

**Syllabus For**  
**JEE–Advance Type Test**  
**XI – IIT**  
**PT –VI**  
**Test Date: 02.02.2020**

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**PHYSICS**

Unit dimension and error analysis, vector, average speed, average velocity, average acceleration, instantaneous velocity and acceleration, variable acceleration, projectile, Newton's Law of Motion, friction, circular motion, center of mass, first law of thermodynamics, second law of thermodynamics, molar specific heat capacity ( $C_p$ ,  $C_v$ ), calorimetry, kinetic theory of gases, heat transfer, relative velocity, properties of matter, fluid mechanics.

**CHEMISTRY**

**Some basic concept of chemistry:** Chemical formula, Element, compound, mixture, homogeneous and heterogeneous mixture, Atomic & molecular masses, Mole concept, molarity, molality, normality, percentage composition, limiting reagents, stoichiometric calculations, equivalent weight, IUPAC nomenclature of organic compound, Chemical equilibrium, Ionic equilibrium Classification of elements and periodicity in properties, Chemical bonding, redox reaction, Hydrogen, Group–1, 2,13 and 14  
Structure of atom, Gaseous state, thermodynamics, thermo chemistry, thermochemistry  
Resonance, inductive effect, hyper conjugation, Purification, Qualitative and quantitatively analysis, alkane, alkene and alkyne

**MATHEMATICS**

Relation and functions, trigonometric ratio and identities, trigonometric equations, quadratic equations, A.P., G.P. and H.P., series, complex number, permutation and combination, binomial theorem (positive index), straight line, circle, parabola.