

**SMTS for JEE (Advanced) 2022 - XI Studying  
(Online)**

| Test No. | Test Date  | Pattern of Test | Subject | Topics of the Test  |
|----------|------------|-----------------|---------|---|
| SMTS-1   | 02-12-2020 | JEE (Advanced)  | Phy     | Units and Measurement, Motion in a Straight Line, Motion in a Plane, Laws of Motion   |
|          |            |                 | Chem    | Some Basic Concepts of Chemistry, Structure of Atom, Classification of Elements and Periodicity in Properties, Chemical Bonding and Molecular Structure, States of Matter : Gases & Liquids   |
|          |            |                 | Maths   | Basics of Mathematics** (Sets, Wavy Curve Method and Inequalities), Relations** and Functions (XI Syllabus) (Including Transformation of Graphs), Trigonometric Functions-I: Trigonometric Ratios and Identities, Transformation Formulae, Trigonometric Equations(Level-I), Principle of Mathematical Induction**, Quadratic Equations, Complex Numbers-I : Algebra of Complex Numbers, Modulus & conjugate of a Complex Number, Polar form, Linear Inequalities |
| SMTS-2   | 13-01-2021 | JEE (Advanced)  | Phy     | Work, Energy and Power, System of Particles and Rotational Motion, Gravitation, Mechanical Properties of Solids, Mechanical Properties of Fluid   |
|          |            |                 | Chem    | Thermodynamics, Equilibrium, Redox Reactions (including Volumetric Analysis), Hydrogen, s-Block Elements, p-Block Elements (Group-13-14)  |
|          |            |                 | Maths   | Sequence and Series(including Exponential & Logarithmic Series**), Binomial Theorem, Permutations and Combinations, Straight Lines(including Pair of Straight Lines**), Conic Section-I (Circle), Conic Section-II (Parabola, Ellipse & Hyperbola)  |
| SMTS-3   | 24-02-2021 | JEE (Advanced)  | Phy     | Thermal Properties of Matter, Thermodynamics, Kinetic Theory of Gases, Oscillations, Waves  |
|          |            |                 | Chem    | Organic Chemistry- Some Basic Principles and Techniques (including Isomerism), Hydrocarbons (including Electrophilic Aromatic substitutions)  |
|          |            |                 | Maths   | Complex Numbers-II(Including Geometrical Applications), Introduction to 3 Dimensional Geometry, Limits & Derivatives (Class XI), Mathematical Reasoning**, Statistics**, Probability, Trigonometric Functions-II : Trigonometric Ratios & Identities, Transformation Formulae, Trigonometric Equations (Level-II), Height & Distance** and Properties of Triangles  |