

JEE-Advanced Syllabus

Units	Physics	Chemistry	Mathematics
1	Essential Mathematics, Units & Dimensions, Vectors	Atomic Structure	Logarithm and Modulus Function
2	Motion in One Dimension, Motion in Two Dimension, Projectile Motion, Relative Motion	Periodic Table	Quadratic Equation
3	Circular Motion, Newton's Law of Motion, Friction	Chemical Bonding	Trigonometric Ratios
4	Work, Power & Energy	Basic Concepts of Chemistry, Redox and Volumetric Analysis	Trigonometric Equations
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)	Parabola
11	Heat Transfer	s-block Elements	Ellipse and Hyperbola
12	Transverse Waves , Longitudinal Waves ,Doppler's Effect in Mechanical Waves	p-block elements [Part-1(Boron and Carbon Family)], Hydrogen and It's Compounds	Properties of Triangle and Radii of Circle
13	Electrostatics ,Gauss Law	Chemical Kinetics, Nuclear Chemistry and Surface Chemistry	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	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 Plain & Spherical Surface	Aromatic Chemistry, Alcohol, Ether and Phenol	Definite Integration
20	Refraction on Plain Surface, Prism	Carbonyl Compounds, Carboxylic Acid and It's Derivatives, Nitrogen Compounds and Amines	Area under the Curves and Differential Equation
21	Refraction on Curved Surface, Lense, Optioal Instrument	Carbohydrates, Amino Acid, Protien and Polymers, Practical Organic Chemistry	Prabability
22	Light Waves, Interference of Light,	Co-ordination 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	X-Ray, Photo-Electric Effect, Radioactivity, Nuclear Physics, Vernier Callipers, Screw Gauge	Salt/Qualitative Analysis, Transitional Elements	Vector and Three Dimensional Geometry