JEE (Main+Advanced)

[For both English/Hindi Medium Students]

PHYSICS

Unit No. Topic Covered 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 80 Properties of matter and Fluid Mechanics, Gravitation, Wave optics (Nature of Light, Interference, Diffraction* & Polarisation*), Electromagnetic Waves* 09 Simple Harmonic Motion, Modern Physics Waves(String & Sound waves), Practical Physics, 10 Electronics and Communication systems*

CHEMISTRY

Unit No. Topic Covered

- 01 Mole Concept, Atomic structure, Organic nomenclature, Handbook of Basic principles of practical organic chemistry
- O2 Periodic properties, Basic inorganic nomenclature, Chemical thermodynamics & Thermochemistry
- GOC (application of electronic effect, aromaticity, application of Inductive, Resonance,
 Hyperconjugation effect on stability of intermediates, acidic & basic strength).
- O4 Chemical Bonding, Solid state, Chemical kinetics
- 05 Isomerism, Chemical Equilibrium, State of matter (gaseous state),Redox & equivalent concept
- lonic Equilibrium, Acid Base theory, Nuclear chemistry, Reaction intermediate.
- 07 Co-ordination compound, s-block elements &

Study Material Syllabus

hydrogen, Boron & Carbon family.

- 08 Haloalkane, Aryl Halide(Substitution & Elimination), Electrochemistry & Solution, Ores & Metallurgy.
- Alkane, Alkenes & Alkynes, Aromatic hydrocarbon,
 Organic compounds containing oxygen & nitrogen,
 Qualitative anaylsis.
- 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

Unit No. Topic Covered

- **Logarithms, Trigonometric Ratios and Identities , Matrices & Determinants
- O2 Quadratic Equations & *Linear Inequilities,
 Functions and Inverse Trignometric Function
- 77 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
- Sequences and Series, Application of Derivatives (Maxima & Minima, Monotonicity, Tangent & Normal)
- Permutation & Combination and Binomial Theorem,Vectors
- O8 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