

JEE-Main Syllabus

Units	Physics	Chemistry	Mathematics
1	Essential Mathematics, Units & Dimensions, Vectors, Error	Atomic Structure	Quadratic Equation
2	Motion in One Dimension, Motion in Two Dimension, Projectile Motion, Relative Motion	Periodic Table	Sets, Statistics, Mathematical Reasoning, Mathematical Induction
3	Circular Motion, Newton's Law of Motion, Friction	Chemical Bonding	Trigonometric Ratio and Identities
4	Work, Power & Energy	Basic Concepts of Chemistry, Redox and Volumetric Analysis	Trigonometric Equations, Heights and Distances
5	Momentum, Center of Mass, Conservation of Energy & Momentum	Gaseous State	Progressions
6	Rigid Body Dynamics, Rotational Motion	Chemical equilibrium	Permutation and Combination
7	Simple Harmonic Motion (SHM), Gravitation	Acid Base, Ionic equilibrium	Binomial Theorem
8	Properties of Matter, Elasticity, Surface Tension, Viscosity, Hydrostatics, Fluid Dynamics	Chemical Energetics	Point and Straight Line
9	Calorimetry, Thermal Expansion	Classification & Nomenclature, Isomerism (Except Optical Isomerism and Tautomerism)	Circle
10	Kinetic Theory of Gases, Law of Thermodynamics	GOC-1 (Brief Idea of Electronic Displacement Effects), Hydrocarbons (Preparation Methods, Physical and Chemical Properties without Optical Isomerism Application), Purification of Organic Compounds	Parabola
11	Heat Transfer	s-block Elements, Environmental Chemistry	Ellipse
12	Transverse Waves, Longitudinal Waves, Doppler's Effect in Mechanical Waves	p-block elements [Part-1(Boron and Carbon Family)], Hydrogen and its Compounds	Hyperbola
13	Electrostatics, Gauss Law	Chemical Kinetics, Nuclear Chemistry and Surface Chemistry	Relation, Function & Inverse Trigonometric Functions
14	Capacitance & Capacitor	Electrochemistry	Limit and Continuity of Function
15	Current Electricity, Heating Effect of Current	Solid State, Solution and colligative properties	Differentiability and Differentiation
16	Magnetism, Magnetic effect of Current	General Organic Chemistry, Optical Isomerism and Tautomerism	Application of Differentiation #1 [Tangent & Normal, Mean Value Theorems and Rate Measurement]
17	Electromagnetic Induction	Hydrocarbons	Application of Differentiation #2 [Monotonicity, Maxima and Minima]
18	Alternating Current	Halogen Derivatives	Indefinite Integration
19	Reflection Plane & Spherical Surface	Aromatic Chemistry, Alcohol, Ether and Phenol	Definite Integration
20	Refraction on Plane Surface, Prism	Carbonyl Compounds, Carboxylic Acid and its Derivatives, Nitrogen Compounds and Amines	Area under the Curves and Differential Equation
21	Refraction on Curved Surface, Lens, Optical Instrument	Carbohydrates, Amino Acid, Protein and Polymers, Practical Organic Chemistry, Chemistry in everyday life	Probability
22	Light Waves, Interference of Light, Diffraction, Polarisation	Coordination Compound, Metallurgy	Complex Number
23	Atomic Structure in Modern Physics, Matter Waves & De-Broglie	p-block elements [Part-2(Nitrogen, Oxygen, Halogen Family and Noble Gas)]	Matrices and Determinants
24	Photo-Electric Effect, Radioactivity, Nuclear Physics, Semiconductors and Electronics, EM Waves, Communication Systems, Vernier Callipers, Screw Gauge	Salt/Qualitative Analysis, Transitional Elements	Vector and Three Dimensional Geometry