

[For both English/Hindi Medium Students]

PHYSICS

Part Test No. Topic Covered

- 01 Basic Mathematics used in Physics, Vectors, Units, Dimensions and Measurement, Electrostatics
Kinematics (Motion along a straight line and Motion in a plane), Current electricity
Laws of Motion and Friction, Capacitors
- 02 Work, Energy & Power, Circular Motion, Magnetic effect of current and Magnetism
Conservation Laws-Collisions and Centre of Mass, Electromagnetic Induction (EMI)
Rotational Motion, Alternating current
- 03 Thermal Physics (Thermal Expansion, Calorimetry, Heat Transfer, KTG & Thermodynamics), Ray optics and optical Instruments
Properties of matter and Fluid Mechanics, Gravitation, Wave optics (Nature of Light, Interference, Diffraction & Polarisation), EM Waves
Oscillations (SHM, damped and forced oscillations & Resonance), Modern Physics
Wave Motion and Doppler's Effect, Electronics and Communication systems
- 04 Full Syllabus
- 05 Full Syllabus
- 06 Full Syllabus
- 07 Full Syllabus

CHEMISTRY

Part Test No. Topic Covered

- 01 Mole Concept, Atomic structure, Organic nomenclature, Basic principles of practical organic chemistry.
Periodic properties, Basic inorganic nomenclature, Chemical thermodynamics & Thermochemistry
GOC (complete)
- 02 Chemical Bonding, Solid state, Chemical kinetics
Isomerism, Chemical Equilibrium, State of matter (gaseous state), Redox & equivalent concept
Ionic Equilibrium, Acid Base theory, Nuclear chemistry, Reaction intermediate.
- 03 Co-ordination compound, s-block elements & hydrogen, Boron & Carbon family.

Haloalkane, Aryl Halide (Substitution & Elimination), Electrochemistry & Solution, Ores & Metallurgy.

Alkane, Alkenes & Alkynes, Aromatic hydrocarbon, Organic compounds containing oxygen & nitrogen, Qualitative analysis.

Biomolecules (Carbohydrates, Amino Acid, Proteins), Polymer, Practical organic chemistry (Identification of elements & functional groups), Chemistry in everyday life, Environmental chemistry, Surface chemistry, d & f block element, p-block (nitrogen, oxygen, fluorine & noble gas) family.

04 Full Syllabus

05 Full Syllabus

06 Full Syllabus

07 Full Syllabus

MATHEMATICS

Part Test No. Topic Covered

- 01 Trigonometric Ratios and Identities, Matrices & Determinants
Quadratic Equations & Linear Inequalities, Functions and Inverse Trigonometric Function
Trigonometric Equations, Height & Distance, Differential, Calculus (Limit, Continuity, Differentiability, Differentiation)
- 02 Point and Straight Line, Indefinite integration
Circle, Definite integration
Sequences and Series, Application of Derivatives (Maxima & Minima, Monotonicity, Tangent & Normal)
- 03 Permutation & Combination and Binomial Theorem, Vectors
Complex Numbers, Principle of Mathematical Induction, Three Dimensional geometry,
Parabola, Ellipse & Hyperbola, Area under the curve and Differential Equations
[Sets, Relation, Statistics, Mathematical Reasoning], Probability
- 04 Full Syllabus
- 05 Full Syllabus
- 06 Full Syllabus
- 07 Full Syllabus