



# JEE (Main+Advanced)

[For both English/Hindi Medium Students]



# Study Material Syllabus

## PHYSICS

Test No.	Topic Covered
01	Basic Mathematics used in Physics, Vectors, Units, Dimensions and Measurement, Electrostatics
02	Kinematics, Current electricity
03	Laws of Motion and Friction, Capacitors
04	Work, Energy & Power, Magnetic effect of current, Magnetism and Matter*
05	Centre of Mass & Collisions, Electromagnetic Induction (EMI)
06	Rotational Motion, Alternating current (AC)
07	Thermal Physics (Thermal Expansion, Calorimetry, Heat Transfer, KTG & Thermodynamics), Ray optics and optical Instruments
08	Properties of matter and Fluid Mechanics, Gravitation, Wave optics (Nature of Light, Interference, *Diffraction & *Polarisation), *Electromagnetic Waves
09	Simple Harmonic Motion, Modern Physics
10	Waves (String & Sound waves), Practical Physics, Electronics and Communication systems*

## CHEMISTRY

Test No.	Topic Covered
01	Mole Concept, Atomic structure, Organic nomenclature, Handbook of Basic principles of practical organic chemistry.
02	Periodic properties, Basic inorganic nomenclature, Chemical thermodynamics & Thermochemistry
03	GOC (application of electronic effect, aromaticity, application of Inductive, Resonance, Hyperconjugation effect on stability of intermediates, acidic & basic strength).
04	Chemical Bonding, Solid state, Chemical kinetics
05	Isomerism, Chemical Equilibrium, State of matter (gaseous state), Redox & equivalent concept
06	Ionic Equilibrium, Acid Base theory, Nuclear chemistry, Reaction intermediate.
07	Co-ordination compound, s-block elements & hydrogen, Boron & Carbon family.
08	Haloalkane, Aryl Halide (Substitution & Elimination), Electrochemistry & Solution, Ores & Metallurgy.

09	Alkane, Alkenes & Alkynes, Aromatic hydrocarbon, Organic compounds containing oxygen & nitrogen, Qualitative analysis.
10	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.

## MATHEMATICS

Test No.	Topic Covered
01	**Logarithms, Trigonometric Ratios and Identities, Matrices & Determinants
02	Quadratic Equations & *Linear Inequalities, Functions and Inverse Trigonometric Function
03	Trigonometric Equations, **Solution of Triangles, *Height and Distance, Differential Calculus (Limit, Continuity, Differentiability, Differentiation)
04	Point and Straight Line, Indefinite integration
05	Circle, Definite integration
06	Sequences and Series, Application of Derivatives (Maxima & Minima, Monotonicity, Tangent & Normal)
07	Permutation & Combination and Binomial Theorem, Vectors
08	Complex Numbers, *Principle of Mathematical Induction, Three Dimensional geometry,
09	Parabola, Ellipse & Hyperbola, Area under the curve and Differential Equations
10	*[Sets, Relation, Statistics, Mathematical Reasoning], Probability

\*MARKED TOPIC / TOPICS ARE ONLY IN JEE - MAIN SYLLABUS,

\*\*MARKED TOPIC / TOPICS ARE ONLY IN JEE-ADVANCED SYLLABUS