

# Syllabi

## Physics

- > Kinematics
- > Laws of Motion
- > Work, Energy and Power
- > Conservation of Momentum
- > Rotation
- > Heat and Thermodynamics
- > Electrostatics
- > Current Electricity
- > Magnetism
- > Electromagnetic Induction
- > A.C. Circuit
- > Gravitation & Fluids
- > Simple Harmonic Motion
- > Optics
- > Modern Physics & Error Analysis
- > Waves & Sound

## Chemistry

- > Atomic structure
- > Gaseous State
- > Stoichiometry
- > Chemical Kinetics, Radioactivity, Fission, Fusion and Nuclear Reaction
- > Chemical Equilibrium
- > Balancing of Redox Reactions
- > Ionic Equilibrium
- > Chemical Bonding
- > Solid State
- > Qualitative Analysis
- > Organic Chemistry (including GOC)
- > Practical Organic Chemistry
- > Amines & Amino Acid
- > Carbohydrates & Polymers
- > s-Block, p-Block Elements
- > Transition Elements & Coordination Compounds
- > Ores and Metallurgy
- > Liquid Solution
- > Electrochemistry
- > Thermodynamics & Thermochemistry

## Mathematics

- > Functions
- > Limits, Continuity and Differentiability
- > Application of Derivatives
- > Indefinite Integration
- > Definite Integrals & their properties
- > Differential Equations
- > Area
- > Trigonometric Ratios and Identities
- > Trigonometric Equations
- > Solution of Triangles
- > Straight Lines
- > Circle
- > Parabola
- > Ellipse
- > Hyperbola
- > Progression and Series
- > Quadratic Equations and Expressions
- > Complex Numbers
- > Binomial Theorem
- > Matrices
- > Determinants
- > Permutation and Combination
- > Probability
- > Vector
- > Three Dimensional Geometry