## **Physics Syllabus:**

- Physical World and Measurement
- Kinematics
- Laws of Motion
- Work, Energy and Power
- Motion of System of Particles and Rigid Body
- Gravitation
- Properties of Bulk Matter
- Behavior of Perfect Gas and Kinetic Theory
- Oscillations and Waves
- Current Electricity
- Magnetic Effects of Current and Magnetism
- Electromagnetic and Alternating Currents
- Electromagnetic Waves
- Optics
- Dual Nature of Matter and Radiation
- Atoms & Nuclei
- Electronic Devices
- Thermodynamics

## **Chemistry Syllabus:**

- Some Basic Concepts of Chemistry
- Solid State
- Solutions
- Electrochemistry

- Chemical Kinetics
- Surface Chemistry
- Structure of Atom
- Classification of Elements and Periodicity in Properties
- Chemical Bonding and Molecular Structure
- States of Matter: Gases and Liquids
- Thermodynamics
- Equilibrium
- Redox Reactions
- Hydrogen
- S-Block Elements (Alkali and Alkaline earth metals)
- Some P-Block Elements
- Environmental Chemistry
- P-Block Elements
- D and F Block Elements
- Coordination Compounds
- Haloalkanes and Haloarenes
- Alcohols, Phenols and Ethers
- Organic compounds containing Nitrogen
- Biomolecules
- Polymers
- Chemistry in Everyday Life

## **Mathematics Syllabus:**

- Sets, Relations & Functions
- Trigonometric Functions

- Principle of Mathematical Induction
- Complex Numbers and Quardratic Equations
- Linear Inequalities
- Permutations & Theorem
- Binomial Theorem
- Sequence and Series
- Straight Lines
- Introduction to Three-dimensional Geometry
- Limits and Derivatives
- Mathematical Reasoning
- Statistics
- Relations and Functions
- Inverse Trigonometric Functions
- Matrices
- Determinants
- Continuity and Differentiability
- Applications of Derivatives
- Integrals
- Differential Equations
- Vectors
- Three dimensional Geometry
- Probability

## **Biology Syllabus:**

- Diversity in Living World
- Structural Organization in Animals and Plants

- Cell: Structure and Function
- Plant Physiology
- Human Physiology
- Sexual Reproduction
- Genetics and Evolution
- Biology and Human Welfare
- Biotechnology and its Applications
- Ecology & Environment