JEE ADVANCED

JEE Advanced Syllabus 2024 - IIT Madras has released the JEE Advance 2024 syllabus online at jeeadv.ac.in. The syllabus of JEE Advanced 2024 includes subject-wise chapters and topics that will appear in the JEE Advanced question paper. JEE Advanced syllabus pdf contains topics of Physics, Chemistry, and Mathematics. Along with the syllabus, candidates should have the details on the JEE Advanced exam pattern. The authority is set to conduct JEE Advanced 2024 on May 26.

Don't Miss: JEE Advanced question papers

JEE Advanced 2024 Syllabus PDF Download

The authority released the JEE Advanced 2024 syllabus pdf online. Candidates can download the syllabus for JEE Advanced 2024 from this page below. Aspirants can also check the detailed JEE Advanced syllabus for Physics, Chemistry, and Mathematics here. The syllabus of JEE Advanced consists of the important topics to prepare for the test. **Direct link for JEE Advanced 2024 syllabus pdf**

JEE Advanced syllabus 2024 for Maths

Candidates can check the Maths syllabus for JEE Advanced 2024 below.

Topics	Sub topics
Sets, Relations and Functions	Sets and their representations, different kinds of sets (empty, finite and infinite), algebra of sets, intersection, complement, difference and symmetric difference of sets and their algebraic properties, De-Morgan's laws on union, intersection, difference (for finite number of sets) and practical problems based on them.

	Cartesian product of finite sets, ordered pair, relations, domain and codomain of relations, equivalence relation
	Function as a special case of relation, functions as mappings, domain, codomain, range of functions, invertible functions, even and odd functions, into, onto and one-to-one functions, special functions (polynomial, trigonometric, exponential, logarithmic, power, absolute value, greatest integer etc.), sum, difference, product and composition of functions.
Algebra	Algebra of complex numbers, addition, multiplication, conjugation, polar representation, properties of modulus and principal argument, triangle inequality, cube roots of unity, geometric interpretations.
	Statement of the fundamental theorem of algebra, Quadratic equations with real coefficients, relations between roots and coefficients, formation of quadratic equations with given roots, symmetric functions of roots.
	Arithmetic and geometric progressions, arithmetic and geometric means, sums of finite arithmetic and geometric progressions, infinite geometric series, sum of the first n natural numbers, sums of squares and cubes of the first n natural numbers
	Logarithms and their properties, permutations and combinations, binomial theorem for a positive integral index, and properties of binomial coefficients.
Matrices	Matrices as a rectangular array of real numbers, equality of matrices, addition, multiplication by a scalar and product of matrices, transpose of a matrix, elementary row and column transformations, determinant of a square matrix of order up to three, adjoint of a matrix, inverse of a square matrix of order up to three, properties of these matrix operations, diagonal, symmetric and skew-symmetric matrices and their properties, solutions of simultaneous linear equations in two or three variables
[Probability and Statistics](#)	Random experiment, sample space, different types of events (impossible, simple, compound), addition and multiplication rules of probability, conditional probability, independence of events, total probability, Bayes Theorem, computation of probability of events using permutations and combinations.

	Measure of central tendency and dispersion, mean, median, mode, mean deviation, standard deviation and variance of grouped and ungrouped data, analysis of the frequency distribution with the same mean but different variance, random variable, mean and variance of the random variable.
Trigonometry	Trigonometric functions, their periodicity and graphs, addition and subtraction formulae, formulae involving multiple and sub-multiple angles, general solution of trigonometry Inverse trigonometric functions (principal value only) and their elementary properties.
Analytical Geometry	Two dimensions: Cartesian coordinates, distance between two points, section formulae, shift of origin. Equation of a straight line in various forms, angle between two lines, distance of a point from a line; Lines through the point of intersection of two given lines, equation of the bisector of the angle between two lines, concurrency of lines; Centroid, orthocentre, incentre and circumcentre of a triangle. Equation of a circle in various forms, equations of tangent, normal and chord. Parametric equations of a circle, intersection of a circle with a straight line or a circle, equation of a circle through the points of intersection of two circles and those of a circle and a straight line. Equations of a parabola, ellipse and hyperbola in standard form, their foci, directrices and eccentricity, parametric equations, equations of tangent and normal. Locus problems.
	Three dimensions: Distance between two points, direction cosines and direction ratios, equation of a straight line in space, skew lines, shortest distance between two lines, equation of a plane, distance of a point from a plane, angle between two lines, angle between two planes, angle between a line and the plane, coplanar lines.
Differential Calculus	Limit of a function at a real number, continuity of a function, limit and continuity of the sum, difference, product and quotient of two functions, L'Hospital rule of evaluation of limits of functions.
	Continuity of composite functions, intermediate value property of continuous functions. Derivative of a function, derivative of the sum, difference, product and quotient of two functions, chain rule, derivatives of polynomial, rational, trigonometric, inverse trigonometric, exponential and logarithmic functions.

	Tangents and normals, increasing and decreasing functions, derivatives of order two, maximum and minimum values of a function, Rolle's theorem and Lagrange's mean value theorem, geometric interpretation of the two theorems, derivatives up to order two of implicit functions, geometric interpretation of derivatives.
Integral Calculus	Integration as the inverse process of differentiation, indefinite integrals of standard functions, definite integrals as the limit of sums, definite integral and their properties, fundamental theorem of integral calculus. Integration by parts, integration by the methods of substitution and partial fractions, application of definite integrals to the determination of areas bounded by simple curves. Formation of ordinary differential equations, solution of homogeneous differential equations of first order and first degree, separation of variables method, linear first order differential equations.
Vectors	Addition of vectors, scalar multiplication, dot and cross products, scalar and vector triple products, and their geometrical interpretations.

JEE Advanced 2024 Syllabus for Physics.

Topics	Sub Topics
General	General Units and dimensions, dimensional analysis; least count, significant figures; Methods of measurement and error analysis for physical quantities pertaining to the following experiments: Experiments based on using Vernier calipers and screw gauge (micrometer), Determination of g using the simple pendulum, Young's modulus - elasticity of the material Surface tension of water by capillary rise and effect of detergents. Specific heat of a liquid using calorimeter, focal length of a concave mirror and a convex lens using u-v method, Speed of sound using resonance column, Verification of Ohm's law using voltmeter and ammeter, and specific resistance of the material of a wire using meter bridge and post office box.
Mechanics	Kinematics in one and two dimensions (Cartesian coordinates only), projectiles; Uniform circular motion; Relative velocity.

	Newton's laws of motion; Inertial and uniformly accelerated frames of reference; Static and dynamic friction; Kinetic and potential energy; Work and power; Conservation of linear momentum and mechanical energy.
	Systems of particles; Centre of mass and its motion; Impulse; Elastic and inelastic collisions. Rigid body, moment of inertia, parallel and perpendicular axes theorems, moment of inertia of uniform bodies with simple geometrical shapes; Angular momentum; Torque; Conservation of angular momentum; Dynamics of rigid bodies with fixed axis of rotation; Rolling without slipping of rings, cylinders and spheres; Equilibrium of rigid bodies; Collision of point masses with rigid bodies. Forced and damped oscillation (in one dimension), resonance.
	Linear and angular simple harmonic motions
	Hooke's law, Young's modulus
	Law of gravitation; Gravitational potential and field; Acceleration due to gravity; Kepler's law, Geostationary orbits, Motion of planets and satellites in circular orbits; Escape velocity. Pressure in a fluid; Pascal's law;Buoyancy; Surface energy and surface tension, angle of contact, drops, bubbles and capillary rise. Viscosity (Poiseuille's equation excluded), Modulus of rigidity and bulk modulus in mechanics. Stoke's law; Terminal velocity, Streamline flow, equation of continuity, Bernoulli's theorem and its applications. Wave motion (plane waves only), longitudinal and transverse waves, superposition of waves; Progressive and stationary waves; Vibration of strings and air columns; Resonance; Beats; Speed of sound in gases; Doppler effect (in sound)
Thermal Physics	Thermal expansion of solids, liquids and gases; Calorimetry, latent heat; Heat conduction in one dimension; Elementary concepts of convection and radiation; Newton's law of cooling; Ideal gas laws; Specific heats (C_v and C_p for monoatomic and diatomic gases); Isothermal and adiabatic processes, bulk modulus of gases; Equivalence of heat and work; First law of thermodynamics and its applications (only for ideal gases); Second law of thermodynamics, reversible and irreversible processes, Carnot engine and its efficiency; Blackbody radiation: absorptive and emissive powers; Kirchhoff's law; Wien's displacement law, Stefan's law.

Electricity and Magnetism	Coulomb's law; Electric field and potential; Electrical potential energy of a system of point charges and of electrical dipoles in a uniform electrostatic field; Electric field lines; Flux of electric field; Gauss's law and its application in simple cases, such as, to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell. Capacitance; Parallel plate capacitor with and without dielectrics; Capacitors in series and parallel; Energy stored in a capacitor.
	Electric current; Ohm's law; Series and parallel arrangements of resistances and cells; Kirchhoff's laws and simple applications; Heating effect of current. Biot–Savart's law and Ampere's law; Magnetic field near a current-carrying straight wire, along the axis of a circular coil and inside a long straight solenoid; Force on a moving charge and on a current-carrying wire in a uniform magnetic field.
	Magnetic moment of a current loop; Effect of a uniform magnetic field on a current loop; Moving coil galvanometer, voltmeter, ammeter and their conversions. Electromagnetic induction: Faraday's law, Lenz's law; Self and mutual inductance; RC, LR, LC and LCR(in series) circuits with d.c. and a.c. sources.
Electromagnetic Waves	Electromagnetic waves and their characteristics. Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, x-rays, gamma rays) including elementary facts about their uses.
Optics	Rectilinear propagation of light; Reflection and refraction at plane and spherical surfaces; Total internal reflection; Deviation and dispersion of light by a prism; Thin lenses; Combinations of mirrors and thin lenses; Magnification. Wave nature of light: Huygen's principle, interference limited to Young's double slit experiment. Diffraction due to a single slit. Polarization of light, plane polarized light; Brewster's law, Polaroids.
Modern Physics	Atomic nucleus; α, β and γ radiations; Law of radioactive decay; Decay constant; Half-life and mean life; Binding energy and its calculation; Fission and fusion processes; Energy calculation in these processes. Photoelectric effect; Bohr's theory of hydrogen-like atoms; Characteristic and continuous X-rays, Moseley's law; de Broglie wavelength of matter waves.

JEE Advanced Syllabus 2024 for Chemistry

Candidates can check the JEE Advanced Chemistry syllabus below.

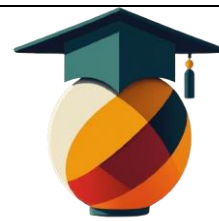| Topics	Sub Topics
General Topics	Concept of atoms and molecules; Dalton's atomic theory; Mole concept; Chemical formulae; Balanced chemical equations; Calculations (based on mole concept and stoichiometry) involving common oxidation-reduction, neutralisation, and displacement reactions; Concentration in terms of mole fraction, molarity, molality and normality.
States of Matter: Gases and Liquids	Gas laws and ideal gas equation, absolute scale of temperature; Deviation from ideality, van der Waals equation; Kinetic theory of gases, average, root mean square and most probable velocities and their relation with temperature; Law of partial pressures; Diffusion of gases. Intermolecular interactions: types, distance dependence, and their effect on properties; Liquids: vapour pressure, surface tension, viscosity.
Atomic Structure	Bohr model, spectrum of hydrogen atom; Wave-particle duality, de Broglie hypothesis; Uncertainty principle; Qualitative quantum mechanical picture of hydrogen atom: Energies, quantum numbers, wave function and probability density (plots only), shapes of s, p and d orbitals; Aufbau principle; Pauli's exclusion principle and Hund's rule.
Chemical Bonding and Molecular Structure	Orbital overlap and covalent bond; Hybridisation involving s, p and d orbitals only; Molecular orbital energy diagrams for homonuclear diatomic species (up to Ne_2); Hydrogen bond; Polarity in molecules, dipole moment; VSEPR model and shapes of molecules (linear, angular, triangular, square planar, pyramidal, square pyramidal, trigonal bipyramidal, tetrahedral and octahedral).
Chemical Thermodynamics	Intensive and extensive properties, state functions, First law of thermodynamics; Internal energy, work (pressure-volume only) and heat; Enthalpy, heat capacity, standard state, Hess's law; Enthalpy of reaction, fusion and vapourization, and lattice enthalpy; Second law of thermodynamics; Entropy; Gibbs energy; Criteria of equilibrium and spontaneity.
Chemical and Ionic Equilibrium	Law of mass action; Significance of $\check{h}_م$ and $\check{h}_م^-$ in chemical equilibrium; Equilibrium constant (Kp and Kc) and reaction quotient, Le Chatelier's principle (effect of concentration, temperature and pressure); Solubility product and its applications,

	common ion effect, pH and buffer solutions; Acids and bases (Bronsted and Lewis concepts); Hydrolysis of salts.
Electrochemistry	Electrochemical cells and cell reactions; Standard electrode potentials; Electrochemical work, Nernst equation; Electrochemical series, emf of galvanic cells; Faraday's laws of electrolysis; Electrolytic conductance, specific, equivalent and molar conductivity, Kohlrausch's law; Batteries: Primary and Secondary, fuel cells; Corrosion
Chemical Kinetics	Rates of chemical reactions; Order and molecularity of reactions; Rate law, rate constant, half-life; Differential and integrated rate expressions for zero and first order reactions; Temperature dependence of rate constant (Arrhenius equation and activation energy); Catalysis: Homogeneous and heterogeneous, activity and selectivity of solid catalysts, enzyme catalysis and its mechanism.
Solid State	Classification of solids, crystalline state, seven crystal systems (cell parameters a, b, c, α, β, γ), close packed structure of solids (cubic and hexagonal), packing in fcc, bcc and hcp lattices; Nearest neighbours, ionic radii and radius ratio, point defects.
Solutions	Henry's law; Raoult's law; Ideal solutions; Colligative properties: lowering of vapour pressure, elevation of boiling point, depression of freezing point, and osmotic pressure; van't Hoff factor.
Surface Chemistry	Elementary concepts of adsorption: Physisorption and Chemisorption, Freundlich adsorption isotherm; Colloids: types, methods of preparation and general properties; Elementary ideas of emulsions, surfactants and micelles (only definitions and examples).
Classification of Elements and Periodicity in Properties	Modern periodic law and the present form of periodic table; electronic configuration of elements; periodic trends in atomic radius, ionic radius, ionization enthalpy, electron gain enthalpy, valence, oxidation states, electronegativity, and chemical reactivity.
Hydrogen	Position of hydrogen in periodic table, occurrence, isotopes, preparation, properties and uses of hydrogen; hydrides – ionic, covalent and interstitial; physical and chemical properties of water,

	heavy water; hydrogen peroxide-preparation, reactions, use and structure; hydrogen as a fuel.
s-Block Elements	Alkali and alkaline earth metals-reactivity towards air, water, dihydrogen, halogens, acids; their reducing nature including solutions in liquid ammonia; uses of these elements; general characteristics of their oxides, hydroxides, halides, salts of oxoacids; anomalous behaviour of lithium and beryllium; preparation, properties, and uses of compounds of sodium (sodium carbonate, sodium chloride, sodium hydroxide, sodium hydrogen carbonate) and calcium (calcium oxide, calcium hydroxide, calcium carbonate, calcium sulphate).
p-Block Elements	Oxidation state and trends in chemical reactivity of elements of groups 13-17; anomalous properties of boron, carbon, nitrogen, oxygen, and fluorine with respect to other elements in their respective groups
	Group 13: Reactivity towards acids, alkalis, and halogens; preparation, properties, and uses of borax, orthoboric acid, diborane, boron trifluoride, aluminium chloride, and alums; uses of boron and aluminium.
	Group 14: Reactivity towards water and halogen; allotropes of carbon and uses of carbon; preparation, properties, and uses of carbon monoxide, carbon dioxide, silicon dioxide, silicones, silicates, zeolites.
	Group 15: Reactivity towards hydrogen, oxygen, and halogen; allotropes of phosphorous; preparation, properties, and uses of dinitrogen, ammonia, nitric acid, phosphine, phosphorus trichloride, phosphorus pentachloride; oxides of nitrogen and oxoacids of phosphorus.
	Group 16: Reactivity towards hydrogen, oxygen, and halogen; simple oxides; allotropes of sulfur; preparation/manufacture, properties, and uses of dioxygen, ozone, sulfur dioxide, sulfuric acid; oxoacids of sulfur.
	Group 17: Reactivity towards hydrogen, oxygen, and metals; preparation/manufacture, properties, and uses of chlorine, hydrogen

	chloride and interhalogen compounds; oxoacids of halogens, bleaching powder.
	Group 18: Chemical properties and uses; compounds of xenon with fluorine and oxygen.
d-Block Elements	Oxidation states and their stability; standard electrode potentials; interstitial compounds; alloys; catalytic properties; applications; preparation, structure, and reactions of oxoanions of chromium and manganese.
f-Block Elements	Lanthanoid and actinoid contractions; oxidation states; general characteristics.
Coordination Compounds	Werner's theory; Nomenclature, cis-trans and ionization isomerism, hybridization and geometries (linear, tetrahedral, square planar and octahedral) of mononuclear coordination compounds; Bonding [VBT and CFT (octahedral and tetrahedral fields)]; Magnetic properties (spin-only) and colour of 3d-series coordination compounds; Ligands and spectrochemical series; Stability; Importance and applications; Metal carbonyls.
Isolation of Metals	Metal ores and their concentration; extraction of crude metal from concentrated ores: thermodynamic (iron, copper, zinc) and electrochemical (aluminium) principles of metallurgy; cyanide process (silver and gold); refining.
Principles of Qualitative Analysis	Groups I to V (only Ag^+, $Hg2^+$, $Cu2^+$, $Pb2^+$, $Fe3^+$, $Cr3^+$, $Al3^+$, $Ca2^+$, $Ba2^+$, $Zn2^+$, $Mn2^+$ and $Mg2^+$); Nitrate, halides (excluding fluoride), carbonate and bicarbonate, sulphate and sulphide.
Environmental Chemistry	Atmospheric pollution; water pollution; soil pollution; industrial waste; strategies to control environmental pollution; green chemistry.
Basic Principles of Organic Chemistry	Hybridisation of carbon; σ and π-bonds; Shapes of simple organic molecules; aromaticity; Structural and geometrical isomerism; Stereoisomers and stereochemical relationship (enantiomers, diastereomers, meso) of compounds containing only up to two asymmetric centres (R,S and E,Z configurations excluded); Determination of empirical and molecular formulae of simple compounds by combustion method only; IUPAC nomenclature of

	organic molecules (hydrocarbons, including simple cyclic hydrocarbons and their mono-functional and bi-functional derivatives only); Hydrogen bonding effects; Inductive, Resonance and Hyperconjugative effects; Acidity and basicity of organic compounds; Reactive intermediates produced during homolytic and heterolytic bond cleavage; Formation, structure and stability of carbocations, carbanions and free radicals.
Alkanes	Homologous series; Physical properties (melting points, boiling points and density) and effect of branching on them; Conformations of ethane and butane (Newman projections only); Preparation from alkyl halides and aliphatic carboxylic acids; Reactions: combustion, halogenation (including allylic and benzylic halogenation) and oxidation.
Alkenes and Alkynes	Physical properties (boiling points, density and dipole moments); Preparation by elimination reactions; Acid catalysed hydration (excluding the stereochemistry of addition and elimination); Metal acetylides; Reactions of alkenes with KMnO4 and ozone; Reduction of alkenes and alkynes; Electrophilic addition reactions of alkenes with X2, HX, HOX, (X=halogen); Effect of peroxide on addition reactions; cyclic polymerization reaction of alkynes.
Benzene	Structure; Electrophilic substitution reactions: halogenation, nitration, sulphonation, FriedelCrafts alkylation and acylation; Effect of directing groups (monosubstituted benzene) in these reactions.
Phenols	Physical properties; Preparation, Electrophilic substitution reactions of phenol (halogenation, nitration, sulphonation); Reimer-Tiemann reaction, Kolbe reaction; Esterification; Etherification; Aspirin synthesis; Oxidation and reduction reactions of phenol.
Alkyl Halides	Rearrangement reactions of alkyl carbocation; Grignard reactions; Nucleophilic substitution reactions and their stereochemical aspects.
Alcohols	Physical properties; Reactions: esterification, dehydration (formation of alkenes and ethers); Reactions with: sodium, phosphorus halides, ZnCl2/concentrated HCl, thionyl chloride; Conversion of alcohols into aldehydes, ketones and carboxylic acids.

Ethers	Preparation by Williamson's synthesis; C-O bond cleavage reactions.
Aldehydes and Ketones	Preparation of: aldehydes and ketones from acid chlorides and nitriles; aldehydes from esters; benzaldehyde from toluene and benzene; Reactions: oxidation, reduction, oxime and hydrazone formation; Aldol condensation, Cannizzaro reaction; Haloform reaction; Nucleophilic addition reaction with RMgX, NaHSO3, HCN, alcohol, amine.
Carboxylic Acids	Physical properties; Preparation: from nitriles, Grignard reagents, hydrolysis of esters and amides; Preparation of benzoic acid from alkylbenzenes; Reactions: reduction, halogenation, formation of esters, acid chlorides and amides.
Amines	Preparation from nitro compounds, nitriles and amides; Reactions: Hoffmann bromamide degradation, Gabriel phthalimide synthesis; Reaction with nitrous acid, Azo coupling reaction of diazonium salts of aromatic amines; Sandmeyer and related reactions of diazonium salts; Carbylamine reaction, Hinsberg test, Alkylation and acylation reactions.
Haloarenes	Reactions: Fittig, Wurtz-Fittig; Nucleophilic aromatic substitution in haloarenes and substituted haloarenes (excluding benzyne mechanism and cine substitution).
Biomolecules	Carbohydrates: Classification; Mono- and di-saccharides (glucose and sucrose); Oxidation; Reduction; Glycoside formation and hydrolysis of disaccharides (sucrose, maltose, lactose); Anomers. Proteins: Amino acids; Peptide linkage; Structure of peptides (primary and secondary); Types of proteins (fibrous and globular). Nucleic acids: Chemical composition and structure of DNA and RNA.
Polymers	Types of polymerization (addition, condensation); Homo and copolymers; Natural rubber; Cellulose; Nylon; Teflon; Bakelite; PVC; Bio-degradable polymers; Applications of polymers.
Chemistry in Everyday Life	Drug-target interaction; Therapeutic action, and examples (excluding structures), of antacids, antihistamines, tranquilizers, analgesics, antimicrobials, and antifertility drugs; Artificial sweeteners (names only); Soaps, detergents, and cleansing action.

Practical Organic Chemistry	Detection of elements (N, S, halogens); Detection and identification of the following functional groups: hydroxyl (alcoholic and phenolic), carbonyl (aldehyde and ketone), carboxyl, amino and nitro.

JEE Advanced AAT Syllabus 2024

Candidates can check the JEE Advanced AAT 2024 syllabus below

- Freehand Drawing
- Three-dimensional Perception
- Architectural Awareness
- Geometrical Drawing
- Imagination and Aesthetic Sensitivity

Best Books for JEE Advanced 2024 Preparation

Candidates preparing for JEE Advanced must always try to increase their knowledge. It is important to improve the knowledge of the topics so that candidates have a strong foundation. For a better understanding of the topics, candidates can refer to the best books for JEE Advanced. Reading the books will help to understand the concepts in the best possible way. While choosing the book, candidates can take the help of syllabus of JEE Advanced 2024. Here we have mentioned the best books for JEE Advanced preparation as per the toppers.

JEE Advanced Preparation Books

Subject	Books
Physics	- Concepts of Physics by H C Verma (Vol-1 and Vol-2) - Fundamentals of Physics by David Halliday/Resnick/Walker - IIT JEE Physics by Arihant (35 years Chapterwise Solved Papers 2013-1979)
Chemistry	- Physical Chemistry by OP Tandon - Modern Approach to Chemical Calculations by R.C. Mukherjee - Organic Chemistry by O.P. Tandon - Organic Chemistry by Paula Bruice Yurkanis - Organic Chemistry by Morrison & Boyd

	• Inorganic Chemistry by J.D Lee • Inorganic Chemistry by O P Tandon
Mathematics	• Objective Mathematics By R.D. Sharma • Plane Trigonometry and Coordinate Geometry (Two Books) by S.L Loney • Problems in Calculus Of One Variable by I.A.Maron • Integral Calculus for IIT-JEE by Amit M Agarwal (Arihant Publications) • A Text Book of Algebra For JEE Main & Advanced by Dr. SK Goyal (Arihant Publications)

JEE Advanced 2024 Preparation Tips

Knowing the JEE Advance syllabus 2024 is not enough. Candidates need to plan their preparation strategy. Every candidate has a unique way of studying. Some might be quick learners while others may take time to understand. So while planning the JEE Advanced preparation, candidates should focus on their study techniques rather than others. Here we have provided a few important tips for JEE Advanced preparations.

- First of all, know the JEE Advanced 2024 syllabus and the exam pattern. Hereafter, gather study materials and other resources that are important for the preparation
- Make a study plan and a timetable with a dedicated time slot for every subject.
- Regular study is important. Moreover, it is important to revise the topics on the same day. Doing so will help in analyzing the understanding of the topics.
- Study conceptually and avoid memorizing topics.
- Take several mock tests every weekend and analyze your answers honestly. Make a note of wrong answers and clear the concepts. Take the help of coaching faculty, online tutorials, or any medium that you are comfortable with but at the end of the day, the concept must be clear.
- Practice multiple numerical

JEE Advanced 2024 Mock Test

The authority will release the JEE Advanced mock test 2024 online on the official website. Aspirants preparing for the JEE Advanced can attempt the mock test to know the level of preparation. Moreover, candidates will get familiar with the difficulty level and improve their

time management skills. The mock test is a replica of the actual exam. The questions in the mock test will be based on the JEE Advanced syllabus 2024.

Factors for Determining JEE Advanced 2024 Cutoff

While preparing the JEE Advanced 2024 cutoff authority will consider various factors.

- Number of students who appeared for JEE Advanced 2024
- Number of students applied for the JEE Advanced
- Exam difficulty level
- Previous year cutoff trends

JEE Advanced Previous Year Cutoff

Candidates can check the cutoff to know the minimum marks in JEE Advanced to get IIT for General, OBC, EWS, SC, and ST. The previous year cutoff will help predict the JEE Advanced 2024 cutoff.

JEE Advanced 2023 Cutoff (Qualifying Marks)

Rank List	Minimum Marks in Each Subject	Minimum Aggregate Marks
Common rank list (CRL)	8	86
OBC-NCL rank list	7	77
GEN-EWS rank list	7	77
SC rank list	4	43
ST rank list	4	43
Common-PwD rank list (CRL-PwD)	4	43
OBC-NCL-PwD rank list	4	43

GEN-EWS-PwD rank list	4	43
SC-PwD rank list	4	43
ST-PwD rank list	4	43
Preparatory course (PC) rank lists	2	22

JEE Advanced Cut off 2023 For Inclusion in Rank List (official)

Candidates who appeared for JEE Advanced 2023 can check the official qualifying marks category-wise below. Applicants who secure more qualifying marks will have a high chance of admission to the participating IITs.

Rank List	Minimum Percentage of Marks in Each Subject	Minimum Percentage of Aggregate Marks
Common rank list (CRL)	6.83%	23.89%
OBC-NCL rank list	6.15%	21.50%
GEN-EWS rank list	6.15%	21.50%
SC rank list	3.42%	11.95%
ST rank list	3.42%	11.95%
Common-PwD rank list (CRL-PwD)	3.42%	11.95%
OBC-NCL-PwD rank list	3.42%	11.95%

GEN-EWS-PwD rank list	3.42%	11.95%
SC-PwD rank list	3.42%	11.95%
ST-PwD rank list	3.42%	11.95%
Preparatory course (PC) rank lists	1.71%	5.98%

IIT JEE Advanced 2022 Cutoff (Qualifying Marks)

Rank List	Minimum Marks in Each Subject	Minimum Aggregate Marks
Common rank list (CRL)	5	55
OBC-NCL rank list	5	50
GEN-EWS rank list	5	50
SC rank list	3	28
ST rank list	3	28
Common-PwD rank list (CRL-PwD)	3	28
OBC-NCL-PwD rank list	3	28
GEN-EWS-PwD rank list	3	28
SC-PwD rank list	3	28
ST-PwD rank list	3	28

Preparatory course (PC) rank lists	1	14

Candidates can check the JEE Advanced cutoff and know the minimum marks for admission in IIT for OBC, SC, ST, and GEN. Check the table for the JEE Advanced cutoff for IIT.

JEE Advanced Cut off 2022 (For Inclusion in Rank List)

Candidates can check the minimum marks in JEE Advanced to get IIT for the General, SC, ST, and OBC categories below.

Rank List	Minimum Percentage of Marks in Each Subject	Minimum Percentage of Aggregate Marks
Common rank list (CRL)	4.40%	15.28%
OBC-NCL rank list	4.00%	13.89%
GEN-EWS rank list	4.00%	13.89%
SC rank list	2.20%	7.78%
ST rank list	2.20%	7.78%
Common-PwD rank list (CRL-PwD)	2.20%	7.78%
OBC-NCL-PwD rank list	2.20%	7.78%

GEN-EWS-PwD rank list	2.20%	7.78%
SC-PwD rank list	2.20%	7.78%
ST-PwD rank list	2.20%	7.78%
Preparatory course (PC) rank lists	0.83%	3.89%

PREVIOUS YEAR QUESTION PAPERS [PYQ] –

- https://engineering.careers360.com/download/jee-advanced-sample-papers-previousyears?page=2
- https://www.aakash.ac.in/jee-advanced-previous-year-question-papers

STUDY MATERIAL –

- **JEE WALLAH** - https://youtube.com/playlist?list=PLxyGaR3hEy3hbSWRWA0PW9BBiMfZQHj4K&si=_LzJcenbatXwBEmF

- **VEDANTU JEE** - https://youtube.com/playlist?list=PLCtUyOrCJbxz9xheItUyFC0s3Mcuh35RQ&si=v-EdFCcfYxrbFyS1

- **JEE WALLAH -** https://youtube.com/playlist?list=PLxyGaR3hEy3jXqZRQtJ7Xq4qshrwpkUMP&si=BYfGTLvcZzcjf-fn