons as sources of energy and for other industrial applications;</p>	Conformations of alkanes Applications	Learning through group activity	Brain storming

16-12-2024 to 20-12-2024	8	Distinguish reactions Identify types of reactions	7.Predict the formation of the addition products of unsymmetrical alkenes and alkynes on the basis of electronic mechanism.	Addition reactions of hydrocarbons	Collaborative learning	Worksheets
30-12-2024 to 31-12-2024	8	Critical thinking skill	comprehend the structure of benzene and explain aromaticity	Benzene Aromaticity by Huckel	Group discussion	MCQ
01-01-2025 to 05-01-2025	8	Analytical skill	9.To predict the directive influence of substituent's in monosubstituted benzene ring; Student have developed concern for our future generation by appreciating judicious use of petroleum and natural gas and practicing in their own life.They also realized the tragic side effects of excessive use of insecticides like DDT in world war ii and felt importance of cheaper alternate to it like BHC	Mono substituted benzene derivatives	Discussion PPT	Brainsorming
06-01-2025 to 10-01-2025	8	Critical thinking Analytical thinking	1.Explain the terms system and surroundings 2.Discriminate between close, open and isolated systems. 3.Explain internal energy, work and heat. 4.state first law of Thermodynamics and express it mathematically. 5.Explain state functions: U, H and correlate $\Delta U$ and $\Delta H$	Thermodynamics Open, closed, isolated system Internal energy Enthalpy	Discussion	Class test
13-01-2025 to 18-01-2025	8	Develops scientific aptitude	Student can calculate enthalpy changes for a reaction Various types of reactions and also state and apply Hess's law of constant heat summation	*Enthalpy change *Hess's law	Problem solving method	Exercises in NCERT
20-01-2025 to	8	Critical thinking	State and apply Hess's law of constant heat summation.	Numericals based on Hess law	Problem solving method	Numericals as assignments

24-01-2025			Differentiate between extensive and intensive properties. .Define spontaneous and nonspontaneous Processes.			
27-01-2025 to 31-01-2025	8	Analytical skill	Applying Gibbs equation to spontaneity of a reaction. Analytical thinking of comparing all 3 parametres of spontaneity	Gibbs Helmolz equation	Match the following problems	Class test
03-02-2025 to 07-02-2025	8		Discussing second term topics . More emphasis on organic chemistry	Organic chemistry		Class TEST
10-02-2025 to 15-02-2025	8	REVISION				
17-02-2025 to 21-02-2025		REVISION				
24-02-2025 to 28-02-2025		REVISION				
03-03-2025 to 07-03-2025		REVISION				
10-03-2025 to 14-03-2025		REVISION				
17-03-2025 to		REVISION				



21-03-2025						
24-03-2025 to 28-03-2025		REVISION				



Department of -ENGLISH  
Annual Academic Plan-2024-25  
Grade:11      Subject:English

Reference Text – Hornbill  
Snapshots

IP: No. of Instructional Periods

# Month # Working Days # Periods	Week & Date Range	# IP	LEARNING OBJECTIVES		Methodology to be used Activities/Projects/Practical's/Experiments/Art Integration (Mention the serial no. in the Daily Plan)	EXPECTED LEARNING OUTCOMES [STUDENTS WILL BE ABLE TO] Activities/Projects/Practical's /Experiments/Art Integration (Mention the serial no. in the Daily Plan)	Assessment Tool(s) through various activities. w.r.to NEP 2020 & NCF 2023 [Ref. 1.2: Suggested Assessment Modes]
			Behavior Skills. [Ref. 1.1: For identifying skills]	(Unit/Chapter/Subtopic to be covered)			
June 2024 20 Days Periods	03-06-2024 to 07-06-2024	5	To enable the students to develop cooperation, care and concern, tolerance, respect, acceptance, responsibility and be independent in thought and action. To understand the feelings of parents and	<b>Hornbill:</b> <b>Prose:</b>  <b>1.Portrait of a Lady</b>  In this story, the author draws a pen portrait of his grandmother. He beautifully unfolds his relationship with her while describing her appearance and	Dialogue and discussion Brainstorming	Students will be able: i)to develop an independent attitude in thought and action ii)to improve working relations and respect for identities in relation to other people iii) to show care and concern for animals iv) to accept and manage the situations with patience and tolerance v) to respect the relations	Formative Assessments

		2	<p>grandparents, face adverse situation calmly and also know that distancing due to circumstances never affects relations. To understand that graph of life never follows a straight line</p> <p>To enable the students to:</p> <p>i) inculcate values like sharing ideas, freedom to express and acceptance of ideas. ii) make use of appropriate formats, expressions</p>	<p>daily activities. The grandmother herself was not formally educated but was serious about the author's education.</p> <p><b>Writing Skill:</b></p> <p><b>Notice Writing</b></p> <p>The students will be able to focus on the major skills of English. They will be able to express their ideas in the form of short and long writing skills.</p>	<p>Extra questions in the form of class worksheets</p>	<p>in the family vi) to know the expressions used in the lesson and their usage vii) to understand the use of past perfect tense viii) to develop responsibility and sensitivity towards the sufferings of others ix) to know the sacrifices and support given by the grandparents in the family.</p> <p>To enable the students :</p> <p>i) To write effectively. ii) To guide the students iii) Spread awareness iv) To write in formal tone, to be precise and to the point. v) Focus on the qualifications and experiences. vi) To write with appropriate vocabulary and expressions. vii) The students will be able to express</p>	<p>Slip Test</p>
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			<p>and vocabulary. iii) improve short writing skills with relevance and accuracy. iv) appreciate the skill of expressing and writing effectively. v) relate with business, issues relating to the environment and the society. vi) writing, reading skill and thinking skill.</p>			<p>their ideas by writing short writing skills.</p>	
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<p>10-06-2024 to 14-06-2024</p>	<p>3</p>	<p>To enable the students to</p> <ul style="list-style-type: none"> <li>i) inculcate values like learn from experience, care and share, love, affection and togetherness.</li> <li>ii) understand that time and tide wait for none.</li> <li>iii) change is the harsh and bitter reality of life.</li> <li>iv) analyse that death is the inevitable end of all.</li> <li>v) understand that we try to capture moments from life which remain as pictures in our mind.</li> <li>vi) understand that death comes as the greatest leveler.</li> <li>vii) develop comprehension skill,</li> </ul>	<p><b>(2) The Photograph</b></p> <p>(Revision-Figures of Speech)</p> <p>The poem is to capture moments from life which remains as pictures in our minds. It is about the moments in life which leave an indelible imprint on our minds and past memories keep flashing back into our mind when we look at the photograph years later. It highlights that when death strikes we humans are expected to accept the loneliness, the vacuum it creates.</p>	<p>Reciting loudly with proper intonation, stress and pronunciation</p>	<p>The students will be able to</p> <ul style="list-style-type: none"> <li>i) express effectively, sharing ideas and develop appropriate style of writing.</li> <li>ii) understand the importance of human relationship.</li> <li>iii) understand child psychology.</li> <li>iv) understand the attachment with family members.</li> <li>v) understand the nostalgic experiences of the past.</li> <li>vi) understand that both the moments of life have been permanently etched in the poet's mind with a feeling of eternal loss.</li> </ul>	<p>Formative Assessments</p>
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		<p>analytical skill, thinking skill, language skills, enhance vocabulary, express effectively, fluency, accuracy, relevance and coherence, and develop a style of writing and life skill (love and affection).</p>					
		<p>5</p>	<p>To enable the students to</p> <ul style="list-style-type: none"> <li>i) imbibe perseverance and patience, trust, self reliance and self confidence, positivity, team work</li> <li>ii) realise that courage and determination can overcome all the challenges</li> </ul>	<p><b>Hornbill:</b></p> <p><b>3. We are not afraid to die.</b></p> <p>- A first person account of an adventurous ordeal that a family experiences. This is a story of extreme courage and skill exhibited by a family of four comprising of the narrator, his wife Mary and two children Suzanne and</p>	<p>Brainstorming</p> <p>Discussion on the learner's experience about such dangerous situation-2018 flood</p>	<p>The students will be able to</p> <ul style="list-style-type: none"> <li>i) learn the parts of ship and different terms/words related to voyage</li> <li>ii) understand the expressions and phrasal verbs used in the lesson and their usage</li> <li>iii) realise that hazardous experience teaches one to face the adverse circumstances with courage</li> <li>iv) understand that</li> </ul>	<p>Comprehension/Textual Questions</p>

iii) understand that presence of mind along with the practical knowledge is important to take instant decisions  
iv) know that adventures impart a great lesson of life and explore the beauty hidden in nature.

Jonathan. Along with the adults, the two children too are worth mentioning as they showed exemplary courage and understanding even in the face of death.

presence of mind along with the practical knowledge is important to take instant decisions  
v) know that determination and self confidence can conquer adverse circumstances  
vi) inculcate values of sharing, caring and responsible attitude towards others  
vii) know homonyms for 'storm' and 'vessel' and about Captain Cook.  
viii) enhance their skills related to the lesson.

	<p>17-06-2024 to 21-06-2024</p>	<p>5</p>	<p>To enable the students to: i) focus on varied life situations and people in general ii) respecting differences iii) freedom and development iv) value the natural resources v) make the best use of the resources and able to retain them for the future generation. vi) analyse the grave situation of the planet Earth. vii) understand the importance of Green Movement viii) know the importance of the Earth's Biological Systems. ix) analyse the use and over</p>	<p><b>HORNBILL :</b></p> <p><b>5. The Ailing Planet: the Green Movement's Role</b></p> <p>This chapter focuses on the factors that are responsible for the declining health of the earth. The chapter was originally an article written by Nani Palkhivala which was published in the newspaper 'The Indian Express' on November 23, 1994. The writer discusses the Green Movement, how a zoo in Zambia declared human beings as 'world's most dangerous animals'. The writer also focuses on overpopulation, deforestation and what should be our responsibility towards the environment.</p>	<p>Debate :Is it necessary to have sustainable development?</p>	<p>The students will be able to understand the i) issues of the decline state of Mother Earth and sustainable development. ii) best use of resources. iii) awareness to save and protect the environment. iv) not to dominate but to share and care. v) importance of individuality and process of growing. vi) hypocrisy and self assessment vii) importance of enhancing writing skill viii) importance of reasoning ix) learning to assess and analyse situations. x) exchange of ideas</p>	<p>Worksheets</p>
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			<p>exploitation of resources.</p> <p>x) take responsibility to preserve and conserve the resources for the future generation.</p> <p>xi) develop comprehension skill, analytical skill, expression, fluency and accuracy, relevance and coherence, language skill and thinking skill.</p>				
		2	<p>The students will be able to</p> <p>i) inculcate values like share ideas,</p>	<p><b>Writing Skill :</b></p> <p>(a) Factual Description</p>	Practice worksheets	<p>i) Guide the students to write effectively.</p> <p>ii) Develop and strengthen business relations, enquiries, registering complaints, placing orders, sending replies,</p>	Slip Tests

			<p>freedom to express and acceptance of ideas.</p> <p>ii) make use of appropriate formats, expressions and vocabulary.</p> <p>iii) write formal letters, articles, speech, debate , reports and other short writing skills.</p>	<p>(b)Formal Letters</p> <p>-Business Letters</p> <p>-Letter to the authorities</p> <p>The students will be able to focus on the major skills of English. They will be able to express their ideas in the form of short and long writing skills.</p>		<p>apply for a job.</p> <p>iii) Letter to school authorities regarding admission, school issues, requirements and suitability.</p> <p>iv) To write in formal tone, to be precise and to the point.</p> <p>v) Focus on the qualifications and experiences.</p> <p>vi) To write with appropriate vocabulary and expressions.</p> <p>vii) The students will be able to express their ideas by writing short and long writing skills.</p>	
24-06-2024 to 28-06-2024	4	<p>To enable the students to</p> <p>i)inculcate the values of concern, responsibility, curiosity and respect</p> <p>Ii)Respect other’s beliefs, customs, rituals</p> <p>iii)Feel pride in</p>	<p><b>Hornbill :</b></p> <p><b>6. Discovering Tut: The Saga Continues</b></p> <p>The story tells us about the intricate details of the boyish Pharaoh</p> <p>-Tutankhamen,</p>	<p>Video Discussion - historical facts</p> <p><a href="https://youtu.be/wtNodW1vFg0?si=Vp5T462xRYt07ZMn">https://youtu.be/wtNodW1vFg0?si=Vp5T462xRYt07ZMn</a></p>		<p>The students will be able to</p> <p>i)Think, analyse and observe</p> <p>ii)Know the meanings of new phrases</p> <p>iii)Satisfy their curiosity about King Tut’s mummy</p> <p>iv)Know about the</p>	<p>Formative Assessments/ Verbal Questioning</p>

		2	<p>using technology to unfold the mysteries iv) Develop inquisitiveness towards historical events and people v) Enhance reading, comprehending thinking skills, analytical skills, Literary skills and Observation skills.</p> <p>The students will be able to i) inculcate values like share ideas, freedom to express and acceptance of ideas. ii) make use of appropriate formats,</p>	<p>his mysterious death, his power, his forensic reconstruction and his CT Scanning for investigation purpose</p> <p><b>Writing skill :</b></p> <p>(a) Article The students will be able to focus on the major skills of English. They will be able to express their ideas in the form of short and long writing skills.</p>	<p>CBSE question paper model questions will be given</p>	<p>archaeology and advancement in technologies v) Understand the wastefulness of war</p> <p>i) Guide the students to write effectively. ii) Develop and strengthen business relations, enquiries, registering complaints, placing orders, sending replies, apply for a job. iii) Letter to school authorities regarding admission, school issues, requirements and suitability. iv) To write in formal tone, to be precise and to the point.</p>	<p>Worksheets</p>
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			expressions and vocabulary. iii) write formal letters, articles, speech, debate , reports and other short writing skills.			v) Focus on the qualifications and experiences. vi) To write with appropriate vocabulary and expressions. vii) The students will be able to express their ideas by writing short and long writing skills.	
July 2024 23Days Periods	01-07-2024 to 5-07-2024	3	<b>To enable the students to:</b> i) understand rain as the life giving force on the earth ii) nurture the plants by taking care of the environment iii) understand the importance of saving resources iv) understand the need of sustainable development	<b>Hornbill:</b>  <b>7. Voice of the Rain</b>  The poem is an imaginary dialogue between the poet and the rain. Surprisingly, the rain answers the questions asked by the poet and tells about its birth and end. The poet has drawn a parallelism	Loud recitation in groups	<b>The students will be able to:</b> i) inculcate values like care and concern to save environment ii) develop imaginative and analytical skills iii) realise the importance of saving natural resources iv) understand the critical appreciation of the poem based on rhyme, content and theme	Practice questions/ Worksheets

			<p>v) discuss methods for safeguarding environment</p> <p>vi) inculcate thinking skills, analytical skills, imaginative skills</p>	<p>between the rain and a song.</p>		<p>v) identify the figures of speech used in the poem</p> <p>vi) understand the process of sustainable development</p>	
08-07-2024 to 12-07-2024	5	<p><b>To enable the students to:</b></p> <p>i) imbibe values like care and concern, empathy, compassion, respect for elders, belongingness and tolerance</p> <p>ii) understand the struggles and sacrifices of parents and to draw inspiration from them</p> <p>ii) strengthen the family bonding with sharing and</p>	<p><b>8. Mother's Day</b></p> <p>The following play is a humorous portrayal of the status of the mother in a family.</p> <p>The humour springs from the unusual situation where the personalities of two ladies( Ms. Fitzgerald and Ms. Pearson) get exchanged. Their subsequent behaviour is in total contrast to the previous one is the powerful source of laughter.</p>	Role play	<p><b>Students will be able:</b></p> <p>i) to know that mothers have equal rights to enjoy their lives and deserve acknowledgement and appreciation</p> <p>ii) to strengthen the family bonding with sharing and solving problems</p> <p>iii) to develop analytical skills, thinking skills, decision making, management skills, logical skills</p> <p>iv) to identify and understand the central/main point and supporting details along with the phrases used in the lesson</p> <p>v) to imbibe values like care and concern, empathy, compassion,</p>	<p>Comprehension Questions/ Textual Questions</p>	

			<p>solving problems</p> <p>iii) accept the members of the family without complaining</p> <p>iv) develop analytical skills, thinking skills, decision making, management skills, logical skills</p> <p>v) realise the worth of sacrifice and struggles of parents for the children.</p>			<p>respect for elders, belongingness and tolerance</p>	
15-07-2024 to 20-07-2024	5	<p>To enable the students to :</p> <p>i) inculcate the values of respecting teachers, mankind, sense of duty, punctuality and appreciation</p> <p>ii) acquire proper mannerism and attitude</p> <p>iii) owe respect towards their teachers</p>	<p><b>HORNBILL</b></p> <p><b>9. Browning Version</b></p> <p>The story is an excerpt from the play ‘The Browning Version’ which tells us about the mannerism and attitude the students should have for teachers and the same is applicable in teacher-</p>	Role play	<p>The Students will be able to:</p> <p>i) enhance vocabulary</p> <p>ii) know how to take role play</p> <p>iii) learn how to display mannerism and attitude towards others</p> <p>iv) to be punctual</p> <p>v) develop a sense of duty</p> <p>vi) not to indulge in criticism</p>	<p>Character Sketches/ Practice questions</p>	

			<p>iv) not indulge in destructive criticism</p> <p>teacher relationship. Taplow, the protagonist was asked to do extra work on the last day of his school for his absenteeism and he was kept waiting by the most strict disciplinarian Mr. Crocker Harris. Meanwhile the other teacher came and began to ask him the questions about Mr. Harris, tried to make fun of him, create his negative image and seemed jealous of his popularity in spite of his strictness.</p>			
22-07-2024 to 26-07-2024	4	<p><b>To enable the students to</b></p> <p>i) have respect for</p>	<p><b>Snapshots:</b></p> <p><b>10. Albert Einstein at school</b></p> <p>This biography describes</p>	Story telling	<p>The students will be able to:</p> <p>1. gain insight into the attitude of various teachers towards</p>	Worksheets

		<p>teachers</p> <p>ii) be truthful</p> <p>iii) accept and respect differences</p> <p>iv) have patience</p> <p>v) understand the difference between information gathering and insight formation</p> <p>vi) understand the struggles and conflicts faced by Einstein</p> <p>vii) know that ideas matter rather than the facts</p> <p>viii) realise that an individual has an immense thinking capacity</p> <p>ix) have an honest approach towards solving the problem</p> <p>x) get inspiration</p>	<p>Einstein's clashes with his teachers, his stay as a paying guest, his noisy landlady, his securing a fake medical certificate to study in an Italian college and his expulsion from the school. It also describes the bitter experience of the great scientist at his own school in Germany and exposes the hollowness of school education in Germany.</p>		<p>Einstein</p> <p>2. know about Einstein's nature based on his conversation with various teachers</p> <p>3. understand the difference between information gathering and insight formation</p> <p>4. understand the struggles and conflicts faced by Einstein</p> <p>5. know Einstein's theory of education</p> <p>6. know that ideas matter rather than the facts</p> <p>7. have an honest approach towards solving the problem</p> <p>8. know various incidents from the life of the scientist</p>	
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			<p>from the scientist's life</p> <p>xi) develop thinking skills, analytical skills, reasoning/ logical skills</p>				
29-07-2024 to 31-07-2024	4	<p>To enable the students to</p> <p>i) inculcate values like respect, being responsible, work for excellence, time management, commitment and determination , care and concern, humility, optimism, helping and tolerance.</p> <p>ii) never to lose hope</p> <p>iii) use of practical knowledge</p> <p>iv) duty of a doctor</p> <p>v) responsible and</p>	<p><b>11. Birth</b></p> <p>The chapter is about an impressive story of a doctor's successful efforts to resuscitate the precious life of a new born baby hopelessly given up as a still born child by an experienced mid-wife. It is about a young doctor's relentless efforts – determination, will power, satisfaction, sense of achievement and fulfillment</p>	Discussion	<p>The students will be able to:</p> <p>i) understand the sense of duty.</p> <p>ii) appreciate and accept the selfless service to mankind.</p> <p>iii) realise and create a balance between the knowledge gained and</p>	Comprehension Questions/Textual Exercises	

			<p>optimistic vi) develop comprehension skill, analytical skill, sensitivity, awareness, presence of mind, time management, language skills and thinking skill.</p>				
<p>August 2024 18 Days Periods</p>	<p>01-08-2024 to 02-08-2024</p>	<p>4</p>	<p>To enable the students to i) inculcate the values of respecting one's belief, honesty, confession, truth, faith, and sharing responsibility ii) show honesty and undo wrong doings iii) understand stealing is a crime iv) find solutions to the unforeseen</p>	<p><b>SNAPSHOTS:</b>  <b>13. The Summer of the Beautiful White Horse</b>  The Summer of the Beautiful White Horse is written by William Saroyan. The story is about two Armenian boys – Aram and Mourad who belong to the Garoghlanian family. Their tribe is known for their honesty.</p>	<p>Discussion on various cultures and traditions</p>	<p>The students will be able to i) enhance vocabulary ii) enjoy humour iii) inculcate values like honesty, trust, responsibility etc iv) understand why it is important to restore cultural values v) make decisions vi) develop a family bond</p>	<p>Verbal Questioning</p>

			circumstances				
05-08-2024 to 09-08-2024	3		<p>To imbibe values like love and care for nature</p> <p>To enhance their observational skills and creativity.</p> <p>To understand the love and care of the nature towards all living beings</p> <p>To be able to understand the motherly affection towards an offspring.</p>	<p><b>HORNBILL: 14.The Laburnum Top</b></p> <p>The poem ‘The Laburnum Top’ is written by Ted Hughes. It is about a repaying relationship between the Laburnum tree and the Goldfinch bird. The tree is yellow, silent and death-like and is made alive by the bird and her young ones. The yellow bird has her shelter on the tree where she feeds her young ones. But as soon as the bird leaves to fly in the sky, the tree becomes silent and death-like again.</p>	Art - To draw a picture based on the poem	<p>To enable the students: To enhance their aesthetic skills . To enhance their appreciation for poetry To enhance their creativity and imagination. To read aloud with proper intonation rhyme and rhythm. To appreciate the use of various poetic devices like alliteration, metaphor and simile.</p>	Formative Assessments
12-08-2024 to 17-08-2024	4		<p>To understand the values like love for art and creativity.</p> <p>To accept and acknowledge all forms of art</p> <p>To believe in one’s own talent</p>	<p><b>Hornbill: 15.Landscape of the soul</b></p> <p>In this chapter, the writer contrasts two forms of art – Chinese art and European art by</p>	Brainstorming	<p>To enable the students: To stimulate their imagination. To understand the meanings of the unfamiliar words.</p>	Worksheets

		1	<p>and have respect for each other.</p> <p>To enable the students to prepare bio-data To help the learners to evaluate their strengths and talents.</p>	<p>using two different stories.</p> <p>Writing skill Bio-data: Bio data, also known as biographical data, is information about a person's personal and professional background. This can include information such as a person's name, age, address, education, work experience, and other relevant details.</p>	<p>Pratice questions Extra questions</p>	<p>To learn more the folktales and legends</p> <p>To help the students to write their own bio-data To prepare for the future To learn to make proper sentences with correct grammar and better vocabulary</p>	<p>Slip Test</p>
19-08-2024 to 24-08-2024	4	<p>The Learners would be able to learn the value of Adventurous activities. The learners would be able to develop their basic skills of language They would develop their reading skills and</p>	<p><b>Hornbill:</b> <b>16. The Adventure</b> The chapter 'The Adventure' is a story about Professor Gangadharpant Gaitonde who is strangely in a different world. He knows it is Pune but the facts are different from what</p>	<p>Seminar</p>	<p>The students will be able: To enhance the scientific Temperament To enhance the critical thinking To develop the problem solving skills. The title of the chapter would be open for interactions.</p>	<p>Worksheets</p>	

			listening . The students understand the transition that took place and the scientific theories responsible for it	he believes. He decided to go to Bombay via train ‘Jijamata Express’. When he reached Bombay, things were different. When he decides to investigate the history, he finds some surprising facts.			
27-08-2024 to 31-08-2024	4	The students will be able to: i) understand as to how to face and deal challenging situations and come up with an appropriate solution for the same. ii) understand that the narrator’s bitter experience of Hor came as a stark contrast to accounts he had read of earlier travellers. iii) analyse the trip to be adventurous iv) praise and appreciate the dull but small	<b>Hornbill: 17. Silk Road</b> The story is written by Nick Middleton. This chapter is about the narrator’s journey from slopes of Ravu to Mount Kailash to complete the kora. To bid him farewell, Lhamo gave him a long sleeve sheepskin coat. He hired Tsetan’s car for his journey and took Daniel along to escort him to Darchen.	Brainstorming	The students will be able to: i) realise that people could work as a team to be successful. ii) understand that positive thinking changes the expected results. iii) understand the difficulties faced while travelling in different situations and places. iv) analyse that the author’s experience at Hor was in stark contrast to earlier accounts of the place.	Verbal Questioning	

			<p>town. v)realise that people could work as a team to be successful.</p> <p>vi)understand that the author thought that his positive thinking strategy will work.</p>				
<p>September 2024 17 Days Periods</p>	<p>02-09-2024 to 06-09-2024</p>	<p>4</p>	<p>The students will be able to- i)the true meaning of friendship and loyalty.</p> <p>ii)understand the love for native land.</p> <p>iii)understand and accept the importance of education.</p> <p>iv)maintain good and cordial relationships with others.</p> <p>v)analyse that politics must not involve religious practices.</p> <p>vi) remain lively and energetic irrespective of</p>	<p><b>SNAPSHOTS:</b></p> <p><b>18. The Ghat of the Only World</b></p> <p>The Ghat of the Only World written by Amitav Ghosh is a promise fulfilled by a friend. Before Cancer took its toll and consumed Shahid’s life, he made the author promise him to write about him after he died. The lesson revolves around Shahid, what he liked and how he lived his life as if it were a celebration even after he was diagnosed by the malignant disease.</p>	<p>Dialogue and discussion</p>	<p>Only World: The students will be able to-</p> <p>i)understand that Shahib hated violence and the counterviolence in Kashmir. ii)analyse that he was secular and believed in the separation of politics and religion. iii)understand that he was a brilliant teacher, famous for his skill in the kitchen, was social and love for his native land, Kashmir.</p>	<p>Verbal Questioning</p>

			personal problems.				
09-09-2024 to 13-09-2024	4		<p>To enable the students to</p> <ul style="list-style-type: none"> <li>i) inculcate values like social connect, trust, co-operation, confidence, faith, respect and integrity, ability to fight against all odds.</li> <li>ii) analyse situations and take appropriate decisions.</li> <li>iii) not to make foolish decisions.</li> <li>iv) proper use of power and skills.</li> <li>v) develop comprehension skill, analytical skill, language skills, thinking skill, imagination and creativity, analyse, interpret and</li> </ul>	<p><b>Snapshots:</b> <b>19.Tale of Melon City</b></p> <p>The poem is a humorous one about a just and peaceful but foolish king and his foolish subjects. It is about the atrocities of those in power and their blind followers. The poem is about the foolishness that creates problems for the king and his people as well.</p>	Seminar	<p>The students will be</p> <ul style="list-style-type: none"> <li>i) aware of different situations and dealing them well.</li> <li>ii) realise that peace and liberty are the two strong factors for a state to flourish.</li> <li>iii) able to understand that the rulers of the state should be judicious and sensitive to the needs of the people.</li> <li>iv) to understand that the ruler of the state must understand the problems and needs of the people.</li> <li>v) able to understand that the simplest way to maintain peace and liberty in a state is by following the principles of laissez faire.</li> </ul>	Worksheets

			social responsibility				
23-09-2024 to 28-09-2024	4	<p>To enable the students:</p> <p>i) to inculcate values like courage, togetherness, empathy, appreciation, sensitivity and critical thinking.</p> <p>ii) to create a balance between tradition and Western culture.</p> <p>iii) to understand that tradition is deep rooted in our culture.</p> <p>iv) to develop comprehension skill, analytical skill, language skills and thinking skill.</p>	<p><b>Snapshots:</b></p> <p><b>20. Ranga's marriage</b> The chapter is a humorous narration and the plot is set in the village of Hosahalli. It is about Ranga, the accountant's son who returns to the village after he completes his studies in the city.</p> <p>It is about how impressed by his values, the narrator tries to play match maker and gets him married to Ratna.</p> <p>The chapter highlights about city education, gradually changing mind set and adoption of English customs. It is about the people who were simple in the village, child</p>	Story telling	<p>The students will be able to:</p> <p>i) analyse that the ideas of Ranga about marriage seem apparently quite different but with the passage of time one realizes that he is inherently just like another person in the village.</p> <p>ii) realise the influence of the English language and Western culture in villages.</p> <p>iii) understand that the story brings out the conflict between tradition and modernity and shows how tradition is deep-rooted in our culture.</p>	Textual Exercises	



			marriage, superstitious, blind faith in astrology and horoscopes.			
30-09-2024	2	<p>The students will be able to</p> <p>i) inculcate values like share ideas, freedom to express and acceptance of ideas.</p> <p>ii) make use of appropriate formats, expressions and vocabulary.</p> <p>iii) write formal letters, articles, speech, debate , reports and other short writing skills.</p>	<p><b>Writing skill :</b></p> <p>(a) Speech</p> <p>The students will be able to focus on the major skills of English. They will be able to express their ideas in the form of short and long writing skills.</p>	<p>Classwork will be given</p> <p>Revising the previous knowledge</p>	<p>i) Guide the students to write effectively.</p> <p>ii) Develop and strengthen business relations, enquiries, registering complaints, placing orders, sending replies, apply for a job.</p> <p>iii) Letter to school authorities regarding admission, school issues, requirements and suitability.</p> <p>iv) To write in formal tone, to be precise and to the point.</p> <p>v) Focus on the qualifications and experiences.</p> <p>vi) To write with appropriate vocabulary and expressions.</p> <p>vii) The students will be able to express their ideas by writing short and long writing skills.</p>	Slip Tests

<p>october2024 21 Days Periods</p>	<p>01-10-2024 to 05-10-2024</p>	<p>3</p>	<p>To enable the students to inculcate the values of accepting differences, understanding people, becoming sensible, valuing childhood and freedom  ii) develop individuality  iii) search for and gain innocence like a child  iv) respect elders  v) Enhance reading, comprehending, thinking skills, analytical skills, Literary skills and Observation skills</p>	<p><b>HORNBILL :</b>  <b>21. Childhood</b>  Childhood is written by Marcus Natten. In this poem, the poet thinks over his lost childhood. He wonders about the moment where he lost his innocence and realized that the world is not what he seemed it to be. He recalls when his thoughts changed and he realized the hypocrisy of the people around him. He finally settled down to the idea that his childhood went to some forgotten place and is hidden in the face of an innocent infant.</p>	<p>Brainstorming  Reading loudly</p>	<p>The students will be able to  i) Think, analyse and observe  ii) Know how to identify rhyme scheme  iii) Gain individuality  iv) Differentiate between innocence and maturity  v) Respect different people  vi) Appreciate the poem  vii) Learn where and when has his childhood gone</p>	<p>Worksheets</p>
	<p>07-10-2024 to 11-10-2024</p>	<p>2</p>	<p>The students will be able to  i) inculcate values like share ideas, freedom to express and acceptance of ideas.  ii) make use of appropriate</p>	<p><b>Writing Skill:</b>  (1)Report Writing  (2)Invitations and Replies  The students will be able to focus on the major skills of English. They will be able to express their</p>	<p>Practice questions will be provided</p>	<p>i) Guide the students to write effectively.  ii) Develop and strengthen business relations, enquiries, registering complaints, placing orders, sending replies, apply for a job.  iii) Letter to school authorities regarding</p>	<p>Slip Tests</p>

			<p>formats, expressions and vocabulary.</p> <p>iii) write formal letters, articles, speech, debate , reports and other short writing skills. iv) appreciate the skill of expressing and writing effectively.</p> <p>v) relate with business, issues relating to the environment and the society.</p> <p>vi) writing, reading skill and thinking skill.</p>	<p>ideas in the form of short and long writing skills.</p>		<p>admission, school issues, requirements and suitability.</p> <p>iv) To write in formal tone, to be precise and to the point.</p> <p>v) Focus on the qualifications and experiences.</p> <p>vi) To write with appropriate vocabulary and expressions.</p> <p>vii) The students will be able to express their ideas by writing short and long writing skills.</p>	
14-10-2024 to 19-10-2024	3	<p>To enable the students -</p> <p>i) to inculcate values like courage, empathy, sensitivity, critical thinking and maintaining relations.</p> <p>ii) to learn</p>	<p><b>Snapshots :</b></p> <p><b>4. The Address</b></p> <p>The chapter is a poignant account of a daughter who goes in search of her family's belongings after the Second</p>	<p>Discussion</p> <p>Talk on different wars and its impacts</p>	<p>To enable the students to</p> <p>i) read effectively with proper voice modulation.</p> <p>ii) comprehend the chapter.</p> <p>iii) enhance their vocabulary.</p> <p>iv) analyse the situations and</p>	<p>Practice Execises/ Verbal Questioning</p>	

			<p>from past experiences.</p> <p>iii) to understand to forget the past and move ahead in life.</p> <p>iv) to appreciate family members and family bonding.</p> <p>v) to value the with all that they are blessed with.</p> <p>vi) realize the value of time and not to be upset with old memories.</p> <p>vii) develop the comprehension skill, analytical skill, language skill and thinking skill.</p>	<p>World War. It is about when she finds them, the objects evoke memories of her earlier life. The chapter highlights on how she decides to leave all the belongings behind and resolves to move on.</p>		<p>characters.</p> <p>v) express themselves effectively in the written form.</p> <p>vi) communicate their ideas with a lot of conviction.</p> <p>vii) appreciate the message conveyed.</p> <p>viii) develop their skills.</p> <p>ix) able to analyse the situations and characters of the chapter.</p> <p>x) use appropriate vocabulary and expressions.</p> <p>xi) understand that the story underlines the human dilemma that follows war and death of a loved one.</p>	
21-10-2024 to 26-10-2024	3	<p>To enable the students to:</p> <p>i) to inculcate the values of accepting differences, understanding people,</p>	<p><b>Hornbill:</b></p> <p><b>12.Father to Son</b></p> <p>The poem highlights a universal problem-generation gap and the lack of</p>	<p>Brainstorming</p> <p>Sharing something about their precious moments with their parents</p>	<p>The students will be able to:</p> <p>i) Comprehend and appreciate poetry</p> <p>ii) Learn new words</p> <p>iii) Enhance understanding of literary devices</p>	Formative Assessments	

			<p>respecting elders ,peace and happiness, resolving conflicts, sincerity and perseverance, valuing relations and self realization</p> <p>ii) develop social skills]</p> <p>iii) manage relations iv) handle criticism v) take initiative for making up the loss vi) enhance reading, comprehending, thinking skills, analytical skills and literary skills</p>	<p>communication between father and son. The father lamentsn for not understanding his son and later the realisation dawns upon him that they must live together. The grief of separation causes anger but they make no efforts to make up the loss.</p>		<p>iv) Read with proper intonation and stress</p> <p>v) Express effectively( both verbal and written form)</p> <p>vi) Value relationship</p> <p>vii) Confess and resolve conflicts</p> <p>viii) Learn social norms</p> <p>ix) respect elders and their views</p>	
	28-10-2024 to 30-10-2024						
November 2024 23 Days Periods	01-11-2024						
	04-11-2024 to 08-11-2024						
	11-11-2024 to 16-11-2024						

	18-11-2024 to 22-11-2024						
	25-11-2024 to 30-11-2024						
december 2024 18 Days Periods	02-12-2024 to 07-12-2024						
	09-12-2024 to 13-12-2024						
	16-12-2024 to 20-12-2024						
	30-12-2024 to 31-12-2024						
January 2025 22 Days Periods	01-01-2025 to 05-01-2025						
	06-01-2025 to 10-01-2025						
	13-01-2025 to 18-01-2025						
	20-01-2025 to 24-01-2025						
	27-01-2025						

	to 31-01-2025						
February 2025 21 Days Periods	01-02-2025						
	03-02-2025 to 07-02-2025						
	10-02-2025 to 15-02-2025						
	17-02-2025 to 21-02-2025						
	24-02-2025 to 28-02-2025						
March 2025 20 Days Periods	03-03-2025 to 07-03-2025						
	10-03-2025 to 14-03-2025						
	17-03-2025 to 21-03-2025						
	24-03-2025 to 28-03-2025						

**1.1 Behavioral Skills:** Imbibe values like care, concern, sharing, love, affection, empathy, confidence. Develop Comprehensive skills, Analytical skills, thinking skills, Language skills, develop patriotism, Love for mother tongue, develop scientific temperament, Develop observation skills, Deduction (Reasoning Skills), etc.







Department of Computer Science  
Annual Academic Plan-2024-25

**Grade: XI      Subject: INFORMATICS PRACTICES**

Informatic practices -Preethi Arora.

IP:

# Month # Working Days # Periods	Week & Date Range	# IP	Expected Behavior outcomes.	Topics to be covered during the week	Expected learning outcomes [students will be able to]	Methodology to be used Activities/Projects/Practical's/ Experiments/Art Integration (Mention the serial no. in the Daily Plan)	Assessment Tool(s) through various activities. w.r.to NEP 2020 & NCF 2023 [Ref. 1.2: Suggested Assessment Modes]
June 2024 20 Days Periods	03-06-2024 to 07-06-2024	6	Analytical skills Thinking skills, Reasoning Skills	Introduction to Problem-solving: algorithm, coding, testing, and debugging, flowchart	Ability to understand basics about python	Explain basics of python. Use algorithm and flowcharts for practice.	Practice to write algorithm.
	10-06-2024 to 14-06-2024	6	Analytical skills Thinking skills, Reasoning Skills	algorithm, coding, testing, and debugging, flowchart,		Use algorithm and flowcharts for practice.	Worksheets Brain storming Collaborative learning
	17-06-2024 to 21-06-2024	6	Analytical skills Thinking skills, Reasoning Skills	Familiarization with the basics of Python programming:	Ability to use print statements operators. Understanding the core concepts of programming	Explain the advantages and disadvantages of python. Explain the concept of python programming. Practice basic code for better learning.	Worksheets Brain storming Collaborative learning

	24-06-2024 to 28-06-2024	6	Analytical skills Thinking skills, Reasoning Skills	Data types, Operators,	Ability to use data types and operators.	Explain the importance data type while programming	Worksheets Brain storming Collaborative learning
July 2024 23Days Periods	01-07-2024 to 5-07-2024	6	Analytical skills Thinking skills, Reasoning Skills	Expressions Errors, Flow control	Ability to use python control statements in coding	Explain the importance of flow control in python programming.	Worksheets Collaborative learning
	08-07-2024 to 12-07-2024	6	Analytical skills Thinking skills, Reasoning Skills	Flow control	Ability to use python control statements in coding	Explain lab programs and explain some logics regarding the syllabus.	Worksheets Brain storming Collaborative learning
	15-07-2024 to 20-07-2024	8	Analytical skills Thinking skills, Reasoning Skills	Flow control	Ability to use python control statements in coding	Explain lab programs and explain some logics regarding the syllabus.	Worksheets Brain storming Collaborative learning
	22-07-2024 to 26-07-2024	6	Analytical skills Thinking skills, Reasoning Skills	Strings, List	Students will be able to use strings and list while writing python programs.	Explain how the string working and various string operations Explain with programs for better learning	Worksheets Brain storming Collaborative learning
	29-07-2024 to 31-07-2024	4	Analytical skills Thinking skills, Reasoning Skills	String, List	Students will be able to use strings and list while writing python programs.	Explain how the lists working and various list operations	Worksheets Brain storming Collaborative learning
	01-08-2024 to 02-08-2024	2	Analytical skills Thinking skills, Reasoning Skills	Tuple, Dictionary	Students will be able to use tuple and dictionary concepts and write python programs	Explain the importance tuple and dictionary concepts.	Worksheets Brain storming Collaborative learning

August 2024 18 Days Periods					and perform different operations.		
	05-08-2024 to 09-08-2024	6	Analytical skills Thinking skills, Reasoning Skills	Dictionary	The student will be able to create dictionary in different concepts.	Explain the importance dictionary concepts..	Worksheets Brain storming Collaborative learning
	12-08-2024 to 17-08-2024	6	Analytical skills Thinking skills, Reasoning Skills	Introduction to Python module	The students will be able to use different modules like math, random		Worksheets Brain storming Collaborative learning
	19-08-2024 to 24-08-2024	8	Analytical skills Thinking skills, Reasoning Skills	Unit 1 Computer Systems and Organisation. Evolution of computing devices, components of a computer system and their interconnections	The students will understand how the computer evolution happens and also they can learn how the interconnections are possible in a computer system.	Explain with figures and ppt for better learning.	Worksheets MCQs
	27-08-2024 to 31-08-2024	6	Analytical skills Thinking skills, Reasoning Skills	Hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory (bit, byte, KB, MB, GB, TB, PB)	Students will learn the purpose of hardwares and softwares. They can learn the Memory of a computer in detail.	Explain with figures and power point.	Worksheets MCQs

September 2024 17 Days Periods	02-09-2024 to 06-09-2024	6	Analytical skills Thinking skills, Reasoning Skills	Types of software: System software (Operating systems, system utilities, device drivers),	Understand about different softwares and its uses.	Explain the details about softwares and its importants.	Worksheets MCQs
	09-09-2024 to 13-09-2024	6	Analytical skills Thinking skills, Reasoning Skills	Database Concepts:	Learn the database concepts and its need, Database Management System.	Explain the concept deeply.	Worksheets Brain storming Collaborative learning
	23-09-2024 to 28-09-2024	8	Analytical skills Thinking skills, Reasoning Skills	Relational data model:	Students can ability to learn the concept of domain, tuple, relation, candidate key, primary key, alternate key	Explain the concepts with tables and do practical in lab	Worksheets MCQs
	30-09-2024	2	Analytical skills Thinking skills, Reasoning Skills	DDL	Students will learn how the DDL commands categories.	Teach them with examples.	Worksheets Brain storming Collaborative learning
October 2024 21 Days Periods	01-10-2024 to 05-10-2024	6	Analytical skills Thinking skills, Reasoning Skills	DQL	Students will learn how the queries works.	Explain the queries and how to do.	Worksheets Brain storming Collaborative learning
	07-10-2024 to 11-10-2024	6	Analytical skills Thinking skills, Reasoning Skills	DML	Students will learn the concept DML	Explain the DML commands.	Worksheets Brain storming Collaborative learning
	14-10-2024 to 19-10-2024	6	Analytical skills Thinking skills, Reasoning Skills	SQL	Students can learn the DDL,DQL and DML commands.	Do practical	Worksheets Brain storming Collaborative learning

	21-10-2024 to 26-10-2024	6	Analytical skills Thinking skills, Reasoning Skills	SQL	Students can learn the DDL,DQL and DML commands.	Do practical	Worksheets Brain storming MCQ s
	28-10-2024 to 30-10-2024	4	Analytical skills Thinking skills, Reasoning Skills	SQL	Students can learn the DDL,DQL and DML commands.	Do practical	Worksheets Brain storming Collaborative learning
November 2024 23 Days Periods	01-11-2024	2	Analytical skills Thinking skills, Reasoning Skills	SQL	Learn with queries	Do practical	Worksheets Brain storming
	04-11-2024 to 08-11-2024	6	Analytical skills Thinking skills, Reasoning Skills	Unit 4: Introduction to the Emerging Trends	Learning the concepts Artificial Intelligence, Machine Learning,	Explain with power point.	Worksheets MCQs
	11-11-2024 to 16-11-2024	6	Analytical skills Thinking skills, Reasoning Skills	NLP, AR,VR	Learning the concepts of Natural Language Processing, Immersive experience (AR, VR),	Explain with examples	Worksheets MCQs
	18-11-2024 to 22-11-2024	6	Analytical skills Thinking skills, Reasoning Skills	Robotics, Big data and its characteristics,	Learn different possibilities in robotics	Explain with real life applications.	Worksheets MCQs
	25-11-2024 to 30-11-2024	6	Analytical skills Thinking skills, Reasoning Skills	IoT, Sensors, Smart cities, Cloud Computing and Cloud Services	Learn more about IoT and Smart devices. Learn about cloud storages.	Do case study questions for better learning.	Worksheets and Question papers
December 2024 18 Days	02-12-2024 to 07-12-2024	6	Analytical skills Thinking skills, Reasoning Skills	Computing	Learn about Grid Computing, Block chain technology.	Explain with ppt and real life examples.	Worksheets

Periods	09-12-2024 to 13-12-2024	6	Analytical skills Thinking skills, Reasoning Skills	Revision of Python	Revise the topics and do more practice papers	Do sample papers.	Worksheets
	16-12-2024 to 20-12-2024	6	Analytical skills Thinking skills, Reasoning Skills	Revision of Python	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
	30-12-2024 to 31-12-2024	2	Analytical skills Thinking skills, Reasoning Skills	Revision python	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
January 2025 22 Days Periods	01-01-2025 to 05-01-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision of Python	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
	06-01-2025 to 10-01-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision of DBMS	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
	13-01-2025 to 18-01-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision of DBMS	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
	20-01-2025 to 24-01-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision of Computer system	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
	27-01-2025 to 31-01-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision of emerging trends	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
	01-02-2025	2	Analytical skills Thinking skills, Reasoning Skills	Revision of emerging trends.	Revise the topics and do more practice papers	Do sample papers	Worksheets and Question papers

February 2025 21 Days Periods							
	03-02-2025 to 07-02-2025	6	Analytical skills Thinking skills, Reasoning Skills	Mini Project	Learn to study how the front end and back end of a software works.	Do code for developing their project	
	10-02-2025 to 15-02-2025	6	Analytical skills Thinking skills, Reasoning Skills	Mini Project	Learn to study how the front end and back end of a software works.	Do code for developing their project	
	17-02-2025 to 21-02-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision	Revision	Revision	
	24-02-2025 to 28-02-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision	Revision	Revision	
March 2025 20 Days Periods	03-03-2025 to 07-03-2025	6					
	10-03-2025 to 14-03-2025	6					
	17-03-2025 to 21-03-2025	6					
	24-03-2025 to 28-03-2025	6					

**1.1 Behavioral Skills:** Imbibe values like care, concern, sharing, love, affection, empathy, confidence. Develop Comprehensive skills, Analytical skills, thinking skills, Language skills, develop patriotism, Love for mother tongue, develop scientific temperament, Develop observation skills, Deduction (Reasoning Skills), etc.

**1.2 Suggested Assessment Modes through Activities:** Assignments, Comprehension questions, Textual questions, worksheets, drop quizzes, presentations, Slip test, Open Book assignments, MCQ's, Seminars, Case Studies, Poster presentations, FA's, SA's, Character Sketches, Identification of Literacy, Device marking, Identify marking, Identify diagrams, Map work, Drawing, Coloring, Diagram, Flow Chart, Chart work, Model making, Photographic evidences for experiments, Group activities, Brain storming, Discussions, Role play, Zig Zag puzzles, Word hunt, Charades(Guess Games), Debates, Free writing, Self-evaluation, Peer evaluation, Art Integration etc.



**Slip Test:** To improve students' academic performance and better understanding of the subject by conducting slip test that contains two short questions and one descriptive / problematic question.





Department of **SCIENCE**  
Annual Academic Plan-2024-25  
**Grade: XI      Subject: BIOLOGY**

Reference Text – **NCERT**  
IP: No. of Instructional Periods

Week & Date Range	# IP	Expected Behavior Skills.	LEARNING OBJECTIVES		Methodology to be used	Assessment Tool(s) through various activities. w.r.to NEP 2020 & NCF 2023 [Ref. 1.2: Suggested Assessment Modes]
			EXPECTED LEARNING OUTCOMES [STUDENTS WILL BE ABLE TO]	(Unit/Chapter/ Subtopic to be covered)		
June 2024 20 Days Periods  03-06-2024 to 07-06-2024	3	Develop scientific temperament, Develop observation skills, Thinking skills	1. Differentiates organisms, phenomena and processes based on certain characteristics and salient features functions of plasma membrane, cell wall, nucleus and other Cell organelles	CH-2 Biological Classification  Explain the salient features of the kingdoms Monera ,Porifera and fungi.	ICT 2. Teacher resource video/Diagrams	1. OBSERVING BIRDS IN THE SURROUNDINGS, CLICKING PICTURES AND IDENTIFICATION WITH COMMON AND SCIENTIFIC NAMES.  2. .QUESTIONANSWERS FROM BACK EXERCISE OF NCERT BOOK AND NCERT EXEMPLAR QUESTIONS

10-06-2024 to 14-06-2024	3	Develop scientific temperament, Develop observation skills, Thinking skills	2. Classifies organisms, phenomena and processes, based on certain characteristics / salient features systematically in more scientific and organized manner	Study of the specimens/slides/models and identification with reasons –  Bacteria, Oscillatoria,  Monocotyledonous plant, Dicotyledonous plant	2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams	QUESTIONANSWERS FROM BACK EXERCISE OF NCERT BOOK AND NCERT EXEMPLAR QUESTIONS
17-06-2024 to 21-06-2024				Spirogyra, Rhizopus, Mushroom,		QUESTIONANSWERS FROM BACK EXERCISE OF NCERT BOOK AND NCERT EXEMPLAR QUESTIONS
24-06-2024 to 28-06-2024	3	Develop scientific temperament, Develop observation skills, Thinking skills	Binomial nomenclature, systematics, taxonomy, etc. 3. explains efficiently systems, relationships, processes and phenomena like reproduction in different groups of plants, bacteria, etc	Yeast, Liverwort, Moss, Fern, and lichen.	2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams	NCERT Question Discussion, MCQs Evaluation test Identification of diagrams
July 2024 23Days	3			CH-4		

<p>Periods</p> <p>01-07-2024 to 5-07-2024</p>		<p>Develop scientific temperament, Develop observation skills, Thinking skills</p>	<p>. Learn common and scientific names of two examples of organisms belonging to each phyla/ class.</p>	<p>Animal Kingdom</p> <p>Salient features and classification of animals, non-chordates up to phyla level and chordates up to class level</p>	<p>2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams</p>	<p>Applies scientific terminology for organisms, processes, and phenomena based on internationally accepted conventions.</p> <p>Draws labeled diagrams, flow charts.-</p>
<p>08-07-2024 to 12-07-2024</p>	<p>3</p>	<p>Develop scientific temperament, Develop observation skills, Thinking skills</p>	<p>Students can understand basis of classification</p> <p>Describe the classification of animals, non-chordates up to phyla level. Explain the features of each non chordate phylum.</p>	<ul style="list-style-type: none"> <li>• Basis of Classification</li> <li>• Phylum Porifera</li> <li>• Phylum Platyhelminthes</li> </ul>	<p>Each phyla of animal kingdom can be assigned to a student to prepare powerpoint presentation and explain in class.</p>	<p>Work sheet</p>
<p>15-07-2024 to 20-07-2024</p>	<p>3</p>			<ul style="list-style-type: none"> <li>• Phylum Aschelminthes</li> <li>• Phylum Coelenterata</li> </ul> <p>Phylum Ctenophora</p>		<p>Work sheet</p> <p>QUESTIONANSWERS FROM BACK EXERCISE OF NCERT BOOK AND NCERT EXEMPLAR QUESTIONS</p>

22-07-2024 to 26-07-2024	3			<ul style="list-style-type: none"> <li>• Phylum Annelida</li> <li>• Phylum Echinodermata</li> <li>• Phylum Arthropoda</li> <li>• Phylum Mollusca</li>   <li>• Phylum Hemichordata</li> <li>• Phylum Chordata</li> </ul>		<p><a href="https://diksha.gov.in/play/collection/do_31310347527677542411483?contentId=do_31307124705936998411077">https://diksha.gov.in/play/collection/do_31310347527677542411483?contentId=do_31307124705936998411077</a></p> <p>QUESTIONANSWERS FROM BACK EXERCISE OF NCERT BOOK AND NCERT EXEMPLAR QUESTIONS</p>
29-07-2024 to 31-07-2024	3	Develop scientific temperament, Develop observation skills, Thinking skills	Explain the classification of animals, chordates up to class level.	<ul style="list-style-type: none"> <li>• Division of Vertebrata</li> <li>• Super Class - Pisces</li> </ul>	2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams	Work sheet
	3	Develop scientific temperament, develop observation skills, Thinking skills	Describe salient features of each class of chordate.	<ul style="list-style-type: none"> <li>• Super Class - Tetrapoda</li> </ul>	2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams	Work sheet
	2			Revision	Brainstorming on movements	NCERT Question Discussion, MCQs Evaluation test

					observed in plants.	Identification of diagrams
August 2024 18 Days Periods	2	Develop scientific temperament, develop observation skills, Thinking skills	Describe the salient features of various divisions of kingdom Plantae	CHAPTER-3 PLANT KINGDOM	Activity based teaching in biology lab	With the help of internet, write their levels of organisation of classification and prepare a poster under the topic "Plants Products in Daily Life". Discuss and share it with peers.
01-08-2024 to 02-08-2024				<ul style="list-style-type: none"> <li>• <b>Algae</b></li> <li>• <b>Bryophytes</b></li> <li>• <b>Pteridophytes</b></li> </ul>		
05-08-2024 to 09-08-2024	3			<ul style="list-style-type: none"> <li>• <b>Gymnosperms</b></li> <li>• <b>Angiosperms</b></li> <li>• <b>Plant Life Cycles</b></li> </ul> <p><b>and Alternation of Generations</b></p>		
12-08-2024 to 17-08-2024	3			<b>Chapter-9:</b>	ICT BASED TEACHING	1.QUESTIONANSWERS FROM BACK EXERCISE OF NCERT BOOK AND NCERT EXEMPLAR QUESTIONS 2.  2.DRAW AND PRACTICE THE STRUCTURES OF VARIOUS BIOMOLECULES
				Biomolecules Chemical constituents of living cells: Biomolecules, structure and function of proteins, carbohydrates,	2.Teacher resource video/Diagrams 3.Explanation with Still Models/Diagrams	

19-08-2024 to 24-08-2024	3	Develop scientific temperament, Develop observation skills, Thinking skills		Lipids, and Nucleic acids;  Enzyme - types, properties, enzyme action	2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams	Work sheet
27-08-2024 to 31-08-2024	3	Develop scientific temperament, Develop observation skills, Thinking skills	Explains efficiently systems, relationships, processes and phenomena like reproduction in different groups of plants, bacteria, etc.	Chapter-15:  Plant - Growth and Development 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;	ICT aided teaching	Collection of graphs and their study and interpretation related questions
	2	Develop scientific temperament, Develop observation skills, Thinking skills		Plant growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA	ICT aided teaching	Work sheet
	2	Develop scientific temperament, Develop observation skills, Thinking skills		REVISION		NCERT Question Discussion, MCQs Evaluation test Identification of diagrams

<p>September 2024 17 Days Periods</p> <p>02-09-2024 to 06-09-2024</p>	3	Develop scientific temperament, develop observation skills, Thinking skills		<p>CH-5 Morphology of Flowering Plants Morphology of different parts of flowering plants: root</p>	<p>ICT 2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams</p>	<p>Preparation and study of T.S. of dicot and monocot roots and stems</p> <p><a href="https://diksha.gov.in/play/collection/do_31310347527677542411483?contentId=do_31307124705936998411077">https://diksha.gov.in/play/collection/do_31310347527677542411483?contentId=do_31307124705936998411077</a></p>
<p>09-09-2024 to 13-09-2024</p> <p>23-09-2024 to 26-09-2024</p>	3	Develop scientific temperament, develop observation skills, Thinking skills	Explains efficiently systems, relationships, processes and phenomena like reproduction in different groups of plants, bacteria, etc.	<p>Morphology of different parts of flowering plants: stem, leaf,</p> <p>Inflorescence, flower, fruit and seed.</p> <p>Description of family Solanaceae</p>	Stream activity-based discussion	<p>Writes floral formulae in technical language based on floral diagrams of different flowers such as flowers of pea, onion, etc</p> <p>Question answers from back exercise of ncert book and ncert exemplar questions 2. Draw and define all terms dealt in the chapter</p>
<p>TERM 1 EXAMINATIONS (27/09/2024 TO 07/10/2024)</p>						
<p>October 2024 21 Days Periods</p> <p>07-10-2024 to 11-10-2024</p>	2	Develop scientific temperament, Develop		<p>Chapter-7: Structural Organisation in Animals Morphology, Anatomy and functions of different systems (digestive,</p>	Stream activity-based discussion	<p><a href="https://diksha.gov.in/play/collection/do_31310347527677542411483?contentId=do_31307124705936998411077">https://diksha.gov.in/play/collection/do_31310347527677542411483?contentId=do_31307124705936998411077</a></p>

		observation skills, Thinking skills		circulatory, respiratory, nervous and reproductive) of frog.		
14-10-2024 to 19-10-2024	3		Makes efforts to conserve environment realizing the interdependency and interrelationship in the biotic and abiotic factors of environment	Structural Organisation in Animals Morphology, Anatomy and functions of different systems Digestive system	Study of tissues and diversity in shapes and sizes of plants and animals through permanent slides.	Study of external morphology of FROG through virtual images/models  Work sheet
21-10-2024 to 26-10-2024	3	Develop scientific temperament, Develop observation skills, Thinking skills		Circulatory, Respiratory of frog Nervous and Reproductive system of frog.	2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams	Work sheet
28-10-2024 to 30-10-2024	3	Develop scientific temperament, Develop observation skills, Thinking skills	Structure cell and cell organelles	Chapter-8: 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;	ICT 2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams	Diagrammatically differentiate between eukaryotic and prokaryotic cell, plant and animal cell  Work sheet  1. QUESTION ANSWERS FROM BACK EXERCISE OF NCERT BOOK AND NCERT EXEMPLAR QUESTIONS



				Cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus.		
November 2024 23 Days Periods		<b>REVISION</b>				
04-11-2024 to 08-11-2024	3	Develop scientific temperament, Develop observation skills, Thinking skills	Chapter-10: Cell Cycle and Cell Division Cell cycle, mitosis, meiosis and their significance		Makes efforts to conserve environment realizing the interdependency and interrelationship in the biotic and abiotic factors of environment 4. Relates processes and phenomena with causes and effects.	
11-11-2024 to 16-11-2024	3		Cell Division: Meiosis and their significance		Study of mitosis in onion root tip cells and animals cells (grasshopper) through permanent slides	
18-11-2024 to 22-11-2024	3		Chapter-17: Breathing and Exchange of Gases Respiratory organs in animals (recall only); Respiratory system in humans; mechanism of breathing and its regulation in humans -			
25-11-2024 to 30-11-2024	3	Develop scientific temperament, Develop observation skills, Thinking skills	Exchange of gases, transport of gases and regulation of respiration, Respiratory volume;  Disorders related to respiration - asthma, emphysema, occupational respiratory disorders.		QUESTIONANSWERS FROM BACK EXERCISE OF NCERT BOOK AND NCERT EXEMPLAR QUESTIONS 2. DIAGRAMS PRACTICE  Work sheet	
December 2024		1.Mock Test Qp Discussion 2.Two Set Previous Year Qp Discussion				

18 Days Periods	<b>TERM TWO EXAMINATIONS</b>					
02-12-2024 to 04-12-2024	3	Develop scientific temperament, Develop observation skills, Thinking skills	<ul style="list-style-type: none"> <li>-Describe the composition of blood .</li> <li>-Explain the functions of each component of blood</li> <li>-Understand blood grouping.</li> </ul>	<p>Chapter-18:</p> <p>Body Fluids and Circulation Composition of blood, blood groups, coagulation of blood; composition of lymph and its function;</p>	<p>ICT</p> <p>2.Teacher resource video/Diagrams</p> <p>3.Explanation with Still Models/Diagrams</p>	Communicates the findings and conclusions effectively, such as, those derived from experiments, activities, and projects both in oral and written form using appropriate figures, tables, graphs, and digital forms, takes part in the discussions, argumentations etc
05/12/2024 TO 11/12/2024	3		<ul style="list-style-type: none"> <li>-Explain Rh incompatibility in humans.</li> <li>-Explain clotting of blood</li> <li>Differentiate between open and closed circulation</li> <li>-Compare the heart of vertebrate classes</li> <li>Explain structure of human heart.</li> </ul>	<p>Human circulatory system - Structure of human heart and blood vessels; cardiac cycle, cardiac output, ECG;</p>		
16-12-2024 to 20-12-2024			<ul style="list-style-type: none"> <li>-Describe cardiac cycle.</li> <li>-Explain the ECG of humans.</li> <li>Describe the regulation of cardiac activity.</li> </ul>	<p>Double circulation; regulation of cardiac activity; disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure.</p>		



January 2025 22 Days Periods			Skeletal system and its functions; joints;			Worksheet
01-01-2025 to 05-01-2025	3			Skeletal system and its functions; joints;		
06-01-2025 to 10-01-2025	3	Develop scientific temperament, Develop observation skills, Thinking skills	Disorders of muscular and skeletal systems	Disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout	ICT 2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams	1. QUESTION ANSWERS FROM BACK EXERCISE OF NCERT BOOK AND NCERT EXEMPLAR QUESTIONS
13-01-2025 to 18-01-2025	3		Describe the components of Nervous system in humans	Chapter-21: Neural Control and Coordination Neuron and nerves; Nervous system in humans - central nervous system;	ICT 2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams	
20-01-2025 to 24-01-2025	3	Develop scientific temperament, Develop observation skills, Thinking skills	– Explain the generation and conduction of nerve impulse.	Peripheral nervous system and visceral nervous system; generation and conduction of nerve impulse	ICT 2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams	1. QUESTION ANSWERS FROM BACK EXERCISE OF NCERT BOOK AND NCERT EXEMPLAR QUESTIONS
27-01-2025 to 31-01-2025	3		Describe human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads	Chapter-22: Chemical Coordination and Integration Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal,	ICT 2. Teacher resource video/Diagrams 3. Explanation with Still Models/Diagrams	Prepare a table of endocrine glands, hormones, functions and diseases  Work sheet

			<p>Explain the mechanism of hormone</p> <p>Appreciate the diseases and disorders related to hormones- dwarfism, acromegaly, cretinism, goiter, exophthalmic goiter, diabetes, Addison's disease</p>	pancreas, gonads; mechanism of hormone action (elementary idea);		
<p>February 2025 (21 Days Periods)</p> <p>01-02-2025</p>				<b>Revision</b>		
<p>03-02-2025 to 07-02-2025</p>		<p>Develop scientific temperament, Develop observation skills, Thinking skills</p>	<p>Explains efficiently systems, relationships, processes and phenomena like reproduction in different groups of plants, bacteria, etc.</p>	<p>Role of hormones as messengers and regulators, hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's disease</p>		<p>1.QUESTIONANSWERS FROM BACK EXERCISE OF NCERT BOOK AND NCERT EXEMPLAR QUESTIONS</p>
<p>10-02-2025 to 15-02-2025</p>	3	<p>Develop scientific temperament, Develop observation skills, Thinking skills</p>	<p>Comparative study of the rates of transpiration in upper and lower surface of leaves</p>	<p>Chapter-13: Photosynthesis in Higher Plants Photosynthesis as a means of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea);</p>	<p>1. differentiates organisms, phenomena and processes based on certain characteristics and salient features. 2.Applies scientific terminology for organisms,</p>	<p>Work sheet</p>

17-02-2025 to 21-02-2025	3		The effect of various factors on rate of photosynthesis like size of leaf	Photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration;	processes, and phenomena based on internationally accepted conventions like.	
24-02-2025 to 28-02-2025	3			C3 and C4 pathways; factors affecting photosynthesis. Chapter-14: Respiration in Plants 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.	Plans and conducts investigations and experiments to arrive at and verify the facts, principles, phenomena, or to seek answers to queries on their own.	MCQs in Google form after every chapter
03-03-2025 to 07-03-2025						
	10-03-					

202 5 to 14- 03- 202 5					
17- 03- 202 5 to 21- 03- 202 5					
24- 03- 202 5 to 28- 03- 202 5					

**1.1 Behavioral Skills:** Imbibe values like care, concern, sharing, love, affection, empathy, confidence. Develop Comprehensive skills, Analytical skills, thinking skills, Language skills, develop patriotism, Love for mother tongue, develop scientific temperament, Develop observation skills, Deduction (Reasoning Skills), etc.

**1.2 Suggested Assessment Modes through Activities:** Assignments, Comprehension questions, Textual questions, worksheets, drop quizzes, presentations, Slip test, Open Book assignments, MCQ's, Seminars, Case Studies, Poster presentations, FA's, SA's, Character Sketches, Identification of Literacy, Device marking, Identify marking, Identify diagrams, Map work, Drawing, Coloring, Diagram, Flow Chart, Chart work, Model making, Photographic evidences for experiments, Group activities, Brain storming, Discussions, Role play, Zig Zag puzzles, Word hunt, Charades(Guess Games),Debates, Free writing, Self-evaluation, Peer evaluation, Art Integration etc.







Department of Computer Science  
Annual Academic Plan-2024-25  
**Grade: XI      Subject: Computer Science(083)**

Computer Science with python-Preethi Arora.

IP:

# Month # Working Days # Periods	Week & Date Range	# IP	Expected Behavior outcomes.	Topics to be covered during the week	Expected learning outcomes [students will be able to]	Methodology to be used Activities/Projects/Practical's/ Experiments/Art Integration (Mention the serial no. in the Daily Plan)	Assessment Tool(s) through various activities. w.r.to NEP 2020 & NCF 2023 [Ref. 1.2: Suggested Assessment Modes]
June 2024 20 Days Periods	03-06-2024 to 07-06-2024	6	Analytical skills Thinking skills, Reasoning Skills	Introduction to Problem-solving: algorithm, coding, testing, and debugging, flowchart	Ability to understand basics about python	Explain basics of python. Use algorithm and flowcharts for practice.	Practice to write algorithm.
	10-06-2024 to 14-06-2024	6	Analytical skills Thinking skills, Reasoning Skills	algorithm, coding, testing, and debugging, flowchart,		Use algorithm and flowcharts for practice.	Worksheets Brain storming Collaborative learning
	17-06-2024 to 21-06-2024	6	Analytical skills Thinking skills, Reasoning Skills	Familiarization with the basics of Python programming:	Ability to use print statements operators. Understanding the core concepts of programming	Explain the advantages and disadvantages of python. Explain the concept of python programming. Practice basic code for better learning.	Worksheets Brain storming Collaborative learning

	24-06-2024 to 28-06-2024	6	Analytical skills Thinking skills, Reasoning Skills	Data types, Operators,	Ability to use data types and operators.	Explain the importance data type while programming	Worksheets Brain storming Collaborative learning
July 2024 23Days Periods	01-07-2024 to 5-07-2024	6	Analytical skills Thinking skills, Reasoning Skills	Expressions Errors, Flow control	Ability to use python control statements in coding	Explain the importance of flow control in python programming.	Worksheets Collaborative learning
	08-07-2024 to 12-07-2024	6	Analytical skills Thinking skills, Reasoning Skills	Flow control	Ability to use python control statements in coding	Explain lab programs and explain some logics regarding the syllabus.	Worksheets Brain storming Collaborative learning
	15-07-2024 to 20-07-2024	8	Analytical skills Thinking skills, Reasoning Skills	Flow control	Ability to use python control statements in coding	Explain lab programs and explain some logics regarding the syllabus.	Worksheets Brain storming Collaborative learning
	22-07-2024 to 26-07-2024	6	Analytical skills Thinking skills, Reasoning Skills	Strings, List	Students will be able to use strings and list while writing python programs.	Explain how the string working and various string operations Explain with programs for better learning	Worksheets Brain storming Collaborative learning
	29-07-2024 to 31-07-2024	4	Analytical skills Thinking skills, Reasoning Skills	String, List	Students will be able to use strings and list while writing python programs.	Explain how the lists working and various list operations	Worksheets Brain storming Collaborative learning
	01-08-2024 to 02-08-2024	2	Analytical skills Thinking skills, Reasoning Skills	Tuple, Dictionary	Students will be able to use tuple and dictionary concepts and write python programs	Explain the importance tuple and dictionary concepts.	Worksheets Brain storming Collaborative learning

August 2024 18 Days Periods					and perform different operations.		
	05-08-2024 to 09-08-2024	6	Analytical skills Thinking skills, Reasoning Skills	Dictionary	The student will be able to create dictionary in different concepts.	Explain the importance dictionary concepts..	Worksheets Brain storming Collaborative learning
	12-08-2024 to 17-08-2024	6	Analytical skills Thinking skills, Reasoning Skills	Introduction to Python module	The students will be able to use different modules like math, random	Explain the various modules in python.	Worksheets Brain storming Collaborative learning
	19-08-2024 to 24-08-2024	8	Analytical skills Thinking skills, Reasoning Skills	Unit 1 Computer Systems and Organisation. Evolution of computing devices, components of a computer system and their interconnections	The students will understand how the computer evolution happens and also they can learn how the interconnections are possible in a computer system.	Explain with figures and ppt for better learning.	Worksheets MCQs
	27-08-2024 to 31-08-2024	6	Analytical skills Thinking skills, Reasoning Skills	Hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory (bit, byte, KB, MB, GB, TB, PB)	Students will learn the purpose of hardwares and softwares. They can learn the Memory of a computer in detail.	Explain with figures and power point.	Worksheets MCQs

September 2024 17 Days Periods	02-09-2024 to 06-09-2024	6	Analytical skills Thinking skills, Reasoning Skills	Types of software: System software (Operating systems, system utilities, device drivers),	Understand about different softwares and its uses.	Explain the details about softwares and its importants.	Worksheets MCQs
	09-09-2024 to 13-09-2024	6	Analytical skills Thinking skills, Reasoning Skills	programming tools and language translators (assembler, compiler, and interpreter),	Learn about NLP and other translators. Detailed study about assembler, compiler and interpreter.	Explain the join query with the help of more than one table.	Worksheets Brain storming Collaborative learning
	23-09-2024 to 28-09-2024	8	Analytical skills Thinking skills, Reasoning Skills	application software, Operating System(OS):	Students will learn how the OS and Application software works in a computer system.	Teach how these softwares differ in their features.	Worksheets MCQs
	30-09-2024	2	Analytical skills Thinking skills, Reasoning Skills	Boolean logic: NOT, AND, OR, NAND, NOR, XOR, NOT,	Students will learn how the Boolean logic works with logic circuits.	Teach them how Boolean logic works. And teach them how the logic circuit draws.	Worksheets Brain storming Collaborative learning
October2024 21 Days Periods	01-10-2024 to 05-10-2024	6	Analytical skills Thinking skills, Reasoning Skills	Truth tables and	Students will how the truth table drawn.,	Explain the truth table in detail	Worksheets Brain storming Collaborative learning
	07-10-2024 to 11-10-2024	6	Analytical skills Thinking skills, Reasoning Skills	De Morgan's laws	Students will learn the concept of De Morgan's law	Explain the De Morgan's law with truth table.	Worksheets Brain storming Collaborative learning
	14-10-2024 to 19-10-2024	6	Analytical skills Thinking skills, Reasoning Skills	Logic circuits	Students will learn the concept of Logic circuits from equations.	Explain different logic diagrams and do more practice.	Worksheets Brain storming Collaborative learning

	21-10-2024 to 26-10-2024	6	Analytical skills Thinking skills, Reasoning Skills	Number System: Binary, Octal, Decimal and Hexadecimal number system;	Students will learn how the number system works and how to represent numbers.	Give extra works for better learning	Worksheets Brain storming MCQ s
	28-10-2024 to 30-10-2024	4	Analytical skills Thinking skills, Reasoning Skills	Number conversions	Students can learn how to convert binary to decimal and decimal to binary.	Give extra codes and concepts.	Worksheets Brain storming Collaborative learning
November 2024 23 Days Periods	01-11-2024	2	Analytical skills Thinking skills, Reasoning Skills	Decimal to octal and Octal to decimal	Students can learn how to convert decimal to octal, octal to decimal and octal to binary.	Do smore questions for better understanding.	Worksheets Brain storming
	04-11-2024 to 08-11-2024	6	Analytical skills Thinking skills, Reasoning Skills	Unit 3: Society, Law and Ethics Digital Footprints ,Digital Society and Netizen	Learning the concepts of society laws and ethics.	Explain with power point.	Worksheets MCQs
	11-11-2024 to 16-11-2024	6	Analytical skills Thinking skills, Reasoning Skills	Data Protection:	Ability to learn IPR and OSS	Explain with examples	Worksheets MCQs
	18-11-2024 to 22-11-2024	6	Analytical skills Thinking skills, Reasoning Skills	Cyber Crime:	Learn about different cybercrimes like hacking, phishing, cyber bullying etc..	Explain with real life applications.	Worksheets MCQs

	25-11-2024 to 30-11-2024	6	Analytical skills Thinking skills, Reasoning Skills	Cyber safety: Malware:	Learn how safely browsing the web, identity protection, confidentiality etc..  Explain about viruses, trojans, adware etc..	Do case study questions for better learning.	Worksheets and Question papers
December 2024 18 Days Periods	02-12-2024 to 07-12-2024	6	Analytical skills Thinking skills, Reasoning Skills	E-waste management:	Ability to learn proper disposal of used electronic gadgets.	Explain with ppt and real life examples.	Worksheets
	09-12-2024 to 13-12-2024	6	Analytical skills Thinking skills, Reasoning Skills	Information Technology Act (IT Act)  Technology and society:	Learn Gender and disability issues while teaching and using Computers	Explain with ppt	Worksheets
	16-12-2024 to 20-12-2024	6	Analytical skills Thinking skills, Reasoning Skills	Revision of Python	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
	30-12-2024 to 31-12-2024	2	Analytical skills Thinking skills, Reasoning Skills	Revision python	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
January 2025 22 Days	01-01-2025 to 05-01-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision of Python	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers

Periods	06-01-2025 to 10-01-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision of Number system	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
	13-01-2025 to 18-01-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision of Number conversions	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
	20-01-2025 to 24-01-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision of Computer system organisation.	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
	27-01-2025 to 31-01-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision of society law and ethics.	Revise the topics and do more practice papers	Do sample papers.	Worksheets and Question papers
February 2025 21 Days Periods	01-02-2025	2	Analytical skills Thinking skills, Reasoning Skills	Revision of society law and ethics.	Revise the topics and do more practice papers	Do sample papers	Worksheets and Question papers
	03-02-2025 to 07-02-2025	6	Analytical skills Thinking skills, Reasoning Skills	Mini Project	Learn to study how the front end of a software works.	Do code for developing their project	
	10-02-2025 to 15-02-2025	6	Analytical skills Thinking skills, Reasoning Skills	Mini Project	Learn to study how the front end of a software works.	Do code for developing their project	
	17-02-2025 to 21-02-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision	Revision	Revision	
	24-02-2025 to 28-02-2025	6	Analytical skills Thinking skills, Reasoning Skills	Revision	Revision	Revision	

March 2025 20 Days Periods	03-03-2025 to 07-03-2025	6					
	10-03-2025 to 14-03-2025	6					
	17-03-2025 to 21-03-2025	6					
	24-03-2025 to 28-03-2025	6					

**1.1 Behavioral Skills:** Imbibe values like care, concern, sharing, love, affection, empathy, confidence. Develop Comprehensive skills, Analytical skills, thinking skills, Language skills, develop patriotism, Love for mother tongue, develop scientific temperament, Develop observation skills, Deduction (Reasoning Skills), etc.

**1.2 Suggested Assessment Modes through Activities:** Assignments, Comprehension questions, Textual questions, worksheets, drop quizzes, presentations, Slip test, Open Book assignments, MCQ's, Seminars, Case Studies, Poster presentations, FA's, SA's, Character Sketches, Identification of Literacy, Device marking, Identify marking, Identify diagrams, Map work, Drawing, Coloring, Diagram, Flow Chart, Chart work, Model making, Photographic evidences for experiments, Group activities, Brain storming, Discussions, Role play, Zig Zag puzzles, Word hunt, Charades(Guess Games),Debates, Free writing, Self-evaluation, Peer evaluation, Art Integration etc.



**Slip Test:** To improve students' academic performance and better understanding of the subject by conducting slip test that contains two short questions and one descriptive / problematic question.







Department of Physical Education  
Annual Academic Plan-2024-25

**Grade: XI**

**Subject: Physical Education**

Reference Text – Physical Education

**IP: No. of Instructional Periods**

# Month # Working Days # Periods	Week & Date Range	# IP	LEARNING OBJECTIVES		EXPECTED LEARNING OUTCOMES [STUDENTS WILL BE ABLE TO] Activities/Projects/Practical's/Experiments/A rt Integration (Mention the serial no. in the Daily Plan)	Assessment Tool(s) through various activities. w.r.to NEP 2020 & NCF 2023 [Ref. 1.2: Suggested Assessment Modes]
			Behavior Skills. [Ref. 1.1: For identifying skills]	(Unit/Chapter/Subt opic to be covered)		
June 2024 20 Days Periods	03-06-2024 to 07-06-2024	5	The students will be able to imbibe values like team spirit, ability to develop scientific temperament, care and concern for other players, grasp the meaning, aims, and objectives of Physical Education. The student will be able to make necessary changes to adapt to this new skills.	Unit 1- Changing Trends and Careers in Physical Education 1. Concept, Aims & Objectives of Physical Education	After completing the unit, the students will be able to: Recognize the concept, aim, and objectives of Physical Education.	Comprehension Questions
	10-06-2024 to 14-06-2024	5	The students will be able to imbibe values like national integrity and love to the field. The students can get a good grip about the development of physical education in India after Independence. The student can have a better understanding by knowing this and make informed choices as he move forward.	2. Development of Physical Education in India – Post Independence	After completing the unit, the students will be able to: Identify the Post-independence development in the area of Physical Education.	Slip Test

	17-06-2024 to 21-06-2024	4	To educate students about the sports culture, development of sports surfaces, wearable gear, sports equipment, and technology.	3. Changing Trends in Sports- playing surface, wearable gear and sports equipment, technological advancements	After completing the unit, the students will be able to: Categorize Changing Trends in Sports- playing surface,wearable gear, sports equipment, technological	Formative Assessment
	24-06-2024 to 28-06-2024	5	To make students know the diversity, vivid career options available in the field and to make them capable of making informed career choices.	4. Career options in Physical Education	After completing the unit, the students will be able to: Explore different career options in the field of Physical Education.	Verbal Questioning
July 2024 23Days Periods	01-07-2024 to 5-07-2024	5	To make the child know about the Khelo India Program, thereby ensuring a seal of heritage preservation. To equip the child to be ready to contribute and participate in the same.	5. Khelo-India Program and Fit – India Program	After completing the unit, the students will be able to: Make out the development of Khelo India and Fit India Program. Have an understanding about what all things have to be done to bring development in that area.	Peer Evaluation
	08-07-2024 to 12-07-2024	5	To make the students aware of Concepts and Olympics Values (Excellence, Friendship & Respect) thereby developing patriotism.	Unit 2 - Olympism Value Education 1. Olympism – Concept and Olympics Values (Excellence, Friendship & Respect)	After completing the unit, the students will be able to: • Incorporate values of Olympism in their life.	Comprehension Questions
	15-07-2024 to 20-07-2024	6	To make students learn about Olympic Value Education – Joy of Effort, Fair Play, Respect for Others, Pursuit of Excellence, Balance Among Body, Will & Mind	2. Olympic Value Education – Joy of Effort, Fair Play, Respect for Others, Pursuit of Excellence, Balance Among Body,	After completing the unit, the students will be able to: Differentiate between Modern and Ancient Olympic Games, Paralympics, and Special Olympic games Incorporate values of Olympism	Formative Assessment

				Will & Mind		
	22-07-2024 to 26-07-2024	5	To make students understand ancient and modern Olympic games. To make the students understand about the evolution of Olympic games and how various factors influenced it.	3. Ancient and Modern Olympics	After completing the unit, the students will be able to: Differentiate between Modern and Ancient Olympic Games, Paralympics, and Special Olympic games	Worksheets
	29-07-2024 to 31-07-2024	3	To make the students aware of Olympics - Symbols, Motto, Flag, Oath, and Anthem thereby inculcating integrity, determination and perseverance.	4. Olympics - Symbols, Motto, Flag, Oath, and Anthem	After completing the unit, the students will be able to: Identify the Olympic Symbol and Ideals	Verbal Questioning
August 2024 18 Days Periods	01-08-2024 to 02-08-2024	2	To make students learn about the working and functioning of IOC, NOC and IFS, and other members. It helps them in understanding unity in diversity.	5. Olympic Movement Structure - IOC, NOC, IFS, Other members	After completing the unit, the students will be able to: Describe the structure of the Olympic movement structure	Formative Assessment
	05-08-2024 to 09-08-2024	5	To make the students aware of the meaning and importance of yoga. It promotes the culture and our proud ancient heritage.	Unit 3 - Yoga 1. Meaning and importance of Yoga	After completing the unit, the students will be able to: Recognize the concept of yoga and be aware of the importance; of it	Slip Test
	12-08-2024 to 17-08-2024	4	To make the students have a positive attitude towards Astanga yoga and start developing a spark for Yoga.	2. Introduction to Astanga Yoga	After completing the unit, the students will be able to: Identify the elements of yoga.	Worksheets
	19-08-2024 to 24-08-2024	5	To learn and practice yogic kriya, specially shat Karmas, which stands very similar to mudhras and	3. Yogic Kriyas (Shat Karma)	Identify the Asanas, Pranayama's, meditation, and yogic kriyas	Verbal Questioning

			other rituals mentioned in the holy scriptures.			
	27-08-2024 to 31-08-2024	5	To make the learn and practice types of Pran. To understand the value of life and its preserverce.	4. Pranayama and its types.	After completing the unit, the students will be able to: Classify various yogic activities for the enhancement of concentration	Worksheets
September 2024 17 Days Periods	02-09-2024 to 06-09-2024	5	To make them learn the importance of yoga in stress Management, which improves the quality of life.	5. Active Lifestyle and stress management through Yoga	After completing the unit, the students will be able to: Know about relaxation techniques for improving concentration	Verbal Questioning
	09-09-2024 to 13-09-2024	5	To make the students aware concept of Disability and Disorder, therby elping them to understand the concept of equality and equity.	Unit 4 - Physical Education and Sports for Children with Special Needs 1. Concept of Disability and Disorder	After completing the unit, the students will be able to: Identify the concept of Disability and Disorder.	Worksheets
	23-09-2024 to 28-09-2024	6	To make students aware of different types of disabilities, which calls for the need for being empathetic to the people around us.	2. Types of Disability, its causes & nature (Intellectualdisability ,Physical disability).	After completing the unit, the students will be able to: Outline types of disability and describe their causes and nature.	Slip Test
	30-09-2024	1	To make students learn and develop a good understanding about Disability Etiquette.	3. Disability Etiquette	After completing the unit, the students will be able to: Adhere to and respect children with special needs by following etiquettes.	Formative Assessment
october2024 21 Days Periods	01-10-2024 to 05-10-2024	4	To make the students Understand the aims and objectives Adaptive Physical Education.	4. Aim and objectives of Adaptive Physical Education.	After completing the unit, the students will be able to: Identify possibilities and scope in adaptive physical education	Discussion
	07-10-2024	5	To make students aware of	5. Role of various	After completing the unit, the	Worksheets

to 11-10-2024		role of various professionals for children with special Needs. This helps the child to understand their needs and value people with special needs.	professionals for children with special needs (Counselor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist, and Special Educator)	students will be able to: Relate various types of professional support for children with special needs along with their roles and responsibilities.	
14-10-2024 to 19-10-2024	6	To make the students understand the Meaning & importance of Wellness, Health, and Physical Fitness  To make students aware of the Components/ Dimensions of Wellness, Health, and Physical Fitness. These values not only boosts the child's understanding of the world, but also opens a wide world of possibilities in front of him.	Unit 5 - Physical Fitness, Wellness, and Lifestyle 1. Meaning & importance of Wellness, Health, and Physical Fitness.  2.Components/Dimensions of Wellness, Health, and Physical Fitness	After completing the unit, the students will be able to: • Explain wellness and its importance and define the components of wellness.  After completing the unit, the students will be able to: Classify physical fitness and recognize its importance in life.	Worksheets  Formative Assessment
21-10-2024 to 26-10-2024	6	To make students learn Traditional Sports & Regional Games to promote wellness which improves the pristine heritage and regional games which carries its own tradition.  To develop Leadership qualities through Physical	3. Traditional Sports & Regional Games for promoting wellness  4. Leadership through	After completing the unit, the students will be able to: Distinguish between skill- related and health-related components of physical fitness. Illustrate traditional sports and regional games to promote wellness.  After completing the unit, the students will be able to:	Worksheets  Verbal Questioning

			Activity and Sports in students	Physical Activity and Sports	Relate leadership through physical activity and sports	
	28-10-2024 to 30-10-2024	3	To make students learn First Aid and its management skills thereby being a valued member to the society and his immediate surroundings.	5. Introduction to First Aid – PRICE	After completing the unit, the students will be able to: Illustrate the different steps used in first aid - PRICE.	Slip Test
November 2024 23 Days Periods	01-11-2024	1	To Introduce the students with the terms like test, measurement and evaluation along with its importance. It helps the child to understand the meaning of fair play in games.	Unit 6 - Test, Measurement & Evaluation 1. Define Test, Measurements and Evaluation.	After completing the unit, the student s will be able to: • Define the terms test, measurement, and evaluation,	Comprehension Questions
	04-11-2024 to 08-11-2024	5	To Introduce them the methods of calculating BMI, Waist- hip ratio and Skin fold measurement. This helps him to understand about the overall well being.	2. Importance of Test, Measurements and Evaluation in Sports.	After completing the unit, the student s will be able to: Differentiate norm and criterion referenced standards, Differentiate formative and summative evaluation, • Discuss the importance of measurement and evaluation processes,	Verbal Questioning
	11-11-2024 to 16-11-2024	6	To Introduce them the methods of calculating BMI, Waist- hip ratio and Skin fold measurement' which educates them the worth of a healthy lifestyle.	3. Calculation of BMI, Waist – Hip Ratio, Skin fold measurement (3-site)	After completing the unit, the student s will be able to: Understand BMI: A popular clinical standard and its computation	Worksheets
	18-11-2024 to 22-11-2024	5	To make the students aware of the different somatotypes, thereby educating them about all around the term and how it affects.	4. Somato Types (Endomorphy, Mesomorphy & Ectomorphy)	After completing the unit, the student s will be able to: Differentiate between Endomorphy, Mesomorphy & Ectomorphy h describe the procedure of Anthropometric measurement.	Formative Assessment

	25-11-2024 to 30-11-2024	6	To make the students learn the method to measure health-related fitness. This will help the child to have a better understanding and worth about their own fitness and well being.	5. Measurements of health-related fitness	<p>*Understanding the components of health-related fitness (e.g., cardiovascular endurance, muscular strength, muscular endurance, flexibility, body composition).</p> <p>*Demonstrating the ability to measure and assess each component accurately.</p> <p>*Applying knowledge of health-related fitness to personal health goals and lifestyle choices.</p> <p>*Interpreting fitness assessment results and identifying areas for improvement.</p> <p>*Formulating a personalized fitness plan based on assessment outcomes and individual needs.</p>	Discussion
december 2024 18 Days Periods	02-12-2024 to 07-12-2024	6	The students will learn the meaning and definition & identify the importance of anatomy, physiology, and Kinesiology. All the above gives the child a comprehensive understanding about his health and body.	Unit 7 - Fundamentals of Anatomy, Physiology in Sports 1. Definition and importance of Anatomy and Physiology in Exercise and Sports.	After completing the unit, the students will be able to: • Identify the importance of anatomy and physiology.	Worksheets
			Students will understand the main functions and Classification of Bone and the Types of Joints.	2. Functions of Skeletal System, Classification of Bones, and Types of Joints.	After completing the unit, the students will be able to: Recognize the functions of the skeleton.	Brainstorming
			The students will learn the Properties and Functions of Muscles. It helps him in changing the life style to improve his muscle mass and health.	3. Properties and Functions of Muscles.	After completing the unit, the students will be able to: Figure out the properties and functions of muscles and understand how they work.	Slip Test
	09-12-2024 to	5	The students will learn the Structure and Functions of	4. Structure and Functions of	After completing the unit, the students will be able to:	Formative Assessment



	13-12-2024		the Circulatory System and Heart. This boosts the child's understanding and he starts to develop value and worthy to his irreplaceable body.	Circulatory System and Heart.	Identify and analyses the layout and functions of Circulatory System.	
	16-12-2024 to 20-12-2024	5	<p>The students will learn the Structure and Functions of Respiratory System. The students will learn the meaning and definition &amp; identify the importance of Kinesiology and Biomechanics in sports.</p> <p>To make the students learn the principles of Biomechanics and its function.</p> <p>To make the students understand the concept of Kinetics and Kinematics in Sports</p>	<p>5. Structure and Functions of Respiratory System. Unit 8 - Fundamentals Of Kinesiology And Biomechanics in Sports</p> <p>1. Definition and Importance of Kinesiology and Biomechanics in Sports.</p> <p>2. Principles of Biomechanics</p> <p>3. Kinetics and Kinematics in Sports</p>	<p>After completing the unit, the students will be able to: Understand the anatomy of the respiratory system and describe its working.</p> <p>After completing the unit, the students will be able to:</p> <ul style="list-style-type: none"> <li>• Understand Kinesiology and Biomechanics with their application in sports.</li> </ul> <p>After completing the unit, the students will be able to:</p> <p>Explain biomechanical principles and their utilization in sports and physical education.</p> <p>After completing the unit, the students will be able to/develop :</p> <ul style="list-style-type: none"> <li>*Enhanced Performance Analysis</li> <li>*Injury Prevention and Rehabilitation</li> <li>*Talent Identification and development</li> <li>*Biomechanical Modeling</li> <li>*Performance Enhancement</li> <li>*Data-Driven Training</li> </ul>	<p>Formative Assessment</p> <p>Brainstorming</p> <p>Discussion</p>
	30-12-2024 to 31-12-2024	2	To make the students learn about different types of body movements and the harmful movements that disrupts the natural movement and health.	4. Types of Body Movements - Flexion, Extension, Abduction, Adduction, Rotation, Circumduction, Supination &	After completing the unit, the students will be able to/develop : Illustrate fundamental body movements and their basic patterns.	Worksheets

			To make the students understand the concept of Axis and Planes and its application in body movements.	Pronation  5. Axis and Planes – Concept and its application in body movements	After completing the unit, the students will be able to/develop : A better idea about the Axis and Planes and their application with body movements.	Brainstorming
January 2025 22 Days Periods	01-01-2025 to 05-01-2025	3	The students will identify the definition and importance of Psychology in Physical Education and sports.  The students will be able to differentiate characteristics of growth and development at different stages	Unit 9 - Psychology and Sports 1. Definition & Importance of Psychology in Physical Education & Sports;  2. Developmental Characteristics at Different Stages of Development;	After completing the unit, the students will be able to: • Identify the role of Psychology in Physical Education and Sports  After completing the unit, the students will be able to: Differentiate characteristics of growth and development at different stages	Formative Assessment  Slip Test
	06-01-2025 to 10-01-2025	5	- Students will be able to identify the issues and management related to adolescents.  The students will be able to understand the importance of team cohesion in sports.	3. Adolescent Problems & their Management;  4. Team Cohesion and Sports;	After completing the unit, the students will be able to: Explain the issues related to adolescent behavior and Team Cohesion in Sports.  After completing the unit, the students will be able to: *Understanding the importance of team cohesion in achieving sports performance goals. *Identifying the factors that contribute to team cohesion in sports environments. *Recognizing the role of communication in fostering team cohesion. *Exploring strategies for building trust and camaraderie among team members. *Analyzing the impact of leadership styles on team cohesion. *Learning how to resolve conflicts constructively within a sports team.	Worksheets  Brainstorming

	13-01-2025 to 18-01-2025	6	Students will distinguish different Psychological Attributes like Attention, Resilience, and Mental Toughness.  To make the students aware about of concepts and principles of sports training.  To make students learn and understand the Training Load, Over Load, Adaptation, and Recovery concepts.	5. Introduction to Psychological Attributes: Attention, Resilience, Mental Toughness  Unit 10- Training & Doping in Sports 1. Concept and Principles of Sports Training  2. Training Load: Over Load, Adaptation, and Recovery	After completing the unit, the students will be able to: Correlate the psychological concepts with the sports and athlete specific situations  After completing the unit, the students will be able to: Understand the concept and principles of sports training.  After completing the unit, the students will be able to: Summarise training load and its concept.	Formative Assessment  Discussion  Brainstorming
	20-01-2025 to 24-01-2025	5	To make students Understand the importance of warning up and limbering down exercises.  To introduce the terms like Skills, Techniques, Tactics, and Strategies to the students.	3. Warming-up & Limbering Down – Types, Method & Importance  4. Concept of Skill, Technique, Tactics & Strategies	After completing the unit, the students will be able to: Understand the concept of warming up & limbering down in sports training and their types, method & importance.  After completing the unit, the students will be able to: Acquire the ability to differentiate between the skill, technique, tactics & strategies in sports training.	Worksheets  Comprehension Questions
	27-01-2025 to 31-01-2025	5	To make students aware of the doping substances and their disadvantages in sports.	5. Concept of Doping and its disadvantages	After completing the unit, the students will be able to: Interpret concept of doping.	Formative Assessment
February 2025 21 Days Periods	01-02-2025			<b>REVISION</b>		
	03-02-2025 to 07-02-2025					
	10-02-2025 to 15-02-2025					

	17-02-2025 to 21-02-2025					
	24-02-2025 to 28-02-2025					
March 2025 20 Days Periods	03-03-2025 to 07-03-2025					
	10-03-2025 to 14-03-2025					
	17-03-2025 to 21-03-2025					
	24-03-2025 to 28-03-2025					

**1.1 Behavioral Skills:** Imbibe values like care, concern, sharing, love, affection, empathy, confidence. Develop Comprehensive skills, Analytical skills, thinking skills, Language skills, develop patriotism, Love for mother tongue, develop scientific temperament, Develop observation skills, Deduction (Reasoning Skills), etc.

**1.2 Suggested Assessment Modes through Activities:** Assignments, Comprehension questions, Textual questions, worksheets, drop quizzes, presentations, Slip test, Open Book assignments, MCQ's, Seminars, Case Studies, Poster presentations, FA's, SA's, Character Sketches, Identification of Literacy, Device marking, Identify marking, Identify diagrams, Map work, Drawing, Coloring, Diagram, Flow Chart, Chart work, Model making, Photographic evidences for experiments, Group activities, Brain storming, Discussions, Role play, Zig Zag puzzles, Word hunt, Charades(Guess Games), Debates, Free writing, Self-evaluation, Peer evaluation, Art Integration etc.

**Slip Test:** To improve students' academic performance and better understanding of the subject by conducting slip test that contains two short questions and one descriptive / problematic question.





Department of **SCIENCE**  
Annual Academic Plan-2024-25  
**Grade: XI      Subject: PHYSICS**

Reference Text – Comprehensive Physics Class XI & NCERT Class XII

IP: No. of Instructional Periods

# Month # Working Days # Periods	Week & Date Range	# IP	LEARNING OBJECTIVES		EXPECTED LEARNING OUTCOMES [STUDENTS WILL BE ABLE TO] Activities/Projects/Practical's/Experiments/Art Integration (Mention the serial no. in the Daily Plan)	Methodology to be used  Activities/Projects/Practical's/Experiments/Art Integration (Mention the serial no. in the Daily Plan)	Assessment Tool(s) through various activities. <small>w.r.to NEP 2020 &amp; NCF 2023 [Ref. 1.2: Suggested Assessment Modes]</small>
			Behavior Skills. [Ref. 1.1: For identifying skills]	(Unit/Chapter/Subtopic to be covered)			
June 2024 20 Days Periods	03-06-2024 to 07-06-2024	8	Problem solving  Critical Thinking  Technical Skill	<b>CH 1</b> <b>Physical world</b> Physics - scope and excitement Nature of Physical laws, Physics, technology and society	Define science. Apply scientific method in various life situations. Find the relation between Physics and society Scope of Physics	1. Brainstorming method 2. Discussion 3. Teacher resource video/Diagrams	Group discussion Brain Storming
	10-06-2024 to 14-06-2024	8	Scientific skills  Problem solving  Critical Thinking  Data Analysis. Team Work	<b>CH-2</b> <b>Units and measurements</b> Need for measurement, systems of units, Fundamental and derived units Length, mass and time measurements	Define science. Apply scientific method in various life situations. Find the relation between Physics and society Scope of Physics. Understand the limitations of dimensional analysis.	1. Differentiated Instruction 2. Teacher resource video/Diagrams	MCQS  Worksheet

				<p>Accuracy and precision of measuring instruments, errors in measurement, significant figures</p> <p>Dimensions of physical quantities, dimensional analysis and its applications.</p>			
	17-06-2024 to 21-06-2024	8	<p>Scientific skills</p> <p>Problem solving</p> <p>Critical Thinking</p> <p>development skills</p> <p>Data Analysis.</p> <p>Team Work</p>	<p><b>CH 3 Motion in a straight line</b></p> <p>Frame of reference, motion in a straight line, position time graph, speed and velocity, Elementary concepts of differentiation and integration for describing motion. Uniform and non-uniform motion,</p>	<p>Understand the concept of distance, displacement, velocity and acceleration</p>	<p>1. Brainstorming method</p> <p>2. Discussion</p> <p>3. Teacher resource video/Diagrams</p>	<p>FA</p>
	24-06-2024 to 28-06-2024	8	<p>Scientific skills</p> <p>Problem solving</p> <p>Critical Thinking</p> <p>Data Analysis.</p> <p>Team Work</p>	<p>average speed and instantaneous velocity, uniformly accelerated motion, velocity -time and position - time graphs.</p> <p>Relations for uniformly accelerated motion (graphical treatment</p>	<p>Distinguish average and instantaneous quantities</p> <p>Plot distance time and velocity time graphs</p> <p>Apply equations of motion to solve numerical problems</p>	<p>1. Differentiated Instruction</p> <p>2. Teacher resource video/Diagrams</p>	<p>ASSIGNMENT 1</p> <p>Worksheet</p>
<p>July 2024</p> <p>23Days</p> <p>Periods</p>	01-07-2024 to 5-07-2024	8	<p>Scientific skills</p> <p>Problem solving</p> <p>Critical Thinking</p> <p>Data Analysis.</p> <p>Team Work</p>	<p><b>CH4 Motion in a plane</b></p> <p>Scalar and vector quantities, position and displacement vectors, general vectors and their notations.</p>	<p>Define Scalar and vector Quantities.</p> <p>understand the concept of vectors.</p>	<p>1. Brainstorming method</p> <p>2. Discussion</p> <p>3. Teacher resource video/Diagrams</p>	<p>MCQS</p> <p>Worksheet</p>

				Equality of vectors, Multiplication of vectors by a real number, addition and subtraction of vectors, relative velocity, unit vector.	Explain multiplication, addition and subtraction of vectors		
08-07-2024 to 12-07-2024	8	Scientific skills Problem solving Critical Thinking Data Analysis.	Resolution of a vector in plane, rectangular components, Scalar and vector product of vectors. Motion in a plane, cases of uniform velocity and uniform acceleration- projectile motion, uniform circular motion	Understand resolution of a vector. Explain motion in a plane - uniform velocity and uniform acceleration Explain projectile motion. Solves numerical	1. Differentiated Instruction 2. Teacher resource video/Diagrams	<b>GROUP DISCUSSION</b>	
15-07-2024 to 20-07-2024	8	Scientific skills Problem solving Critical Thinking	<b>CH 5 Laws of Motion</b> 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. Law of conservation of linear momentum and its applications	Define force Understand the concept of inertia momentum State and explain Newton's first and second laws of motion Solves numerical problems Derive the expression for conservation of linear momentum	1. Brainstorming method 2. Discussion 3. Teacher resource video/Diagrams	<b>BRAIN STORMING</b>  Worksheet	
22-07-2024 to 26-07-2024	8	Scientific skills Problem solving Critical Thinking Data Analysis.	Equilibrium of concurrent forces, Static and Kinetic friction, laws of friction, rolling friction, lubrication Dynamics of uniform circular motion, Centripetal force, examples of circular motion- level road and banked road	Explains the different types of friction Understand the importance of banking curve based on scientific concept	1. Differentiated Instruction 2. Teacher resource video/Diagrams	<b>MT1</b>	



	29-07-2024 to 31-07-2024	4	Scientific skills Problem solving Critical Thinking Data Analysis.	<b>CH 6 Work ,Energy and Power</b> Work done by a constant force and a variable force, Kinetic energy, work-energy theorem, power Potential energy,	Differentiate work done by a constant force and a variable force Derive and explain work energy theorem Define power	1. Differentiated Instruction 2. Teacher resource video/Diagrams	<b>ASSIGNMENT 2</b>  Worksheet
August 2024 18 Days Periods	01-08-2024 to 02-08-2024	4	Scientific skills Problem solving Critical Thinking	Potential energy of a spring, conservative forces, conservation of mechanical energy, non- conservative forces, motion in a vertical circle Elastic and inelastic collisions in one and two dimensions.	Identify conservative and non-conservative force. Distinguish elastic and inelastic collision and derive the mathematical expression for collision in 1d and 2D	<b>Problem solving and discussion</b>	<b>MCQS</b>
	05-08-2024 to 09-08-2024	8	Scientific skills Problem solving Critical Thinking	<b>CH7 System of particles and Rotational Motion</b>  Centre of mass of a rigid body, uniform rod, moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications Centre of mass of a two particle system, momentum conservation and center of mass Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motion	Understand the concept of Centre of mass and momentum conservation  Define torque, moment of a force, angular momentum  State the law of conservation of angular momentum Explain the applications of angular momentum	1.Brainstorming method 2.Discussion 3. Teacher resource video/Diagrams	<b>FA</b>  Worksheet
	12-08-2024 to	8	Scientific skills	Centre of mass of a two-particle system, momentum	Define moment of inertia, radius of gyration	1. Differentiated Instruction	<b>MCQS</b>

	17-08-2024		Problem solving Critical Thinking	conservation and center of mass Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motion	Explain the equilibrium of rigid bodies Compare linear and rotational motions	2. Teacher resource video/Diagrams	
	19-08-2024 to 24-08-2024	8	Scientific skills Problem solving Critical Thinking	<b>CH 8 Gravitation</b> Kepler's laws of planetary motion, universal law of gravitation, Acceleration due to gravity and its variation with altitude and depth.	State and explain Kepler's laws of planetary motion, Universal law of gravitation , understand the concept of Acceleration due to gravity and its variation with altitude and depth.	1. Brainstorming method 2. Discussion 3. Teacher resource video/Diagrams	<b>BRAIN STORMING</b>  Worksheet
	27-08-2024 to 31-08-2024	6	Scientific skills Problem solving Critical Thinking	Gravitational potential energy and gravitational potential, escape velocity, orbital velocity of a satellite, Geo- stationary satellites.	Differentiate gravitational potential energy and gravitational potential Define escape velocity, orbital velocity of a satellite Explain geostationary satellites	1. Differentiated Instruction 2. Teacher resource video/Diagrams	<b>ASSIGNMENT 3</b>  Worksheet
September 2024 17 Days Periods	02-09-2024 to 06-09-2024	6	Scientific skills Problem solving Critical Thinking	<b>CH 9 mechanical properties of Solids</b> Elastic behavior, Stress-strain relationship, Hooke's law, Young's modulus, Bulk modulus	Elastic behavior, Stress-strain relationship, Hooke's law, Young's modulus, Bulk modulus	1. Brainstorming method 2. Discussion 3. Teacher resource video/Diagrams	<b>GROUP ACTIVITIES</b>  Worksheet
	09-09-2024 to 13-09-2024	8	Scientific skills Problem solving Critical Thinking	<b>CH 10 Mechanical properties of Fluids</b> Pressure due to a fluid column, Pascal's law and its	Explain pressure due to a fluid column. Explain Pascal's law and understand the working of hydraulic lift, brake etc.	1. Brainstorming method 2. Discussion	<b>GROUP DISCUSSION</b>

			Data Analysis.	applications, effect of gravity on fluid pressure, viscosity, Stoke's law, terminal velocity,	Define viscosity Explain stoke's law	3. Teacher resource video/Diagrams	Worksheet
	23-09-2024 to 28-09-2024	8	Scientific skills  Problem solving  Critical Thinking	streamline and turbulent flow, critical velocity. Bernoulli's theorem and its applications surface energy and surface tension, angle of contact, excess of pressure across a curved surface.  REVISION	Differentiate stream line and turbulent flow state and explain Bernoulli's theorem Define surface tension Explain angle of contact. Explain applications of surface tension. drops and bubbles and capillary rise	1. Differentiated Instruction 2. Teacher resource video/Diagrams	TERM 1
	30-09-2024	1		REVISION	Conceptual understanding through numerical, Assertion Reasoning, Case Studies, HOTS and Competency based questions	Problem solving, Discussion	TERM 1
october2024 21 Days Periods	01-10-2024 to 05-10-2024	6		REVISION	Conceptual understanding through numerical, Assertion Reasoning, Case Studies, HOTS and Competency based questions	Problem solving, Discussion	TERM 1
	07-10-2024 to 11-10-2024	8	Scientific skills  Problem solving  Critical Thinking	<b>CH 12 Thermodynamics</b> Thermal equilibrium, Zeroth law of thermodynamics, heat, work and internal energy, cyclic process	Define the processes in thermodynamics	1. Brainstorming method 2. Discussion 3. Teacher resource video/Diagrams	WORK SHEET

	14-10-2024 to 19-10-2024	8	Scientific skills Problem solving Critical Thinking	First law of thermodynamics, isothermal and adiabatic processes Second law of thermodynamics: reversible and irreversible processes.	Understand and be able to use laws of thermodynamics	1. Differentiated Instruction 2. Teacher resource video/Diagrams	<b>GROUP DISCUSSION</b>  Worksheet
	21-10-2024 to 26-10-2024		Scientific skills Problem solving Critical Thinking Data Analysis.	<b>CH 13 Kinetic theory</b> 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	Derive perfect gas equation.  Explain kinetic theory of gases.  Define rms velocity	1. Brainstorming method 2. Discussion 3. Teacher resource video/Diagrams	<b>ASSIGNMENT</b>
	28-10-2024 to 30-10-2024	4	Scientific skills Problem solving Critical Thinking	Law of equipartition of energy and application to specific heat capacities of gases, State the law of equipartition of energy Understand the concept of mean free path and Avogadro number	Define law of equipartition of energy Understand the concept of mean free path and Avogadro number	1. Differentiated Instruction 2. Teacher resource video/Diagrams	<b>MCQS</b>
November 2024 23 Days Periods	01-11-2024	1	Scientific skills Problem solving Critical Thinking Team Work	<b>CH 14 Oscillations</b> periodic motion- time period, frequency displacement as a function of time, periodic functions, simple harmonic motion and its equation,	Define periodic motion, time period, frequency etc.... Derive expression for simple harmonic motion	1. Brainstorming method 2. Discussion 3. Teacher resource video/Diagrams	<b>MCQS</b>  Worksheet

				phase			
	04-11-2024 to 08-11-2024	8	Scientific skills Problem solving Critical Thinking Data Analysis.	Oscillations of a loaded spring, restoring force and force constant,  energy in SHM, kinetic and potential energies simple pendulum derivation of expression for its time period.	Explain oscillations of a loaded spring Define restoring force and force constant. Understand the concept of energy in SHM., Explain the movement of a simple pendulum Derive the expression for the time period.	1. Differentiated Instruction 2. Teacher resource video/Diagrams	MT2
	11-11-2024 to 16-11-2024	8	Scientific skills Problem solving Critical Thinking	Free, forced and damped oscillations, resonance, transverse and longitudinal waves, speed of wave motion	Define free , forced and damped oscillations Differentiate between transverse and longitudinal waves.	Problem solving and discussion	GROUP DISCUSSION  Worksheet
	18-11-2024 to 22-11-2024	6					
	25-11-2024 to 30-11-2024	8		REVISION	Conceptual understanding through numerical, Assertion Reasoning, Case Studies, HOTS and Competency based questions	Problem solving, Discussion	Revision Worksheet
December 2024 18 Days Periods	02-12-2024 to 07-12-2024	8		REVISION	Conceptual understanding through numerical, Assertion Reasoning, Case Studies, HOTS and Competency based questions	Problem solving, Discussion	TERM 2

	09-12-2024 to 13-12-2024	8		REVISION	Conceptual understanding through numerical, Assertion Reasoning, Case Studies, HOTS and Competency based questions	Problem solving, Discussion	TERM 2
	16-12-2024 to 20-12-2024	8	Scientific skills Problem solving Critical Thinking Data Analysis.	<b>CH 11 Thermal properties of matter</b>  Heat, temperature, thermal expansion of solids, liquids and gases, anomalous expansion of water	Understand thermal expansion of solids, liquids and gases. Explain anomalous expansion of water	1. Brainstorming method 2. Discussion 3. Teacher resource video/Diagrams	MCQS WORK SHEET
	30-12-2024 to 31-12-2024	2	Scientific skills Problem solving Critical Thinking Data Analysis.	, specific heat capacity Calorimetry, latent heat capacity	Explain specific heat capacity Solves numerical problems Define calorimetry	1. Differentiated Instruction 2. Teacher resource video/Diagrams	
January 2025 22 Days Periods	01-01-2025 to 05-01-2025	8	Scientific skills Problem solving Critical Thinking Data Analysis. Team Work	Heat transfer- Conduction, Convection, Radiation, thermal conductivity, Black body radiation, Weins displacement law, Stefan's law, Greenhouse effect	Explain the various types of heat transfer Identifies and analyses various laws related with heat transfer.	Problem solving and discussion	GROUP DISCUSSION
	06-01-2025 to 10-01-2025	8	Scientific skills Problem solving Critical Thinking	<b>CH 15 waves</b>  Displacement, relation for a progressive wave, principle of superposition of waves,	understand the concept of progressive wave Explain the principle of superposition of waves.	1. Brainstorming method 2. Discussion 3. Teacher resource video/Diagrams	MCQS  Worksheet

	13-01-2025 to 18-01-2025	8	Scientific skills Problem solving Critical Thinking Data Analysis.	reflection of waves, standing waves in strings and organ pipes, beats	Explain with diagram standing waves in strings and organ pipes. Explain fundamental mode, harmonics, beats	1. Differentiated Instruction 2. Teacher resource video/Diagrams	FA
	20-01-2025 to 24-01-2025	8		PROJECT: from the given list of CBSE		Expeditionary learning	Group activities Discussion
	27-01-2025 to 31-01-2025	8		PROJECT: From the given list of CBSE		Expeditionary learning	Group activities Discussion
February 2025 21 Days Periods	01-02-2025			REVISION	Conceptual understanding through numerical, Assertion Reasoning, Case Studies, HOTS and Competency based questions	Problem solving, Discussion	Revision Worksheet
	03-02-2025 to 07-02-2025						
	10-02-2025 to 15-02-2025						
	17-02-2025 to 21-02-2025						
	24-02-2025 to 28-02-2025						
March 2025	03-03-2025 to 07-03-2025						

20 Days Periods	10-03-2025 to 14-03-2025						
	17-03-2025 to 21-03-2025						
	24-03-2025 to 28-03-2025						

**1.1 Behavioral Skills:** Imbibe values like care, concern, sharing, love, affection, empathy, confidence. Develop Comprehensive skills, Analytical skills, thinking skills, Language skills, develop patriotism, Love for mother tongue, develop scientific temperament, Develop observation skills, Deduction (Reasoning Skills), etc.

**1.2 Suggested Assessment Modes through Activities:** Assignments, Comprehension questions, Textual questions, worksheets, drop quizzes, presentations, Slip test, Open Book assignments, MCQ's, Seminars, Case Studies, Poster presentations, FA's, SA's, Character Sketches, Identification of Literacy, Device marking, Identify marking, Identify diagrams, Map work, Drawing, Coloring, Diagram, Flow Chart, Chart work, Model making, Photographic evidences for experiments, Group activities, Brain storming, Discussions, Role play, Zig Zag puzzles, Word hunt, Charades(Guess Games),Debates, Free writing, Self-evaluation, Peer evaluation, Art Integration etc.



**Slip Test:** To improve students' academic performance and better understanding of the subject by conducting slip test that contains two short questions and one descriptive / problematic question.



