



Prayas JEE 2026 Lecture Planner - Physical Chemistry

| S. No. | Batch Name | Subject | Sub- Subject | Chapter Name | Topic | Lecture Number | Date | Faculty Name |
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| 1 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Nature of Matter, Classification of Matter, Properties of Matter and their Measurement, International System of Units (S.I) | 1 | Monday, April 21, 2025 | Faisal Razaq Sir |
| 2 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Uncertainty in Measurement | 2 | Tuesday, April 22, 2025 | Faisal Razaq Sir |
| 3 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Laws of Chemical Combinations | 3 | Wednesday, April 23, 2025 | Faisal Razaq Sir |
| 4 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Dalton's Atomic Theory, Atomic Mass, Atomic Mass Unit, | 4 | Thursday, April 24, 2025 | Faisal Razaq Sir |
| 5 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Gram Atomic Mass, Average Atomic Mass | 5 | Friday, April 25, 2025 | Faisal Razaq Sir |
| 6 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Molecular Mass, Gram Molecular Mass | 6 | Saturday, April 26, 2025 | Faisal Razaq Sir |
| 7 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Average Molecular Mass Formula Mass | 7 | Monday, April 28, 2025 | Faisal Razaq Sir |
| 8 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Percentage Composition, Empirical and Molecular formula | 8 | Tuesday, April 29, 2025 | Faisal Razaq Sir |
| 9 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Mole, Vapour density, Atomicity | 9 | Wednesday, April 30, 2025 | Faisal Razaq Sir |
| 10 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Mole Concept | 10 | Friday, May 2, 2025 | Faisal Razaq Sir |
| 11 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Concentration Terms & Application | 11 | Saturday, May 3, 2025 | Faisal Razaq Sir |
| 12 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Concentration Terms & Application | 12 | Monday, May 5, 2025 | Faisal Razaq Sir |
| 13 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Stoichiometry and Stoichiometric Calculations Gravimetric Analysis | 13 | Tuesday, May 6, 2025 | Faisal Razaq Sir |
| 14 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Some Basic Concepts of Chemistry | Sequential Reaction, POAC, Oleum Labelling | 1 | Wednesday, May 7, 2025 | Faisal Razaq Sir |
| 15 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Redox Reaction | Balancing of Redox Reaction Types of Redox Reaction Concept of n-Factor or Valency Factor | 2 | Thursday, May 8, 2025 | Faisal Razaq Sir |
| 16 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Redox Reaction | Law of Equivalence Redox Titration | 3 | Friday, May 9, 2025 | Faisal Razaq Sir |
| 17 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Redox Reaction | Iodometric and Iodimetric Titration, Redox Reactions in Electrode process | 4 | Saturday, May 10, 2025 | Faisal Razaq Sir |
| 18 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Redox Reaction | Iodometric and Iodimetric Titration, Redox Reactions in Electrode process | 5 | Monday, May 12, 2025 | Faisal Razaq Sir |
| 19 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Solutions | Binary Solution Concentration Terms | 1 | Tuesday, May 13, 2025 | Faisal Razaq Sir |
| 20 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Solutions | Solubility Vapour Pressure Vapour Pressure of Liquid Solutions | 2 | Wednesday, May 14, 2025 | Faisal Razaq Sir |
| 21 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Solutions | Vapour Pressure Vapour Pressure of Liquid Solutions Determination of Vapour Pressure of a Liquid Vapour Pressure of Liquid Solutions | 3 | Thursday, May 15, 2025 | Faisal Razaq Sir |
| 22 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Solutions | Ideal and Non-ideal Solutions Colligative Properties | 4 | Friday, May 16, 2025 | Faisal Razaq Sir |
| 23 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Solutions | Osmosis Osmotic Pressure | 5 | Saturday, May 17, 2025 | Faisal Razaq Sir |
| 24 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Solutions | Abnormal Molar Masses | 6 | Monday, May 19, 2025 | Faisal Razaq Sir |
| 25 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Solutions | Van't Hoff Factor and Abnormality in Molar Mass | 7 | Tuesday, May 20, 2025 | Faisal Razaq Sir |

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| 26 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Solutions | Abnormal Molar Masses Van't Hoff Factor and Abnormality in Molar Mass | 8 | Wednesday, May 21, 2025 | Faisal Razaq Sir |
| 27 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Kinetics | Introduction Rate of Reaction Rate Law Expression Rate constant Factors Affecting the Reaction Rate Order and molecularity of Reaction Negative Order of the Reaction Approximation | 1 | Thursday, May 22, 2025 | Faisal Razaq Sir |
| 28 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Kinetics | Integrated Rate Equations Numericals on Some Important First Order Reactions Integrated Rate Equations | 2 | Friday, May 23, 2025 | Faisal Razaq Sir |
| 29 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Kinetics | Pseudo First Order Reaction Experimental Determination of Order of Reaction Experimental Determination of Order of Reaction Collision Theory of Chemical Reactions | 3 | Saturday, May 24, 2025 | Faisal Razaq Sir |
| 30 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Kinetics | Concept of Activation Energy and Transition State Theory Activation Energy Activated Complex Theory | 4 | Monday, May 26, 2025 | Faisal Razaq Sir |
| 31 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Kinetics | Effect of Temperature on the reaction rate Temperature Dependence of the Rate of a Reaction Temperature Dependence of the Rate of a Reaction Potential Energy Curves Ratio of Two Rate Constant at Two Different Temperatures | 5 | Tuesday, May 27, 2025 | Faisal Razaq Sir |
| 32 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Kinetics | Parallel Decay Parallel Reactions Sequential Decay Kinetics of Consecutive/Sequence/Series Reactions Reversible Reaction | 6 | Wednesday, May 28, 2025 | Faisal Razaq Sir |
| 33 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Kinetics | Effect of Catalyst on the Reaction rate Equilibrium Nucleo Chemistry Radioactive and Nuclear Reactions Applications of Radioactivity | 7 | Thursday, May 29, 2025 | Faisal Razaq Sir |
| 34 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Thermodynamics | Introduction, Basic terms, Classification of system on the basis of nature, State of system | 1 | Friday, May 30, 2025 | Faisal Razaq Sir |
| 35 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Thermodynamics | Types of properties, TYPES OF THERMODYNAMIC PROCESSES ON BASIS OF THE WAY THE PROCESSES ARE CARRIED OUT Work, heat and internal energy, 1st Law of Thermodynamics Enthalpy | 2 | Saturday, May 31, 2025 | Faisal Razaq Sir |
| 36 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Thermodynamics | Heat Capacity | 3 | Monday, June 2, 2025 | Faisal Razaq Sir |
| 37 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Thermodynamics | CALCULATION OF Q, W, ΔU & ΔH IN VARIOUS PROCESS | 4 | Tuesday, June 3, 2025 | Faisal Razaq Sir |
| 38 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Thermodynamics | Thermochemistry Enthalpy of a substance Standard state of substance Enthalpy of reaction Factor affecting heat of reaction LAWS OF THERMO CHEMISTRY | 5 | Wednesday, June 4, 2025 | Faisal Razaq Sir |
| 39 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Thermodynamics | Enthalpy change for different type of reaction ENTHALPY OF IONIZATION OF WEAK ELECTROLYTE" ENTHALPY OF TRANSITION ENTHALPY OF FORMATION OF IONS Kirchoff's Law | 6 | Thursday, June 5, 2025 | Faisal Razaq Sir |
| 40 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Thermodynamics | Calorimetry Limitation of 1st law of thermodynamics Spontaneous process Entropy Second law of Thermodynamics ENTROPY CHANGE OF AN IDEAL GAS | 7 | Saturday, June 7, 2025 | Faisal Razaq Sir |

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| 41 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Thermodynamics | Entropy Change of Solids and liquids Upon Heating Entropy Calculation for solid or liquid systems | 8 | Monday, June 9, 2025 | Faisal Razaq Sir |
| 42 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Thermodynamics | Standard absolute molar entropy Comparing absolute entropies of substance Entropy Change (ΔS) of a Chemical Reaction GIBB'S FREE ENERGY | 9 | Tuesday, June 10, 2025 | Faisal Razaq Sir |
| 43 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Equilibrium | Introduction, Characteristics of chemical equilibrium Law of mass action | 1 | Wednesday, June 11, 2025 | Faisal Razaq Sir |
| 44 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Equilibrium | Variation of equilibrium constant with the change of stoichiometric coefficients, Multiple | 2 | Thursday, June 12, 2025 | Faisal Razaq Sir |
| 45 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Equilibrium | Equilibrium Reaction Quotient Equilibrium Constant of Various equilibrium, | 3 | Friday, June 13, 2025 | Faisal Razaq Sir |
| 46 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Equilibrium | Calculation of degree of dissociation from vapour density measurement Le chatelier's principle Effect of temperature on equilibrium constant | 4 | Saturday, June 14, 2025 | Faisal Razaq Sir |
| 47 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Chemical Equilibrium | Free energy and chemical equilibrium Physical Equilibrium | 5 | Monday, June 16, 2025 | Faisal Razaq Sir |
| 48 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Ionic Equilibrium | Type of electrolytes, Different theory for acid and base, The autoionization of water | 1 | Tuesday, June 17, 2025 | Faisal Razaq Sir |
| 49 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Ionic Equilibrium | The pH-Scale Ionisation of weak electrolyte | 2 | Wednesday, June 18, 2025 | Faisal Razaq Sir |
| 50 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Ionic Equilibrium | Common ion effect and levelling effect | 3 | Thursday, June 19, 2025 | Faisal Razaq Sir |
| 51 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Ionic Equilibrium | pH-Calculation Buffer Solution | 4 | Friday, June 20, 2025 | Faisal Razaq Sir |
| 52 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Ionic Equilibrium | Salt hydrolysis Indicator | 5 | Saturday, June 21, 2025 | Faisal Razaq Sir |
| 53 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Ionic Equilibrium | Common Ion Effect Solubility and Solubility product | 6 | Monday, June 23, 2025 | Faisal Razaq Sir |
| 54 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Electrochemistry | Introduction Electrochemical Cell Galvanic Cells Liquid Junction Potential or Diffusion Potential | 1 | Tuesday, June 24, 2025 | Faisal Razaq Sir |
| 55 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Electrochemistry | Electrochemical Cell electrodes and Electrode potential Electrochemical Cell Electrochemical Series | 2 | Wednesday, June 25, 2025 | Faisal Razaq Sir |
| 56 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Electrochemistry | Nernst Equation Equilibrium Constant and emf Gibbs Energy of the reaction Application of Nernst equation Various types of half cells Thermodynamics of Galvanic cell Concentration Cell | 3 | Thursday, June 26, 2025 | Faisal Razaq Sir |
| 57 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Electrochemistry | Electrolytes Electrolytic cell Quantitative Aspects of Electrolysis and Faraday's Laws Metallic/Electrolytic Conductors Determination of Cell Constant | 4 | Friday, June 27, 2025 | Faisal Razaq Sir |
| 58 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Electrochemistry | Measurement of Conductance and Conductivity of Ionic Solutions Molar Conductivity Equivalent Conductivity | 5 | Saturday, June 28, 2025 | Faisal Razaq Sir |
| 59 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Electrochemistry | Relation Between Molar Conductivity and Equivalent Conductivity Variation of Conductivity and Molar Conductivity with Concentration Kohlrausch's Law | 6 | Monday, June 30, 2025 | Faisal Razaq Sir |

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| 60 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Electrochemistry | Absolute Ionic Mobilities and their Calculation Conductometric Titrations Commercial Cells or Batteries Fuel Cells Hydrogen Economy Corrosion of Metals | 7 | Tuesday, July 1, 2025 | Faisal Razaq Sir |
| 61 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Structure of Atom | Introduction | 1 | Wednesday, July 2, 2025 | Faisal Razaq Sir |
| 62 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Structure of Atom | Fundamental Particles, Discovery of Fundamental Particles | 2 | Thursday, July 3, 2025 | Faisal Razaq Sir |
| 63 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Structure of Atom | Atomic Models | 3 | Friday, July 4, 2025 | Faisal Razaq Sir |
| 64 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Structure of Atom | Some Important Atomic Terms, Nature of Light and Electromagnetic Spectrum, Particle Nature of Electromagnetic Radiation: Planck's Quantum, Application of Planck's Quantum Theory | 4 | Saturday, July 5, 2025 | Faisal Razaq Sir |
| 65 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Structure of Atom | Bohr's Model for Hydrogen Atom | 5 | Monday, July 7, 2025 | Faisal Razaq Sir |
| 66 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Structure of Atom | Ionization Energy of Hydrogen and Hydrogen-Like Particles | 6 | Tuesday, July 8, 2025 | Faisal Razaq Sir |
| 67 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Structure of Atom | Spectrum: Evidence for the Quantized Electronic Energy Levels | 7 | Wednesday, July 9, 2025 | Faisal Razaq Sir |
| 68 | Prayas JEE 2026 | Chemistry | Physical Chemistry | Structure of Atom | Spectrum: Evidence for the Quantized Electronic Energy Levels Quantum Mechanical Model of the Atom Quantum Number Rules for Filling of electrons in Orbitals in Atom, Exchange and Pairing energy | 8 | Thursday, July 10, 2025 | Faisal Razaq Sir |
| 69 | Prayas JEE 2026 | Chemistry | Physical Chemistry | State of matter (Recorded) | Introduction, Intermolecular Forces The Gaseous State The Gas Laws The Gas Laws, Ideal Gas Equation Dalton's Law of Partial Pressures Graham's Law of Diffusion/effusion Kinetic Molecular Theory of Gases Kinetic Gas Equation Explanation of gas law of Kinetic Theory Kinetic Energy and Molecular Speeds Maxwell-Boltzmann Distribution of Molecular Speeds, Collision Theory Collision frequency Mean Free Path Behaviour of Real Gases : Deviation from Ideal Gas Behaviour Equation of State for Real Gases (Van der Waal's Equation) Liquefaction of Gases Joule - Thomson Effect Inversion Temperature Liquid State Vapour Pressure Boiling and Boiling point Viscosity Surface Tension | 1 | Saturday, December 20, 2025 | Faisal Razaq Sir |

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| 70 | Prayas JEE 2026 | Chemistry | Physical Chemistry | The Solid State (Recorded) | Introduction Difference between Crystalline and amorphous solids Classification of crystalline solids Types of symmetry in crystals Some basic terms in crystalline solids Cubic unit cell(Bravais lattice) Mathematical analysis of cubic system Close packing of identical solid spheres Voids or interstitial voids Tetrahedral and Octahedral voids in close packed structure (FCC main) Radius ratio rule (For ionic solids) Structure of Ionic Compounds Effect of temperature and pressure on the crystal structure Defects or imperfections in Solids Properties of Solids:Electrical properties Super conducting materials | 1 | Monday, December 22, 2025 | Faisal Razaq Sir |
| 71 | Prayas JEE 2026 | Chemistry | Physical Chemistry | SURFACE CHEMISTRY (Recorded) | Introduction Adsorption Adsorption Isotherm Application of adsorption Catalysis Collidal State Type of Colloids Prepaion of Colloidal Solution Gels Emulsion Application of Colloids | 1 | Tuesday, December 23, 2025 | Faisal Razaq Sir |

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