MAJOR TEST SERIES SYLLABUS

JEE (Main + Advanced)

PHYSICS

- Basic Mathematics used in Physics, Vectors, Units, Dimensions and Measurement, Electrostatics
- Kinematics, Current electricity
- Laws of Motion and Friction ,Capacitors
- Work, Energy & Power, Magnetic effect of current, Magnetism and Matter *
- Centre of Mass & Collisions, Electromagnetic Induction (EMI)
- Rotational Motion, Alternating current (AC)
- 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*), Electromagnetic Waves *
- Simple Harmonic Motion, Modern Physics
- Waves(String & Sound waves), Practical Physics, Electronics and Communication systems*

CHEMISTRY

- Mole Concept, Atomic structure, Organic nomenclature, Basic principles of practical organic chemistry.
- Periodic properties, Basic inorganic nomenclature, Chemical thermodynamics & Thermochemistry
- GOC(complete)
- 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.
- 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 anaylsis.
- 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

- **Logarithms, Trigonometric Ratios and Identities , Matrices & Determinants
- Quadratic Equations & *Linear Inequilities , Functions and Inverse Trignometric Function
- Trigonometric Equations, **Solution of Triangles, *Height and Distance ,Differential Calculus (Limit, Continuity , Differentiability , Differentiation)
- Point and Straight Line ,Indefinite integration
- Circle, Definite integration
- Sequences and Series, Application of Derivatives (Maxima & Minima, Monotonicity, Tangent & Normal)
- 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

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