

## SYLLABUS for BANSAL OPEN OPPORTUNITY & SCHOLARSHIP TEST (BOOST)

From Class 12th to 13th Moving (Sterling) Engineering

Current Class	Physics	Chemistry	Mathematics
XII/XII Pass Engineering	<p>Physical World, Units and Measurement, Motion in a Straight Line, Motion in a Plane, Laws of Motion, Work Energy and Power, System of Particles &amp; Rotational Motion, Fluid Mechanics &amp; Elasticity, Thermal Physics (Calorimetry, Thermal Expansion, Heat Transfer, Kinetic theory of gaseous, Thermodynamics), Simple Harmonic Motion, Mechanical Wave, Electric Charges and Fields Electrostatic Potential and Capacitance, Current Electricity, Moving charges &amp; Magnetism, Magnetism And matter, Electromagnetic Induction and Alternate Current, Ray Optics and Optical Instruments, Electromagnetic Waves, Wave Optics, semiconductor &amp; communication.</p>	<p>General Chemistry, Some Basic Concepts of Chemistry (Mole concept), States of Matter (Gaseous state), Structure of Atom, Equilibrium, Redox reaction, Classification of Elements and Periodicity in Properties, Chemical Bonding and Molecular Structure, Hydrogen compound, s-block compound, Nomenclature of organic compound, General Organic Chemistry (GOC), Isomerism (Structural) Surface chemistry, Chemical Kinetics, Thermodynamics, Thermochemistry, Liquid Solutions, Ionic Equilibrium, Electrochemistry, Solid State, Radioactivity s-block elements &amp; compounds, Coordination compounds, P-Block elements, d &amp; f-Block elements, Salt analysis, General Principles and Processes of Isolation of Elements (Metallurgy), Stereoisomerism, Grignard reagent, Halogen Derivatives, Alcohols, Phenols and Ethers, Oxidation Reduction, Hydrocarbon (Alkane, Alkene &amp; Alkyne), Carbonyl compound (Aldehydes, Ketones), Carboxylic Acids and its derivatives, Amines, Aromatic Compound, Biomolecules, Polymers, Practical Organic chemistry, Chemistry in Everyday Life.</p>	<p>Basic Mathematics, Logarithm, Compound Angles, Quadratic Equations and Sequence and Series, Trigonometric Equation &amp; Inequalities, Solution of triangle, Straight line, Circle, Permutation &amp; Combination, Binomial Sets, Relation &amp; Function, Inverse Trigonometric Functions, Limits, Continuity function, Method of differentiation, Indefinite integration, Definite Integration, Application of Derivatives (Tangent &amp; Normal), Monotonicity, Determinants &amp; Matrices, Differential Equation, Area Under the curve Vector &amp; 3D, Probability, Conic Section (Parabola, Ellipse &amp; Hyperbola).</p>