

Year	Q.No.	AP Section	Title	AP Section	Title
Test 4	1.(d)	1.3	Elemental Composition of Pure Substances		
Test 4	1.(e)(f)	1.3	Elemental Composition of Pure Substances		
Test 4	1.(e)(ii)	1.3	Elemental Composition of Pure Substances		
Test 4	6.(d)	1.5	Atomic Structure and Electron Configuration		
Test 5	5.(a)	1.6	Photoelectron Spectroscopy		
Test 3	1.(e)	1.7	Periodic Trends		
Test 4	2.(b)	1.7	Periodic Trends		
Test 5	2.(a)(ii)	1.7	Periodic Trends		
Test 4	6.(c)	2.2	Intramolecular Force and Potential Energy		
Test 4	2.(d)(iii)	2.3	Structure of Ionic Solids		
Test 4	2.(e)	2.3	Structure of Ionic Solids		
Test 1	1.(d)	2.5	Lewis Diagrams		
Test 2	1.(a)	2.5	Lewis Diagrams		
Test 5	6.(a)	2.5	Lewis Diagrams		
Test 4	6.(b)	2.6	Resonance and Formal Charge		
Test 2	1.(b)(i)	2.7	VSEPR and Hybridization		
Test 3	2.(a)	2.7	VSEPR and Hybridization		
Test 1	1.(e)	3.1	Intermolecular and Interparticle Forces		
Test 1	1.(f)	3.1	Intermolecular and Interparticle Forces		
Test 1	5.(a)	3.1	Intermolecular and Interparticle Forces		
Test 2	1.(b)(ii)	3.1	Intermolecular and Interparticle Forces		
Test 2	1.(c)	3.1	Intermolecular and Interparticle Forces		
Test 3	2.(b)(i)	3.1	Intermolecular and Interparticle Forces		
Test 3	2.(b)(ii)	3.1	Intermolecular and Interparticle Forces		
Test 3	2.(c)	3.1	Intermolecular and Interparticle Forces		
Test 3	2.(d)	3.1	Intermolecular and Interparticle Forces		
Test 4	2.(a)	3.1	Intermolecular and Interparticle Forces		
Test 4	2.(c)	3.1	Intermolecular and Interparticle Forces		
Test 4	5.(a)	3.1	Intermolecular and Interparticle Forces		
Test 5	2.(d)(ii)	3.1	Intermolecular and Interparticle Forces		
Test 5	6.(b)	3.1	Intermolecular and Interparticle Forces		
Test 5	6.(c)	3.1	Intermolecular and Interparticle Forces		
Test 3	4.(a)	3.11	Spectroscopy and the Electromagnetic Spectrum		
Test 3	4.(b)	3.11	Spectroscopy and the Electromagnetic Spectrum		
Test 3	4.(c)	3.11	Spectroscopy and the Electromagnetic Spectrum		
Test 4	7.(a)(ii)	3.11	Spectroscopy and the Electromagnetic Spectrum		
Test 4	7.(b)	3.11	Spectroscopy and the Electromagnetic Spectrum		
Test 5	5.(b)	3.11	Spectroscopy and the Electromagnetic Spectrum		
Test 5	5.(c)	3.12	Properties of Photons		
Test 5	2.(c)(i)	3.3	Solids, Liquids, and Gases		
Test 3	6.(a)	3.4	Ideal Gas Law	lab	Laboratory Overview - Experimental Design
Test 3	6.(b)	3.4	Ideal Gas Law	lab	Laboratory Overview - Experimental Design
Test 3	6.(c)	3.4	Ideal Gas Law	lab	Laboratory Overview - Experimental Design
Test 4	5.(c)(ii)	3.4	Ideal Gas Law		
Test 5	2.(b)(i)	3.4	Ideal Gas Law	4.5	Stoichiometry
Test 5	2.(d)(f)	3.4	Ideal Gas Law		
Test 5	3.(c)	3.4	Ideal Gas Law		
Test 4	5.(b)	3.5	Kinetic Molecular Theory		
Test 4	5.(c)(i)	3.5	Kinetic Molecular Theory		
Test 5	2.(c)(ii)	3.5	Kinetic Molecular Theory		
Test 4	3.(c)	3.8	Representations of Solutions		
Test 1	5.(b)(f)	3.9	Separation of Solutions and Mixtures		
Test 1	5.(b)(ii)	3.9	Separation of Solutions and Mixtures		
Test 2	1.(d)(f)	3.9	Separation of Solutions and Mixtures		
Test 2	1.(d)(ii)	3.9	Separation of Solutions and Mixtures		
Test 2	1.(e)(f)	3.9	Separation of Solutions and Mixtures		
Test 2	1.(e)(ii)	3.9	Separation of Solutions and Mixtures		
Test 3	2.(e)	3.9	Separation of Solutions and Mixtures		
Test 5	3.(b)	4.1	Introduction for Reactions		
Test 1	1.(b)	4.5	Stoichiometry		
Test 1	1.(c)(f)	4.5	Stoichiometry		
Test 1	1.(c)(ii)	4.5	Stoichiometry		
Test 1	3.(d)	4.5	Stoichiometry		
Test 2	2.(a)(i)	4.5	Stoichiometry		
Test 3	3.(a)	4.5	Stoichiometry		
Test 4	1.(b)(f)	4.5	Stoichiometry		
Test 4	1.(b)(ii)	4.5	Stoichiometry		
Test 5	3.(a)(f)	4.5	Stoichiometry		
Test 1	3.(c)	4.7	Types of Chemical Reactions		
Test 1	1.(a)	4.9	Oxidation-Reduction (Redox) Reactions		
Test 4	6.(a)	4.9	Oxidation-Reduction (Redox) Reactions		
Test 5	2.(a)(f)	4.9	Oxidation-Reduction (Redox) Reactions		

Test 2	6.(b)	5.11	Catalysis		
Test 5	3.(d)(i)	5.11	Catalysis		
Test 5	3.(d)(ii)	5.11	Catalysis		
Test 1	4.(a)	5.3	Concentration Changes Over Time	5.9	Pre-Equilibrium Approximation
Test 1	4.(b)	5.3	Concentration Changes Over Time	5.9	Pre-Equilibrium Approximation
Test 3	7.(a)	5.3	Concentration Changes Over Time	5.9	Pre-Equilibrium Approximation
Test 3	7.(c)	5.3	Concentration Changes Over Time	5.9	Pre-Equilibrium Approximation
Test 4	4.(a)(i)	5.3	Concentration Changes Over Time	5.9	Pre-Equilibrium Approximation
Test 4	4.(a)(ii)	5.3	Concentration Changes Over Time	5.9	Pre-Equilibrium Approximation
Test 4	4.(b)	5.3	Concentration Changes Over Time	5.9	Pre-Equilibrium Approximation
Test 5	7.(a)	5.3	Concentration Changes Over Time		
Test 5	7.(b)	5.3	Concentration Changes Over Time		
Test 5	7.(c)	5.3	Concentration Changes Over Time		
Test 1	4.(c)	5.5	Collision Model		
Test 3	7.(b)	5.5	Collision Model		
Test 2	6.(c)	5.6	Reaction Energy Profile		
Test 2	6.(a)	5.7	Introduction to Reaction Mechanisms		
Test 1	3.(b)	6	Enthalpy of Solutions		
Test 2	3.(a)	6	entropy		
Test 2	3.(b)	6	phase changes/specific heat/calorimetry		
Test 2	3.(c)(i)	6	phase changes/specific heat/calorimetry		
Test 2	3.(c)(ii)	6	phase changes/specific heat/calorimetry		
Test 2	3.(d)(i)	6	phase changes/specific heat/calorimetry		
Test 2	3.(d)(ii)	6	phase changes/specific heat/calorimetry		
Test 2	3.(e)	6	phase changes/specific heat/calorimetry		
Test 2	3.(f)	6	Boltzmann distribution		
Test 5	2.(b)(ii)	6.1	Endothermic and Exothermic Processes		
Test 4	2.(d)(i)	6.4	Heat Capacity and Calorimetry		
Test 4	2.(d)(ii)	6.4	Heat Capacity and Calorimetry		
Test 4	7.(a)(i)	6.7	Bond Enthalpies		
Test 1	2.(e)(i)	7	Changes in the Equilibrium Constant		
Test 1	7.(a)	7	The Reaction Quotient, Q		
Test 1	7.(b)	7	Le Chatelier's Principle - Pressure		
Test 1	7.(c)	7	The Equilibrium Constant, Keq - Manipulating Keq		
Test 2	7.(a)(i)	7	solution particulate diagram		
Test 2	7.(a)(ii)	7	ion size		
Test 2	7.(b)(ii)	7	dilution calculation		
Test 3	1.(a)(i)	7	Introduction to Solubility Equilibria		
Test 3	1.(a)(ii)	7	Introduction to Solubility Equilibria		
Test 3	1.(c)(i)	7	Introduction to Solubility Equilibria		
Test 3	1.(c)(ii)	7	Introduction to Solubility Equilibria		
Test 3	1.(c)(iii)	7	Introduction to Solubility Equilibria		
Test 4	1.(c)(i)	7.11	Introduction to Solubility Equilibria		
Test 4	1.(c)(ii)	7.11	Introduction to Solubility Equilibria		
Test 5	3.(a)(ii)	7.4	Calculating the Equilibrium Constant		
Test 1	2.(d)	8	Acid Strengths - Percent Dissociation		
Test 1	2.(e)(ii)	8	Acid Strengths - Percent Dissociation		
Test 1	2.(f)(ii)	8	Acid Strengths - Polyprotic Acids		
Test 4	3.(d)(ii)	8.1	Introduction to Acids and Bases		
Test 1	2.(a)(i)	8.3	Weak Acid and Base Equilibria		
Test 1	2.(a)(ii)	8.3	Weak Acid and Base Equilibria		
Test 1	2.(b)	8.3	Weak Acid and Base Equilibria		
Test 1	2.(c)	8.3	Weak Acid and Base Equilibria		
Test 1	2.(f)(i)	8.3	Weak Acid and Base Equilibria		
Test 2	4.(a)	8.3	Weak Acid and Base Equilibria		
Test 2	4.(b)	8.3	Weak Acid and Base Equilibria		
Test 2	5.(a)	8.3	Weak Acid and Base Equilibria		
Test 2	5.(b)(i)	8.3	Weak Acid and Base Equilibria		
Test 2	5.(b)(ii)	8.3	Weak Acid and Base Equilibria		
Test 3	3.(b)	8.3	Weak Acid and Base Equilibria		
Test 4	3.(a)	8.3	Weak Acid and Base Equilibria		
Test 3	3.(d)	8.5	Acid-Base Titrations		
Test 3	3.(e)	8.5	Acid-Base Titrations		
Test 3	3.(f)	8.5	Acid-Base Titrations		
Test 3	3.(c)(i)	8.7	pH and pKa		
Test 3	3.(c)(ii)	8.7	pH and pKa		
Test 3	3.(c)(iii)	8.7	pH and pKa		
Test 4	3.(b)(i)	8.7	pH and pKa		
Test 4	3.(b)(ii)	8.7	pH and pKa		
Test 5	4.(a)	8.8	Properties of Buffers		
Test 4	3.(d)(i)	8.9	Henderson-Hasselbalch Equation		
Test 5	4.(b)	8.9	Henderson-Hasselbalch Equation		
Test 5	4.(c)	8.9	Henderson-Hasselbalch Equation		

Test 1	6.(a)	9	Entropy		
Test 1	6.(b)	9	Gibbs Free Energy - ΔG_0 and Phase Changes		
Test 1	6.(c)	9	Thermodynamics of Phase Change - Enthalpy of Vaporization		
Test 2	2.(e)	9.11	Electrolysis and Faraday's Law		
Test 5	3.(f)	9.2	Absolute Entropy and Entropy Change		
Test 3	5.(a)	9.3	Gibbs Free Energy and Thermodynamic Favorability		
Test 3	5.(b)	9.3	Gibbs Free Energy and Thermodynamic Favorability		
Test 3	5.(c)	9.3	Gibbs Free Energy and Thermodynamic Favorability	5.6	Reaction Energy Profile
Test 5	3.(e)	9.5	Free Energy and Equilibrium		
Test 2	2.(b)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 2	2.(b)(ii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 2	2.(c)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 2	2.(d)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 2	2.(d)(ii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 5	1.(a)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 5	1.(a)(ii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 5	1.(b)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 5	1.(c)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 5	1.(d)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 5	1.(d)(ii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 5	1.(d)(iii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 5	1.(e)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
Test 1	3.(a)	lab	Laboratory Overview - Experimental Design		
Test 1	3.(e)(i)	lab	Laboratory Overview - Experimental Design		
Test 1	3.(e)(ii)	lab	Laboratory Overview - Experimental Design		
Test 1	3.(f)	lab	Laboratory Overview - Experimental Design		
Test 2	7.(b)(i)	lab	Laboratory Overview - Experimental Design		
Test 3	1.(b)	lab	Laboratory Overview - Experimental Design		
Test 3	1.(d)	lab	Laboratory Overview - Experimental Design		
Test 4	1.(a)	lab	Laboratory Overview - Experimental Design		