

# AmityJEE Test Syllabus

## ENGLISH

- ❖ Reading Comprehension
- ❖ Grammer
- ❖ Vocabulary
- ❖ Verbal Ability
- ❖ Logical Ability

## PHYSICS

- ❖ Physics and Measurement
- ❖ Vector Algebra
- ❖ Kinematics of a Particle
- ❖ Newton's Laws of Motion
- ❖ Work, Energy and Power
- ❖ Rotational Motion
- ❖ Gravitation
- ❖ Periodic Motion
- ❖ Wave Motion
- ❖ Properties of Solids and Liquids
- ❖ Heat
- ❖ Thermodynamics
- ❖ Kinetic Theory of Gases
- ❖ Electrostatics
- ❖ Current Electricity
- ❖ Magnetic Effects of Current and Magnetism
- ❖ Magnetism
- ❖ Terrestrial Magnetism
- ❖ Electromagnetic Induction
- ❖ Alternating Currents
- ❖ Electromagnetic Waves
- ❖ Ray Optics
- ❖ Wave Optics
- ❖ Dual Nature of Matter and Radiation
- ❖ Atoms and Nuclei
- ❖ Electronic Devices
- ❖ Communication Systems
- ❖ Experimental Skills

# CHEMISTRY

- ❖ Some Basic Concepts in Chemistry
- ❖ Chemistry in Everyday Life
- ❖ Atomic Structure
- ❖ Classification of Elements and Periodicity in Properties
- ❖ Chemical Bonding and Molecular Structure
- ❖ States of Matter
- ❖ Chemical Thermodynamics
- ❖ Chemical Equilibrium
- ❖ Ionic Equilibrium
- ❖ Redox Reactions
- ❖ Hydrogen
- ❖ S-Block Elements (Alkali & Alkaline Earth Metals) : Group 1 & 2 Elements
- ❖ P- Block Elements
- ❖ Purification and Characterization of Organic Compounds
- ❖ Basic Principles of Organic Chemistry
- ❖ Hydrocarbons
- ❖ Solid State
- ❖ Solutions
- ❖ Electro Chemistry
- ❖ Chemical Kinetics
- ❖ Surface Chemistry
- ❖ General Principles and Processes of Isolation of Elements
- ❖ D and F Block Elements
- ❖ Co-Ordination Compounds
- ❖ Organic Compounds Containing Halogens ( Alkyl and Aryl Halides)
- ❖ Organic Compounds Containing Oxygen
- ❖ Organic Compounds Containing Nitrogen
- ❖ Polymers
- ❖ Biomolecules

# MATHEMATICS

- ❖ Quadratic Equation
- ❖ Sequence Series
- ❖ Complex Number
- ❖ Binomial Theorem
- ❖ Permutation and Combinations
- ❖ Matrix and Determinant
- ❖ Straight Line

- ❖ Circle
- ❖ Parabola
- ❖ Trigonometric Equations (Ratios, Identities, Equations)
- ❖ Properties of Triangles
- ❖ Functions
- ❖ Limits and Continuity
- ❖ Differentiation and Differentiability
- ❖ Indefinite Integration
- ❖ Definite Integration
- ❖ Area
- ❖ Differential Equations
- ❖ Application of Derivatives (Tangents and Normals)
- ❖ Maxima and Minima
- ❖ Ellipse and Hyperbola
- ❖ Inverse Trigonometric Function
- ❖ Probability
- ❖ 3D
- ❖ Vectors

## **BIOLOGY**

- ❖ Diversity in Living World
- ❖ Structural Organisation in Animals and Plants
- ❖ Cell Structure and Function
- ❖ Plant Physiology
- ❖ Human Physiology
- ❖ Reproduction
- ❖ Genetics and Evolution
- ❖ Biology and Human Welfare
- ❖ Biotechnology and its Applications
- ❖ Ecology and Environment