

**SUBJECT: MATHEMATICS****CLASS - XI****TERM-I: June 2026 to September 2026**

| Month     | No of Working days | Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Activities                                                                                                                                                 |
|-----------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JUNE      | 12                 | <b>SETS</b><br>Sets and their representations, Empty set, Finite and Infinite sets, Equal sets, Subsets, Subsets of a set of real numbers especially intervals (with notations). Universal set. Venn diagrams. Union and Intersection of sets. Difference of sets. Complement of a set. Properties of Complement.<br><br><b>RELATIONS &amp; FUNCTIONS</b><br><br>Ordered pairs. Cartesian product of sets, Number of elements in the Cartesian product of two finite sets. Cartesian product of the set of reals with itself (up to $\mathbb{R} \times \mathbb{R} \times \mathbb{R}$ ). Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function special type of relation. Pictorial representation of a function, domain, co-domain and range of a function. Real valued functions, domain and range of these functions, constant, identity, polynomial, rational, modulus, signum, exponential, logarithmic and greatest integer functions, with their graphs. Sum, difference, product and quotients of functions. |                                                                                                                                                            |
| JULY      | 26                 | <b>TRIGONOMETRIC FUNCTIONS</b><br>Positive and negative angles. Measuring angles in radians and in degrees and conversion from one measure to another. Definition of trigonometric functions with the help of unit circle. Truth of the identity $\sin^2 x + \cos^2 x = 1$ , for all $x$ . Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing $\sin(x \pm y)$ and $\cos(x \pm y)$ in terms of $\sin x$ , $\sin y$ , $\cos x$ & $\cos y$ and their simple applications.<br><br><b>COMPLEX NUMBERS AND QUADRATIC EQUATIONS</b><br>Need for complex numbers, especially $\sqrt{-1}$ , to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers. Argand plane.                                                                                                                                                                                                                                                                                     | <b>ACTIVITY 1</b><br>Venn diagram for three sets<br><br><b>ACTIVITY 2</b><br>Graph of different functions                                                  |
| AUGUST    | 24                 | <b>LINEAR INEQUALITIES</b><br>Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line.<br><br><b>SEQUENCE AND SERIES</b><br><br>Sequence and Series. Arithmetic Mean (A.M.) Geometric Progression (G.P.), general term of a G.P., sum of $n$ terms of a G.P., infinite G.P. and its sum, geometric mean (G.M.), relation between A.M. and G.M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>ACTIVITY 3</b><br>Mind map on complex number<br><br><b>ACTIVITY 4</b><br>Pascal's triangle<br><br><b>ACTIVITY 5</b><br>Sum of first $n$ natural numbers |
| SEPTEMBER | 10                 | <b>REVISION AND FIRST TERM EXAMINATION (SYLLABUS COMPLETED TILL AUGUST)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |

**TERM-II: October 2026 to February 2027**

| Month    | No of Working days | Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Activities                                                                                                                                                         |
|----------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OCTOBER  | 21                 | <p><b>PERMUTATIONS AND COMBINATIONS</b><br/>Fundamental Principle of counting. Factorial <math>n</math>. <math>(n!)</math> Permutations and combinations, derivation of formulae for <math>{}^n P_r</math>, <math>{}^n C_r</math> and their connections, simple applications.</p> <p><b>BINOMIAL THEOREM</b><br/><br/>Historical perspective, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, simple applications.</p> <p><b>STRAIGHT LINES</b><br/><br/>Brief recall of two-dimensional geometry from earlier classes. Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point -slope form, slope-intercept form, two-point form, intercept form. Distance of a point from a line.</p> <p><b>CONIC SECTIONS</b><br/><br/>Sections of a cone: circles, ellipse, parabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.</p> | <p><b>ACTIVITY 6</b><br/><br/>Different equations of straight lines<br/>(Use mind map)</p> <p><b>ACTIVITY 7</b><br/><br/>Geometrical meaning of conic sections</p> |
| NOVEMBER | 16                 | <p><b>CONIC SECTION CONTINUED.....</b><br/>Introduction to Three-dimensional Geometry</p> <p>Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p><b>ACTIVITY 8</b><br/><br/>Graphical representation of octants in three-dimensional geometry</p>                                                                |
| DECEMBER | 21                 | <p><b>LIMITS AND DERIVATIVES</b><br/><br/>Derivative introduced as rate of change both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions trigonometric, exponential and logarithmic functions. Definition of derivative relate it to slope of tangent of the curve, derivative of sum, difference, product and quotient of functions of polynomial and trigonometric functions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p><b>ACTIVITY 9</b><br/><br/><b>Geometrical concepts of derivatives</b></p>                                                                                       |
| JANUARY  | 23                 | <p><b>STATISTICS</b><br/><br/>Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/grouped data.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <p><b>ACTIVITY 10</b><br/><br/><b>Sample space for different experiment in Probability.</b></p>                                                                    |

|                 |          |                                                                                                                                                                                                                                                                                                     |  |
|-----------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                 |          | <b>Probability</b><br><br>Events; occurrence of events, ‘not’, ‘and’ and ‘or’ events, exhaustive events, mutually exclusive events, Axiomatic (set theoretic) probability, connections with other theories of earlier classes. Probability of an event, probability of ‘not’, ‘and’ and ‘or’ events |  |
| <b>FEBRUARY</b> | <b>7</b> | <b>Final examination</b>                                                                                                                                                                                                                                                                            |  |

**Portion of Different Tests / Examinations of the Session 2026-27**

| Name of Exam/ Test | Portion                                                      |
|--------------------|--------------------------------------------------------------|
| Periodic Test I    | Sets Relation and Function, Trigonometry                     |
| Objective Test I   | Complex number, Linear equation, Arithmetic progression      |
| Half Yearly        | April 2026 to September 2026                                 |
| Periodic Test III  | Permutation and combination, Binomial theorem, Straight line |
| Periodic Test IV   | Conic section, Limit and Derivatives                         |
| Objective Test II  | Statistics and probability                                   |
| Annual Exam        | Full syllabus                                                |

**Blue Print of Question Paper**

**HALF YEARLY (2026-27)**

| S. No. | Chapter name                               | MCQ<br>1M | AR<br>1M | Very<br>Short<br>Ans<br>2M | Short<br>Ans<br>3M | Long<br>Ans<br>5M | VBQ<br>4M | Marks     |
|--------|--------------------------------------------|-----------|----------|----------------------------|--------------------|-------------------|-----------|-----------|
| 1      | Sets                                       | 3         |          | 1                          | 1                  |                   |           | 8         |
| 2      | Relation and function                      | 3         |          |                            | 1                  |                   | 1         | 10        |
| 3      | Trigonometry                               | 4         |          | 1                          | 1                  | 1                 |           | 14        |
| 4      | Complex Number sand<br>Quadratic Equations | 2         | 1        | 1                          | 1                  | 1                 | 1         | 17        |
| 5      | Linear Inequalities                        | 2         |          | 1                          | 1                  | 1                 |           | 12        |
| 6      | Sequence and Series                        | 4         | 1        | 1                          | 1                  | 1                 | 1         | 19        |
|        | <b>Total</b>                               | <b>18</b> | <b>2</b> | <b>10</b>                  | <b>18</b>          | <b>20</b>         | <b>12</b> | <b>80</b> |

**Blue Print of Question Paper**

### ANNUAL EXAM(2026-27)

| S.No | Chapter name                               | MCQ<br>1M | AR<br>1M | Very<br>Short<br>Ans 2M | Short<br>Ans<br>3M | Long<br>Ans<br>5M | VBQ<br>4M | Marks |
|------|--------------------------------------------|-----------|----------|-------------------------|--------------------|-------------------|-----------|-------|
| 1    | Sets                                       | 2         | 1        | 1                       |                    | 1                 |           | 10    |
| 2    | Relation and function                      | 1         |          | 1                       |                    |                   |           | 3     |
| 3    | Trigonometry                               | 2         |          |                         | 1                  | 1                 |           | 10    |
| 4    | Complex Numbers and Quadratic Equations    | 1         |          |                         |                    |                   | 1         | 5     |
| 5    | Linear Inequalities                        | 1         |          |                         | 1                  | 1                 |           | 9     |
| 6    | Sequence and Series                        | 1         |          |                         | 1                  |                   |           | 4     |
| 7    | Permutations and Combinations              | 3         |          |                         | 1                  |                   |           | 6     |
| 8    | Binomial Theorem                           | 1         |          | 1                       |                    |                   |           | 3     |
| 9    | Straight Lines                             | 1         |          |                         |                    |                   | 1         | 5     |
| 10   | Conic Sections                             | 1         |          |                         | 1                  |                   |           | 4     |
| 11   | Introduction to Three-dimensional Geometry | 1         |          | 1                       |                    |                   |           | 3     |
| 12   | Limits and Derivatives                     |           | 1        | 1                       | 1                  |                   |           | 6     |
| 13   | Statistics                                 | 1         |          |                         |                    | 1                 |           | 6     |
| 14   | Probability                                | 2         |          |                         |                    |                   | 1         | 6     |
|      | TOTAL                                      | 18        | 2        | 10                      | 18                 | 20                | 12        | 80    |

**SUBJECT: CHEMISTRY**

**CLASS – XI**

#### TERM-I: April 2026 to September 2026

| Month  | No of Working days/Periods | Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Activities |
|--------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| JUNE   | 12                         | <b>Some Basic Concepts of Chemistry:</b> Importance of Chemistry, Nature of Matter, Properties of Matter and their Measurement, Uncertainty in Measurement, Laws of Chemical Combination, Dalton's Atomic Theory, Atomic and Molecular Masses, Mole Concept and Molar Masses, Percentage Composition, Stoichiometry and Stoichiometric Calculations.                                                                                                                                                                                                                                                                                                                                             |            |
| JULY   | 26                         | <b>Structure of Atom :</b> Discovery of Sub-atomic Particles, Atomic Models, Developments Leading to the Bohr's Model of Atom, Bohr's Model for Hydrogen Atom, Towards Quantum Mechanical Model of the Atom, Quantum Mechanical Model of Atom<br><b>Classification of Elements and Periodicity in Properties</b> Why we Need to Classify Elements? Genesis of Periodic Classification, Modern Periodic Law and the Present Form of Periodic Table, Nomenclature of Elements with Atomic Number > 100, Electronic Configuration of Elements and the Periodic Table, Electronic Configuration of Elements and Types of Elements: s-, p-, d-, f- Blocks, Periodic Trends in Properties of Elements. |            |
| AUGUST | 24                         | <b>Chemical bonding :</b> Kossel-Lewis Approach to Chemical Bonding, Ionic or Electrovalent Bond, Bond Parameters, The Valence Shell Electron Pair Repulsion (VSEPR) Theory, Valence Bond Theory, Hybridisation, Molecular Orbital Theory, Bonding in                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |

|                  |           |                                                                                                                                                                                                                                                                                                  |  |
|------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                  |           | Some Homonuclear Diatomic Molecules, Hydrogen Bonding.                                                                                                                                                                                                                                           |  |
| <b>SEPTEMBER</b> | <b>10</b> | <b>Chemical Thermodynamics</b><br>: Thermodynamic Terms, Applications, Measurement of $\Delta U$ and $\Delta H$ : Calorimetry, Enthalpy Change, and $\Delta H$ of a Reaction – Reaction Enthalpy, Enthalpies for Different Types of Reactions, Spontaneity, Gibbs Energy Change and Equilibrium. |  |

**TERM-II: October 2026 to February 2027**

| Month           | No of Working days | Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Activities |
|-----------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>OCTOBER</b>  | <b>21</b>          | <b>Equilibrium</b> : Equilibrium in Physical Processes, Equilibrium in Chemical Processes – Dynamic Equilibrium, Law of Chemical Equilibrium and Equilibrium Constant, Homogeneous Equilibria, Heterogeneous Equilibria, Applications of Equilibrium Constants, Relationship between Equilibrium Constant K, Reaction Quotient Q and Gibbs Energy G, Factors Affecting Equilibria, Ionic Equilibrium in Solution, Acids, Bases and Salts, Ionization of Acids and Bases, Buffer Solutions, Solubility Equilibria of Sparingly Soluble Salts. |            |
| <b>NOVEMBER</b> | <b>16</b>          | <b>Redox Reactions:</b> Classical Idea of Redox Reactions – Oxidation and Reduction Reactions, Redox Reactions in Terms of Electron Transfer Reactions, Oxidation Number, Redox Reactions and Electrode Processes.                                                                                                                                                                                                                                                                                                                           |            |
| <b>DECEMBER</b> | <b>21</b>          | <b>Organic Chemistry</b> – Some Basic Principles and Techniques General Introduction, Tetravalence of Carbon: Shapes of Organic Compounds, Structural Representations of Organic Compounds, Classification of Organic Compounds, Nomenclature of Organic Compounds, Isomerism, Fundamental Concepts in Organic Reaction Mechanism, Methods of Purification of Organic Compounds, Qualitative Analysis of Organic Compounds, Quantitative Analysis                                                                                            |            |
| <b>JANUARY</b>  | <b>23</b>          | <b>Hydrocarbons</b> : Classification, Alkanes, Alkenes, Alkynes, Aromatic Hydrocarbon, Carcinogenic and Toxicity.                                                                                                                                                                                                                                                                                                                                                                                                                            |            |
| <b>FEBRUARY</b> | <b>7</b>           | <b>Revision for Annual Examination</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            |

**Portion of Different Tests / Examinations of the Session 2026-27**

| Name of Exam/ Test | Portion |
|--------------------|---------|
|--------------------|---------|

|                          |                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------|
|                          |                                                                                                          |
| <b>Periodic Test I</b>   |                                                                                                          |
| <b>Periodic Test II</b>  | <b>Some Basic Concepts of Chemistry</b>                                                                  |
| <b>Objective Test I</b>  | <b>Some Basic Concepts of Chemistry, Structure of Atom, , Classification of Elements</b>                 |
| <b>Half Yearly</b>       | <b>Some Basic Concepts of Chemistry, Structure of Atom, Classification of Elements, Chemical bonding</b> |
| <b>Periodic Test III</b> | <b>Thermodynamics</b>                                                                                    |
| <b>Periodic Test IV</b>  | <b>Equilibrium</b>                                                                                       |
| <b>Objective Test II</b> | <b>Thermodynamics, Equilibrium, Redox Reactions</b>                                                      |
| <b>Annual Exam</b>       | <b>(FUL SYLLABUS)</b>                                                                                    |

**Blue Print of Question Paper**  
**ANNUAL EXAM(2026-27)**

| Type                | Marks for each question | Number of questions | Total marks |
|---------------------|-------------------------|---------------------|-------------|
| <b>Objective</b>    | 1                       | 16(12 MCQAS 4 A/R)  | 16          |
| <b>Short answer</b> | 2                       | 5                   | 10          |
| <b>Short answer</b> | 3                       | 7                   | 21          |
| <b>Case based</b>   | 4                       | 2                   | 08          |
| <b>Long answer</b>  | 5                       | 3                   | 15          |
| <b>Total</b>        |                         | 33                  | 70          |

| SL NO                  | CHAPTER                                                  | 1 MARK MCQ | 1 MARK R/A | 2 MARKS | 3 MARKS | 4 MARKS Case Based questions | 5 MARKS | TOTAL |
|------------------------|----------------------------------------------------------|------------|------------|---------|---------|------------------------------|---------|-------|
| <b>1</b>               | SOME BASIC CONCEPTS OF CHEMISTRY                         | 02         | 01         | 01      | 02      | -                            | 01      | 16    |
| <b>2</b>               | STRUCTURE OF ATOM                                        | 05         | 01         | 02      | 01      | 01                           | 01      | 22    |
| <b>3</b>               | CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES | 01         | 01         | 02      | 02      | -                            | -       | 12    |
| <b>4</b>               | CHEMICAL BONDING AND MOLECULAR STRUCTURE                 | 04         | 01         | -       | 02      | 01                           | 01      | 20    |
| <b>TOTAL QUESTIONS</b> |                                                          | 12         | 04         | 05      | 07      | 02                           | 03      | 33    |
| <b>TOTAL MARKS</b>     |                                                          | 12         | 04         | 10      | 21      | 08                           | 15      | 70    |

**SUBJECT: BIOLOGY**

**CLASS - XI**

**TERM-I: April 2026 to September 2026**

| Month  | No of Working days | Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JUNE   | 12                 | <b>UNIT I - DIVERSITY IN THE LIVING ORGANISMS</b><br><b>Ch. 1. The Living World</b><br>What is living ? Biodiversity; Need for classification; taxonomy and systematics; concept of species and taxonomical hierarchy; binomial nomenclature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>PRACTICALS</b><br><b>1.</b> 1. Study and describe locally available common flowering plants, from family Solanaceae (Poaceae, Asteraceae or Brassicaceae can be substituted in case of particular geographical location) including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams), type of root (tap and adventitious); type of stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound). |
| JULY   | 26                 | <b>Ch. 2. Biological Classification</b><br>Five Kingdom Classification; Salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroids.<br><b>Ch. 3. Plant Kingdom</b> Salient features and classification of plants into major groups - Algae, Bryophyta, Pteridophyta, Gymnospermae.<br><b>Ch 4. Animal Kingdom</b> Salient features and classification of animals, non-chordates upto phyla level and chordates up to class level (salient features and distinguishing features of a few examples of each category). <b>UNIT II STRUCTURAL ORGANISATION IN PLANTS &amp; ANIMALS Ch. 5. Morphology of Flowering Plants</b><br>Morphology of different parts of flowering plants: root, stem, leaf, inflorescence, flower, fruit and seed. Description of family Solanaceae | <b>2.</b> Preparation and study of T.S. of dicot and monocot roots and stems (primary).<br><br><b>3.</b> Study of osmosis by potato osmometer.<br><br><b>4.</b> Study of plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or flashy scale leaves of onion bulb).<br><br><b>5.</b> Study of distribution of stomata on the upper and lower surfaces of leaves.                                                                                                                                   |
| AUGUST | 24                 | <b>Ch. 6. Anatomy of Flowering Plants</b><br>Anatomy and functions of tissue systems in dicots and monocots.<br><b>Ch.7. Structural Organisation in Animals</b> Morphology, Anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of frog.<br><b>UNIT III- CELL : STRUCTURE AND FUNCTIONS</b><br><b>Ch. 8. Cell : The Unit of Life</b><br>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, ribosomes, golgi                                                                                                                                                       | <b>6.</b> Comparative study of the rates of transpiration in the upper and lower surfaces of leaves.<br><br><b>7.</b> Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials.<br><br><b>8.</b> Separation of plant pigments through paper chromatography.<br><br><b>9.</b> Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.                                                                                               |

|           |    |                                                                                                                                                                                                                                                                     |  |
|-----------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|           |    | bodies, lysosomes, vacuoles; mitochondria, ribosome, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus.<br><b>Ch. 10. Cell Cycle and Cell Division</b><br>Cell Cycle, mitosis, meiosis and their significance |  |
| SEPTEMBER | 10 |                                                                                                                                                                                                                                                                     |  |

**TERM-II : October 2026 to February 2027**

| Month    | No of Working days | Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OCTOBER  | 21                 | <b>Ch. 9. Biomolecules</b> Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, nucleic acids; Enzymes - types, properties, enzyme action.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>10.</b> Test for presence of urea in urine.<br><b>11.</b> Test for presence of sugar in urine.<br><b>12.</b> Test for presence of albumin in urine.<br><b>13.</b> Test for presence of bile salts in urine.                                                                                                                                                                                                                                                                                                                                                                     |
| NOVEMBER | 16                 | <b>UNIT IV- PLANT PHYSIOLOGY</b><br><br><b>Ch. 11 Photosynthesis in Higher Plants</b> Photosynthesis as a means of autotrophic nutrition; early experiments, site of photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C <sub>3</sub> and C <sub>4</sub> pathways; factors affecting photosynthesis.<br><b>Ch. 12, Respiration in Plants</b> 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<br><b>Ch. 13. Plant growth and Development</b> Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of | <b>B. Study and Observe the following (spotting):</b><br><br><b>1.</b> Parts of a compound microscope.<br><br><b>2.</b> Specimens/slides/models and identification with reasons - Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.<br><br><b>3.</b> Virtual specimens/slides/models and identifying features of - Amoeba, Hydra, liver fluke, Ascaris, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit. |



|                 |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                    |
|-----------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |           | developmental processes in a plant cell; plant growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                    |
| <b>DECEMBER</b> | <b>21</b> | <p><b>UNIT V -HUMAN PHYSIOLOGY</b></p> <p><b>Ch-14: Breathing and Exchange of Gases</b><br/>Respiratory organs in animals , Respiratory system in humans; mechanism of breathing and its regulation in humans - exchange of gases, transport of gases and regulation of respiration, respiratory volume; disorders related to respiration - asthma, emphysema, occupational respiratory disorders.</p> <p><b>Ch-15: Body Fluids and Circulation</b><br/>Composition of blood, blood groups, coagulation of blood; composition of lymph and its function; human circulatory system - Structure of human heart and blood vessels; cardiac cycle, cardiac output, ECG; double circulation; regulation of cardiac activity; disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure.</p> <p><b>Ch-16: Excretory Products and their Elimination</b><br/>Modes of excretion - ammonotelism, ureotelism, uricotelism; human excretory system – structure and function; urine formation, osmoregulation; regulation of kidney function - renin - angiotensin, atrial natriuretic factor, ADH and diabetes insipidus; role of other organs in excretion; disorders - uremia, renal failure, renal calculi, nephritis; dialysis and artificial kidney, kidney transplant.</p> | <p><b>4.</b> Mitosis in onion root tip cells and animal's cells (grasshopper) from permanent slides.</p> <p><b>5.</b> Types of inflorescence (cymose and racemose).</p> <p><b>6.</b> Human skeleton and different types of joints with the help of virtual images/models only.</p> |
| <b>JANUARY</b>  | <b>23</b> | <p><b>Ch17: Locomotion and Movement</b><br/>Types of movement - ciliary, flagellar, muscular; skeletal muscle, contractile proteins and muscle contraction; skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout. <b>Ch-18: Neural Control and Coordination</b> Neuron and nerves; Nervous system in humans - central nervous system; peripheral nervous system and visceral nervous system; generation and conduction of nerve impulse <b>Ch- 19: Chemical Coordination and Integration</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                    |

|                 |          |                                                                                                                                                                                                                                                                                                                                                                                    |  |
|-----------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                 |          | Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads; mechanism of hormone action (elementary idea); role of hormones as messengers and regulators, hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goitre, diabetes, Addison's disease. |  |
| <b>FEBRUARY</b> | <b>7</b> | <b>REVISION</b>                                                                                                                                                                                                                                                                                                                                                                    |  |

**Portion of Different Tests / Examinations of the Session 2026-27**

| <b>Name of Exam/ Test</b> | <b>Portion</b>                                                                                                                 |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>Periodic Test I</b>    | <b>The Living World, Biological Classification, Plant Kingdom, Animal Kingdom</b>                                              |
| <b>Periodic Test II</b>   | <b>Morphology of Flowering Plants, Anatomy of Flowering Plants, Structural Organisation in Animals, cell: The unit of life</b> |
| <b>Objective Test I</b>   | <b>All the eight chapters.</b>                                                                                                 |
| <b>Half Yearly</b>        | <b>April 2026 to September 2026<br/>(50% OF THE ENTIRE SYLLABUS)</b>                                                           |
| <b>Periodic Test III</b>  | <b>Photosynthesis in higher plants, Respiration in plants, Plant growth and Development, Breathing and Exchange of Gases</b>   |
| <b>Periodic Test IV</b>   |                                                                                                                                |
| <b>Objective Test II</b>  | <b>All the chapters taught.</b>                                                                                                |
| <b>Annual Exam</b>        | <b>October 2026 to February 2027<br/>(NEXT 50% OF THE ENTIRE SYLLABUS)</b>                                                     |

**Blue Print Of Question Paper  
HALF YEARLY (2026-27)**

| <b>S.No</b> | <b>Chapter name</b> | <b>MCQ</b> | <b>A/R</b> | <b>Very Short Ans</b> | <b>Short Ans</b> | <b>CASE BASED</b> | <b>Long Ans</b> | <b>Marks</b> |
|-------------|---------------------|------------|------------|-----------------------|------------------|-------------------|-----------------|--------------|
| <b>1</b>    | The Living World    | <b>1</b>   | <b>1</b>   |                       | <b>1</b>         |                   |                 | <b>5</b>     |

|          |                                    |          |          |          |          |          |          |           |
|----------|------------------------------------|----------|----------|----------|----------|----------|----------|-----------|
| <b>2</b> | Biological Classification          | <b>1</b> |          | <b>1</b> | <b>1</b> |          | <b>1</b> | <b>11</b> |
| <b>3</b> | Plant Kingdom                      | <b>1</b> |          | <b>1</b> | <b>1</b> |          |          | <b>6</b>  |
| <b>4</b> | Animal Kingdom                     | <b>1</b> | <b>1</b> | <b>1</b> |          |          |          | <b>4</b>  |
| <b>5</b> | Morphology of Flowering Plants     | <b>2</b> |          |          |          | <b>1</b> |          | <b>6</b>  |
| <b>6</b> | Anatomy of Flowering Plants        | <b>2</b> |          | <b>1</b> | <b>1</b> | <b>1</b> |          | <b>11</b> |
| <b>7</b> | Structural Organisation in Animals | <b>1</b> | <b>1</b> |          | <b>1</b> |          |          | <b>5</b>  |
| <b>8</b> | Cell-The Unit of Life              | <b>2</b> |          | <b>1</b> | <b>1</b> |          | <b>1</b> | <b>12</b> |
| <b>9</b> | Cell Cycle and Cell Division       | <b>1</b> | <b>1</b> |          | <b>1</b> |          | <b>1</b> | <b>10</b> |

### Blue Print Of Question Paper

#### ANNUAL EXAM(2026-27)

| S.No      | Chapter name                             | MCQ      | A/R      | Very Short Ans | Short Ans | Case Based | Long Ans | Marks     |
|-----------|------------------------------------------|----------|----------|----------------|-----------|------------|----------|-----------|
| <b>1</b>  | The Living World                         | <b>1</b> | <b>1</b> |                |           |            |          | <b>15</b> |
| <b>2</b>  | Biological Classification                | <b>1</b> |          | <b>1</b>       |           |            | <b>1</b> |           |
| <b>3</b>  | Plant Kingdom                            |          | <b>1</b> |                | <b>1</b>  |            |          |           |
| <b>4</b>  | Animal Kingdom                           | <b>1</b> |          |                |           |            |          |           |
| <b>5</b>  | Morphology of Flowering Plants           |          |          |                | <b>1</b>  |            |          | <b>10</b> |
| <b>6</b>  | Anatomy of Flowering Plants              | <b>1</b> |          | <b>1</b>       |           |            |          |           |
| <b>7</b>  | Structural Organisation in Animals       |          |          |                |           | <b>1</b>   |          |           |
| <b>8</b>  | Cell-The Unit of Life                    | <b>1</b> |          |                | <b>1</b>  |            |          | <b>15</b> |
| <b>9</b>  | Biomolecules                             | <b>1</b> | <b>1</b> |                |           |            | <b>1</b> |           |
| <b>10</b> | Cell Cycle and Cell Division             | <b>1</b> |          |                | <b>1</b>  |            |          |           |
| <b>11</b> | Photosynthesis in higher plants          | <b>1</b> |          | <b>1</b>       |           |            |          | <b>12</b> |
| <b>12</b> | Respiration in plants                    | <b>1</b> | <b>1</b> |                | <b>1</b>  |            |          |           |
| <b>13</b> | Plant growth and Development             | <b>1</b> |          |                | <b>1</b>  |            |          |           |
| <b>14</b> | Breathing and Exchange of Gases          |          |          |                |           |            | <b>1</b> | <b>18</b> |
| <b>15</b> | Body Fluids and Circulation              | <b>1</b> |          |                |           |            |          |           |
| <b>16</b> | Excretory Products and their Elimination |          |          | <b>1</b>       |           | <b>1</b>   |          |           |
| <b>17</b> | Locomotion and Movement                  | <b>1</b> |          | <b>1</b>       |           |            |          |           |
| <b>18</b> | Neural Control and Coordination          |          |          |                |           |            |          |           |
| <b>19</b> | Chemical Coordination and Integration    |          |          |                | <b>1</b>  |            |          |           |

**SUBJECT: English**

**CLASS – XI**

**TERM-I : April 2026 to September 2026**

| <b>Month</b>     | <b>No of Working days</b> | <b>Unit Hornbill/Snapshot</b>                                                                                                                                                  | <b>Reading, Grammar &amp; Advanced Writing Skills</b>                                                                                                                  | <b>Suggested Activities/Projects</b>                                                                                                                                                                                                             |
|------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>APRIL</b>     |                           | NA                                                                                                                                                                             |                                                                                                                                                                        |                                                                                                                                                                                                                                                  |
| <b>MAY</b>       |                           | NA                                                                                                                                                                             |                                                                                                                                                                        |                                                                                                                                                                                                                                                  |
| <b>JUNE</b>      | 12                        | i. The Portrait of a Lady (Prose)<br>ii. A Photograph (Poem)                                                                                                                   | Short Writing Task: i. Classified Advertisement (a) Situation Vacant (b) Situation Wanted (c) To Let (d) For Sale (e) For Purchase (f) Travel and Tour (g) Educational | i. Collecting ads from newspaper and pasting it in their note books.<br>ii. Discussion on the theme changing relationships between generations in modern Times<br>iii. Speech on the theme of loss and passage of time as reflected in the poem. |
| <b>JULY</b>      | 26                        | i. The Summer of The Beautiful White Horse (Prose)<br>ii. We're Not Afraid to Die.....If We Can Be Together (Prose)<br>ii. The Laburnum Top (Poem)<br>iii. The Address (Prose) | i. Poster<br>ii. Long compositions<br>a. Speech writing<br>b. Debate writing<br>iii. Grammar: Practice Of Questions On Gap Filling (Tenses, Clauses)                   | i.. Comic strips based on the Ch.- The Summer of the Beautiful White Horse.<br>ii. Speech on the effects of war on individuals and society.<br>iii.A diary entry as the narrator after visiting the house and seeing her belongings.             |
| <b>AUGUST</b>    | 24                        | i. Discovering Tut: The Saga Continues (Prose) ii. The Voice Of The Rain (Poem)                                                                                                | i. Note Making and Summarization<br>ii. Grammar: Questions on Reordering/ Transformation of Sentences                                                                  | i. Debate on whether scientific investigation of historical remains is justified or not.<br>ii. A short presentation on the life and historical significance of King Tutankhamun                                                                 |
| <b>SEPTEMBER</b> | 10                        | Revision                                                                                                                                                                       | i. Unseen passage: Case based passage with Verbal/ Visual inputs like statistical data, chart etc.                                                                     | ASL                                                                                                                                                                                                                                              |

| Month    | No of Working days | Unit                                              |                                                                                                                                                                                                                  | Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------|--------------------|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OCTOBER  | 21                 | i. Mother's Day<br>ii. Childhood (Poem)           | Practice on<br>i. Classified advertisement<br>ii. Transformation of sentences .                                                                                                                                  | i. Role Play (Mother's Day )<br>i. Write a brief note on one of your childhood experiences (good or bad) and present the same in class.<br>Project Work                                                                                                                                                                                                                                                                                                    |
| NOVEMBER | 16                 | ii. Birth (Prose)<br>ii. Father to Son (Poem)     | Practice of<br>ii. Long compositions<br>a. Speech writing<br>b. Debate writing<br>iii. Grammar: Practice Of Questions On Gap Filling (Tenses, Clauses)<br>Poster on Adolescence                                  | i. A diary entry from the perspective of Andrew Manson describing his experience after the childbirth incident.<br>ii. A value-based discussion on the topic: "Is presence of mind more important than experience?"<br>Letter Writing: Write a letter from father to son OR son to father expressing feelings not spoken in the poem.<br>Group Discussion: Topic: Generation gap – causes and solutions<br>Students share ideas and real-life connections. |
| DECEMBER | 21                 | i. The Adventure (Prose)<br>ii. Silk Road (Prose) | Practice on<br>i. Classified advertisement<br>ii. Transformation of sentences<br>Poster Making: Topic: Life on the Silk Road or Challenges of High-Altitude Travel<br>Questions on Gap filling (Tenses, Clauses) | Debate on: What if the Marathas had won the Third Battle of Panipat?<br>Students can explore how history might have changed (like in the story).<br>Diary Writing: Diary entry as Professor Gaitonde after returning to the real world. (Include confusion, curiosity, and reflection)                                                                                                                                                                     |

|                 |           |                                          |                                                                                                                                                                                                 |                                                                                                                                                                     |
|-----------------|-----------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |           |                                          |                                                                                                                                                                                                 | <b>Travel Brochure Making:</b><br>Designing a brochure on the Silk Road journey (places, culture, challenges)/ students can be encouraged to prepare a travel blog. |
| <b>JANUARY</b>  | <b>23</b> | <b>ii. The Tale of Melon City (Poem)</b> | <b>Note making and summarization (revision)</b><br><b>Comprehension of unseen passage (Revision)</b><br><b>Revision of writing section</b><br><b>Questions on Gap filling (Tenses, Clauses)</b> | <b>Role play</b><br><br><b>ASL</b>                                                                                                                                  |
| <b>FEBRUARY</b> | <b>7</b>  | <b>Revision</b>                          | <b>Revision</b>                                                                                                                                                                                 | <b>Revision</b>                                                                                                                                                     |

**Portion of Different Tests / Examinations of the Session 2026-27**

| <b>Name of Exam/ Test</b> | <b>Portion</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Periodic Test I</b>    | <b>i. The Portrait of a Lady (Prose)</b><br><b>ii. A Photograph (Poem)</b><br><b>iii. Classified Advertisement</b><br><b>iv. Integrated Grammar/ re-ordering/transformation of sentences</b>                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Periodic Test II</b>   | <b>i. The Summer of The Beautiful White Horse (Prose)</b><br><b>ii. We're Not Afraid to Die.....If We Can Be Together (Prose)</b><br><b>ii. The Laburnum Top (Poem)</b><br><b>iii. Poster Making</b><br><b>iv. Integrated Grammar</b>                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Objective Test I</b>   | <b>i. The Address (Prose)</b><br><b>ii. Discovering Tut: The Saga Continues (Prose)</b><br><b>iii. The Voice Of The Rain (Poem)</b><br><b>iv. Integrated Grammar</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Half Yearly</b>        | <b>Reading Skills : (i) Unseen passages , (ii)Note Making and Summarization</b><br><b>Grammar and Creative Writing Skills: Classified Advertisement, Poster Making, Debate , Speech</b><br><b>Integrated Grammar , Re-ordering/transformation of sentences, Questions on Gap filling (Tenses, Clauses)</b><br><b>Literature Text Book And Supplementary Reading Text:</b><br><b>(i)The Portrait of a Lady (ii)A Photograph (iii) The Summer of the Beautiful White Horse (iv) We're Not Afraid to Die ...If We Can Be Together (v) Laburnum Top (vi) The Address (vii) Discovering Tut the Saga Continues (viii) The Voice of the Rain</b> |
| <b>Periodic Test III</b>  | <b>i. Mother's Day</b><br><b>ii. Childhood (Poem)</b><br><b>iii. Re-ordering/transformation of sentences</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|                          |                                                                                                                                               |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Periodic Test IV</b>  | <b>i. Birth (Prose)</b><br><b>ii. Father to Son (Poem)</b><br><b>iii. Integrated Grammar</b>                                                  |
| <b>Objective Test II</b> | <b>i. The Adventure (Prose)</b><br><b>ii. Silk Road (Prose)</b><br><b>iii. The Tale of Melon City (Poem)</b><br><b>iv. Integrated Grammar</b> |
| <b>Annual Exam</b>       | <b>ENTIRE SYLLABUS</b>                                                                                                                        |

**Blue Print of Question Paper**  
**ENGLISH CORE (301)**  
**CLASS –XI (2025-26)**  
**Section A**

**Reading Skills—26 Marks**

- I. Reading Comprehension through Unseen Passages 10+8=18 Marks
  1. One unseen passage to assess comprehension, interpretation, analysis, inference and vocabulary. The passage may be factual, descriptive or literary.
  2. One unseen case-based factual passage with verbal/visual inputs like statistical data, charts etc. to assess comprehension, interpretation, analysis, inference and evaluation.

Note: The combined word limit for both the passages will be 600-750. Multiple Choice Questions/ Objective Type Questions will be asked.

3. Note Making and Summarization based on a passage of approximately 200-250 words.

- i. Note Making: 5 Marks
- ii. Summary (up to 50 words): 3 Marks

**Section B**

**Grammar and Creative Writing Skills– 23 Marks**

**II. Grammar 7 Marks**

4. Questions on Gap filling (Tenses, Clauses)
5. Questions on re-ordering/transformation of sentences  
(Total seven questions to be done out of the eight given).

**III. Creative Writing Skills 16 Marks**

6. Short writing task – Classified Advertisements, up to 50 words. One out of the two given (3 marks)
7. Short writing task –Poster up to 50 words. One out of the two given questions to be answered. (3 marks)
8. Long Writing task: Speech in 120-150 words based on verbal / visual cues related to contemporary / age-appropriate topic. One out of the two given questions to be answered. (5 Marks)
9. Long Writing Task: Debate based on visual/verbal inputs in 120-150 words, thematically related to contemporary, topical issues. One out of the two given questions to be answered. (5 Marks)

**Section C**

**Literature Text Book and Supplementary Reading Text- -31 M**

This section will have variety of assessment items including Multiple Choice Questions, objective Type Questions, Short Answer Type Questions and Long Answer Type Questions

10. One Poetry extract out of two, from the book Hornbill (3x1=3 Marks)
11. One Prose extract out of two, from the book Hornbill (3x1=3 Marks)
12. One prose extract out of two, from the book Snapshots. . (4x1=4 Marks)
13. Two Short answer type questions (one from Prose and one from Poetry, from the book Hornbill), out of four, to be answered in 40-50 words. . (3x2=6 Marks)
14. One Short answer type question, from the book Snapshots, to be answered in 40- 50 words. One out of two questions to be done (3x1=3 Marks )
15. One Long answer type question, from Prose/Poetry of Hornbill, to be answered in 120-150 words. Any one out of two questions to be done. ( 1x6=6 Marks)
16. One Long answer type question, based on the chapters from the book Snapshots, to be answered in 120-150 words. Any one out of two questions to be done. (1x6=6 Marks )

Hornbill: English Reader

- The Portrait of a Lady (Prose)
- A Photograph (Poem)
- “We’re Not Afraid to Die... if We Can Be Together

- Discovering Tut: The Saga Continues
  - The Laburnum Top (Poem)
  - The Voice of the Rain (Poem)
  - Childhood (Poem)
  - The Adventure
  - Silk Road (Prose)
  - Father to Son
  - 2. Snapshots: Supplementary Reader
  - The Summer of the Beautiful White Horse (Prose)
  - The Address (Prose)
  - Mother's Day (Play)
  - Birth (Prose)
  - The Tale of Melon City
- INTERNAL ASSESSMENT  
 Assessment of Listening Skills  
 Assessment of Speaking Skills  
 Project Work  
 05 marks.  
 05 Marks  
 10 Marks

## SUBJECT- PHYSICS

| MONTH | DA<br>YS | NAME OF UNIT                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ACTIVITY                                                                                                                                                                              |
|-------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| APRIL | 7        | <b>Unit–I: Physical World and Measurement</b><br><b>Chapter–1: Units and Measurements</b><br>Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. significant figures                                                                                                                                                                                                                                                             |                                                                                                                                                                                       |
| MAY   | 7        | <b>Unit–I: Physical World and Measurement</b><br><b>Chapter–1: Units and Measurements</b><br>Determining the uncertainty in result. Dimensions of physical quantities, dimensional analysis and its applications.                                                                                                                                                                                                                                                                   | To make a paper scale of given least count, e.g., 0.2cm, 0.5 cm.                                                                                                                      |
| JUNE  | 12       | <b>Unit II: Kinematics</b><br><b>Chapter–2: Motion in a Straight Line</b><br>Frame of reference, Motion in a straight line, Elementary concepts of differentiation and integration for describing motion, uniform and non- uniform motion, average speed and average velocity and instantaneous velocity, uniformly accelerated motion, velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical and calculus treatment).                    | To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume. |
| JULY  | 26       | <b>Chapter–3: Motion in a Plane</b><br>Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors, Unit vector; resolution of a vector in a plane, rectangular components, Scalar and Vector product of vectors. Motion in a plane, cases of uniform velocity and uniform acceleration- projectile motion, uniform circular motion. | To measure diameter of a given wire and thickness of a given sheet using screw gauge<br><br>To study the variation in range of a projectile with angle of projection.                 |



|      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                          |
|------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      |    | <b>Unit III: Laws of Motion</b><br><b>Chapter–4: Laws of Motion</b><br>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<br><br>Law of conservation of linear momentum and its applications. 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 (vehicle on a level circular road, vehicle on a banked road)                                                                                          | <b>To determine radius of curvature of a given spherical surface by a spherometer</b><br><br><b>To determine the mass of two different objects using a beam balance.</b> |
| AUG  | 24 | <b>Unit IV: Work, Energy and Power</b><br><b>Chapter– 5: Work, Energy and Power</b> Work done by a constant force and a variable force; kinetic energy, work- energy theorem, power. Notion of potential energy, potential energy of a spring, conservative forces: non-conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.                                                                                                                                                                                                                                                                     | <b>To find the force constant of a helical spring by plotting a graph between load and extension.</b>                                                                    |
|      |    | <b>Unit V: Motion of System of Particles and Rigid Body</b><br><b>Chapter–6: System of Particles and Rotational Motion</b><br>Centre of mass of a two-particle system, momentum conservation and Centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications. Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions. Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation). |                                                                                                                                                                          |
| SEPT | 10 | <b>Unit VI: Gravitation</b><br><b>Chapter – 7: Gravitation</b><br>Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy and gravitational potential, escape speed, orbital velocity of a satellite, energy of an orbiting satellite.                                                                                                                                                                                                                                                                                                     | <b>Using a simple pendulum, plot its graph and use it to find the effective length of second's pendulum.</b>                                                             |
| OCT  | 21 | <b>Unit VII: Properties of Bulk Matter</b><br><b>Chapter–8: Mechanical Properties of Solids</b><br>Elasticity, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), Poisson's ratio; elastic energy. Application of elastic behavior of materials (qualitative idea only).                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                          |
|      |    | <b>Chapter–9: Mechanical Properties of Fluids</b><br>Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), effect of gravity on fluid pressure. Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its simple applications (Torricelli's law and Dynamic lift). Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise.                                                                                         | <b>To study the effect of detergent on surface tension of water by observing capillary rise</b>                                                                          |
| NOV  | 16 | <b>Chapter–10: Thermal Properties of Matter</b><br>Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; Cp, Cv - calorimetry; change of state - latent heat capacity. Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law.                                                                                                                                                                                                                                   | <b>To study the relationship between the temperature of a hot body and time by plotting a cooling curve.</b>                                                             |
| DEC  |    | <b>Unit VIII: Thermodynamics Chapter–11: Thermodynamics</b><br>Thermal equilibrium and definition of temperature, zeroth law of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>To observe change of state and plot a</b>                                                                                                                             |

|            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                  |
|------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
|            |  | thermodynamics, heat, work and internal energy. First law of thermodynamics, Second law of thermodynamics: Thermodynamic state variable and equation of state. Change of condition of gaseous state - isothermal, adiabatic, reversible, irreversible, and cyclic processes.<br><b>Unit IX: Behavior of Perfect Gases and Kinetic Theory of Gases</b><br><b>Chapter–12: Kinetic Theory</b><br>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, law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number. | <b>cooling curve for molten wax.</b>                                                                             |
| <b>JAN</b> |  | <b>Unit X: Oscillations and Waves</b><br><b>Chapter–13: Oscillations</b><br>Periodic motion - time period, frequency, displacement as a function of time, periodic functions and their applications. Simple harmonic motion (S.H.M), uniform circular motion and its equations of motion; phase; oscillations of a loaded spring-restoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum derivation of expression for its time period. Chapter–14: Waves Wave motion: Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats  | <b>To study the relation between frequency and length of a given wire under constant tension using sonometer</b> |

**PORTION FOR RESPECTIVE EXAMINATIONS OF THE SESSION 2026-27**

| <b>NAME OF EXAM/TEST</b> | <b>PORTION</b>                                                                                                                                                                 |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PT-1</b>              | <b>Chapter–1: Units and Measurements, Chapter–2: Motion in a Straight Line</b>                                                                                                 |
| <b>OBJECTIVE TEST-1</b>  | <b>Chapter–1: Units and Measurements, Chapter–2: Motion in a Straight Line, Chapter–3: Motion in a Plane, Chapter–4: Laws of Motion</b>                                        |
| <b>HALF YEARLY</b>       | <b>Chapter–1: Units and Measurements, Chapter–2: Motion in a Straight Line, Chapter–3: Motion in a Plane, Chapter–4: Laws of Motion, Chapter– 5: Work, Energy and Power</b>    |
| <b>PT-2</b>              | <b>Chapter–6: System of Particles and Rotational Motion, Chapter – 7: Gravitation</b>                                                                                          |
| <b>PT-3</b>              | <b>Chapter–8: Mechanical Properties of Solids, Chapter–9: Mechanical Properties of Fluids</b>                                                                                  |
| <b>OBJECTIVE TEST-2</b>  | <b>Chapter–6: System of Particles and Rotational Motion, Chapter – 7: Gravitation , Chapter–8: Mechanical Properties of Solids ,Chapter–9: Mechanical Properties of Fluids</b> |
| <b>ANNUAL</b>            | <b>COMPLETE SYLLABUS</b>                                                                                                                                                       |

## Physics Exam Marking Scheme

| Sections  | Number of questions                    | Marks Allotted     |
|-----------|----------------------------------------|--------------------|
| Section-A | 16 (12 MCQs and 4 Assertion Reasoning) | $16 \times 1 = 16$ |
| Section-B | 5 Questions                            | $5 \times 2 = 10$  |
| Section-C | 7 Questions                            | $7 \times 3 = 21$  |
| Section-D | 2 Case Study Based Questions           | $2 \times 4 = 8$   |
| Section-E | 3 Long Answer Questions                | $3 \times 5 = 15$  |

### BLUE-PRINT FOR HALF YEARLY EXAMINATION

|                                     | Objective      | Subjective                  |                       |                     |                        |                |
|-------------------------------------|----------------|-----------------------------|-----------------------|---------------------|------------------------|----------------|
| Chapter No. and Name                | MCQ + A & R    | Very Short Answers (2marks) | Short Answer (3marks) | Case Study (4Marks) | Long Answers (5 Marks) | Total Marks 70 |
| Chapter 1: Units and measurements   | 3              | 1                           | 1                     |                     |                        | 8              |
| Chapter 2: Motion in straight Lines | 3              | 1                           | 1                     |                     | 1                      | 13             |
| Chapter 3: Motion in a Plane        | 3              | 1                           | 1                     |                     | 1                      | 13             |
| Chapter 4: Laws of Motion           | 3              | 1                           | 1                     | 1                   | 1                      | 17             |
| Chapter 5: work, Energy and Power   | 2              | 1                           | 1                     | 1                   |                        | 11             |
| Chapter 7: Gravitation              | 2              |                             | 2                     |                     |                        | 8              |
| <b>TOTAL</b>                        | <b>16x1=16</b> | <b>5x2=10</b>               | <b>7x3=21</b>         | <b>2x4=08</b>       | <b>3x5=15</b>          | <b>70</b>      |

### ANNUAL EXAMINATION

| S. NO | NAME OF THE UNIT               | NAME OF THE CHAPTER       | SEC A    |          | SEC B     | SEC C      | SEC D    | SEC E   | TOTAL MARKS CHAPTER WISE | UNIT WISE MARKS |
|-------|--------------------------------|---------------------------|----------|----------|-----------|------------|----------|---------|--------------------------|-----------------|
|       |                                |                           | MCQ (1M) | A&R (1M) | SA I (2M) | SA II (3M) | CBQ (4M) | LA (5M) |                          |                 |
| 1     | PHYSICAL WORLD AND MEASUREMENT | UNITS AND MEASUREMENTS    | 1(1)     |          |           | 3(1)       |          |         | 4(2)                     | 23              |
| 2     | KINEAMTICS                     | MOTION IN A STRAIGHT LINE | 1(1)     |          | 2(1)      | 3(1)       |          |         | 6(3)                     |                 |
|       |                                | MOTION IN A PLANE         | 1(1)     |          |           |            |          | 5(1)    | 6(2)                     |                 |
| 3     | LAWS OF MOTION                 | LAWS OF MOTION            | 1(1)     | 1(1)     | 2(1)      | 3(1)       |          |         | 7(4)                     |                 |
| 4     | WORK ENERGY AND POWER          | WORK, ENERGY AND POWER    | 1(1)     |          |           |            | 4(1)     |         | 5(2)                     |                 |

|    |                                                        |                                           |               |             |              |              |             |              |               |           |
|----|--------------------------------------------------------|-------------------------------------------|---------------|-------------|--------------|--------------|-------------|--------------|---------------|-----------|
| 5  | SYSTEM OF PARTICLES AND ROTATIONAL MOTION              | SYSTEM OF PARTICLES AND ROTATIONAL MOTION | 1(1)          | 1(1)        | 2(1)         | 3(1)         |             |              | 7(4)          | 17        |
| 6  | GRAVITATION                                            | GRAVITATION                               | 1(1)          | 1(1)        |              | 3(1)         |             |              | 5(3)          |           |
| 7  | PROPERTIES OF BULK MATTER                              | MECHANICAL PROPERTIES OF SOLIDS           |               | 1(1)        | 2(1)         |              |             |              | 3(2)          | 20        |
|    |                                                        | MECHANICAL PROPERTIES OF FLUIDS           | 1(1)          |             |              |              |             | 5(1)         | 6(2)          |           |
|    |                                                        | THERMAL PROPERTIES OF MATTER              |               |             |              | 3(1)         |             |              | 3(1)          |           |
| 8  | THERMODYNAMICS                                         | THERMODYNAMICS                            | 1(1)          |             |              |              | 4(1)        |              | 5(2)          |           |
| 9  | BEHAVIOUR OF PERFECT GASES AND KINETIC THEORY OF GASES | KINETIC THEORY                            | 1(1)          |             | 2(1)         |              |             |              | 3(2)          |           |
| 10 | OSCILLATIONS AND WAVES                                 | OSCILLATIONS                              | 1(1)          |             |              |              |             | 5(1)         | 6(2)          | 10        |
|    |                                                        | WAVES                                     | 1(1)          |             |              | 3(1)         |             |              | 4(2)          |           |
|    |                                                        | <b>TOTAL</b>                              | <b>12(12)</b> | <b>4(4)</b> | <b>10(5)</b> | <b>21(7)</b> | <b>8(2)</b> | <b>15(3)</b> | <b>70(33)</b> | <b>70</b> |