

Syllabus for the Entrance Screening Test

- **MATHEMATICS**

Numbers, Logarithms, Complex numbers, Algebra, Trigonometry, Sequences and Series, Sets, Relations and Functions, Mathematical Induction, Linear and Quadratic equations, Cartesian System of Rectangular Coordinates, Straight lines, Circles, Conic Sections, Three Dimensional Geometry, Permutations and Combinations, Binomial Theorem, Probability, Statistics, Mathematical Logic, Boolean Algebra, Vectors, Matrices and Determinants, Limits and Continuity, Differentiation, Application of Derivatives, Definite and Indefinite Integrals, Differential Equations.

- **PHYSICS**

Physical World and Measurement, Kinematics, Laws of Motion, Motion of System of Particles and Rigid Body, Work, Energy and Power, Gravitation, Electricity, Magnetic Effects of Current and Magnetism, Electromagnetic Induction and Alternating Current, Electromagnetism, Waves, Optics, Oscillations, Dual Nature of Matter and Radiations, Thermodynamics.

- **BASIC ENGINEERING (first year undergraduate level)**

Basic electrical and electronic engineering, Solid mechanics, Strength of materials, Basic thermal sciences, Basic programming, Engineering drawing