

Year	Q.No.	AP Section	Title	AP Section	Title
2016	3.(b)	1.1	Moles and Molar Mass		
2021	2.(a)(i)	1.2	Mass Spectra of Elements		
2016	1.(b)	1.5	Atomic Structure and Electron Configuration		
2018	3.(a)	1.5	Atomic Structure and Electron Configuration		
2019	5.(a)(i)	1.5	Atomic Structure and Electron Configuration		
2021	2.(a)(ii)	1.5	Atomic Structure and Electron Configuration		
2022	3.(a)	1.5	Atomic Structure and Electron Configuration		
2023	1.(a)(i)	1.5	Atomic Structure and Electron Configuration		
2023	1.(a)(ii)	1.5	Atomic Structure and Electron Configuration		
2018	7.(a)	1.6	Photoelectron Spectroscopy		
2019	5.(a)(ii)	1.6	Photoelectron Spectroscopy		
2020	1.(j)	1.6	Photoelectron Spectroscopy		
2021	2.(g)	1.6	Photoelectron Spectroscopy		
2014	5.(a)	1.7	Periodic Trends		
2016	1.(c)	1.7	Periodic Trends		
2017	6.(b)	1.7	Periodic Trends		
2018	3.(b)	1.7	Periodic Trends		
2018	3.(c)	1.7	Periodic Trends		
2019	2.(a)	1.7	Periodic Trends		
2021	2.(h)	1.7	Periodic Trends		
2022	3.(b)	1.7	Periodic Trends		
2023	6.(c)	1.7	Periodic Trends		
2024	3.(B)(ii)	1.7	Periodic Trends		
2016	3.(c)	1.8	Valence Electrons and Ionic Compounds		
2023	2.(c)(i)	2.2	Intramolecular Force and Potential Energy		
2023	2.(c)(ii)	2.2	Intramolecular Force and Potential Energy		
2015	6.(a)	2.3	Structure of Ionic Solids		
2015	6.(b)	2.3	Structure of Ionic Solids		
2016	1.(d)	2.3	Structure of Ionic Solids		
2016	1.(e)	2.3	Structure of Ionic Solids		
2016	1.(f)	2.3	Structure of Ionic Solids		
2021	6.(a)	2.3	Structure of Ionic Solids		
2024	3.(b)(i)	2.4	Structure of Metals and Alloys		
2013	6.(a)(i)	2.5	Lewis Diagrams	3.1	Intermolecular and Interparticle Forces
2013	6.(a)(ii)	2.5	Lewis Diagrams	3.1	Intermolecular and Interparticle Forces
2013	6.(b)	2.5	Lewis Diagrams	3.1	Intermolecular and Interparticle Forces
2013	6.(c)	2.5	Lewis Diagrams	3.1	Intermolecular and Interparticle Forces
2013	6.(d)	2.5	Lewis Diagrams	3.1	Intermolecular and Interparticle Forces
2013	6.(e)	2.5	Lewis Diagrams	3.1	Intermolecular and Interparticle Forces
2014	5.(b)	2.5	Lewis Diagrams		
2015	2.(d)	2.5	Lewis Diagrams		
2016	2.(e)	2.5	Lewis Diagrams	2.6	Resonance and Formal Charge
2017	1.(c)(i)	2.5	Lewis Diagrams		
2018	2.(d)(i)	2.5	Lewis Diagrams		
2020	1.(g)	2.5	Lewis Diagrams		
2020	1.(h)	2.5	Lewis Diagrams		
2021	1.(c)	2.5	Lewis Diagrams	8.6	Molecular Structure of Acids and Bases
2022	2.(b)	2.5	Lewis Diagrams		
2023	2.(d)(i)	2.5	Lewis Diagrams	2.7	VSEPR and Hybridization
2023	2.(d)(ii)	2.5	Lewis Diagrams	2.7	VSEPR and Hybridization
2024	6.(c)(i)	2.5	Lewis Diagrams		
2017	2.(a)	2.6	Resonance and Formal Charge		
2014	5.(c)	2.7	VSEPR and Hybridization		
2014	5.(d)	2.7	VSEPR and Hybridization		
2015	2.(e)	2.7	VSEPR and Hybridization		
2017	1.(c)(ii)	2.7	VSEPR and Hybridization		
2018	2.(d)(ii)	2.7	VSEPR and Hybridization		
2019	1.(a)	2.7	VSEPR and Hybridization		
2022	7.(a)	2.7	VSEPR and Hybridization		
2024	6.(c)(ii)	2.7	VSEPR and Hybridization		

2014	1.(g)(i)	3.1	Intermolecular and Interparticle Forces		
2014	6.(a)	3.1	Intermolecular and Interparticle Forces		
2014	6.(b)	3.1	Intermolecular and Interparticle Forces		
2015	2.(f)	3.1	Intermolecular and Interparticle Forces		
2016	3.(d)	3.1	Intermolecular and Interparticle Forces		
2017	1.(d)(i)	3.1	Intermolecular and Interparticle Forces		
2017	1.(d)(ii)	3.1	Intermolecular and Interparticle Forces		
2017	4.(a)	3.1	Intermolecular and Interparticle Forces		
2017	4.(b)	3.1	Intermolecular and Interparticle Forces		
2018	4.(a)	3.1	Intermolecular and Interparticle Forces		
2019	1.(b)	3.1	Intermolecular and Interparticle Forces		
2019	1.(c)	3.1	Intermolecular and Interparticle Forces		
2019	1.(d)	3.1	Intermolecular and Interparticle Forces		
2019	2.(c)	3.1	Intermolecular and Interparticle Forces		
2020	1.(i)	3.1	Intermolecular and Interparticle Forces		
2020	2.(d)	3.1	Intermolecular and Interparticle Forces		
2020	2.(e)	3.1	Intermolecular and Interparticle Forces		
2021	2.(b)	3.1	Intermolecular and Interparticle Forces		
2022	1.(b)	3.1	Intermolecular and Interparticle Forces		
2022	1.(d)	3.1	Intermolecular and Interparticle Forces		
2022	4.(b)	3.1	Intermolecular and Interparticle Forces		
2023	3.(c)	3.1	Intermolecular and Interparticle Forces		
2023	6.(a)	3.1	Intermolecular and Interparticle Forces		
2023	6.(b)(i)	3.1	Intermolecular and Interparticle Forces		
2019	5.(b)	3.11	Spectroscopy and the Electromagnetic Spectrum		
2021	2.(i)	3.11	Spectroscopy and the Electromagnetic Spectrum		
2015	5.(c)	3.13	Beer-Lambert Law		
2021	3.(f)	3.13	Beer-Lambert Law		
2021	3.(g)	3.13	Beer-Lambert Law		
2022	6.(a)	3.13	Beer-Lambert Law		
2014	4.(a)	3.4	Ideal Gas Law		
2014	4.(b)	3.4	Ideal Gas Law		
2014	4.(c)	3.4	Ideal Gas Law		
2016	5.(a)	3.4	Ideal Gas Law		
2017	1.(a)(i)	3.4	Ideal Gas Law		
2018	4.(b)	3.4	Ideal Gas Law		
2019	2.(d)	3.4	Ideal Gas Law		
2019	4.(b)	3.4	Ideal Gas Law		
2021	1.(f)	3.4	Ideal Gas Law		
2021	7.(a)	3.4	Ideal Gas Law		
2021	7.(b)	3.4	Ideal Gas Law		
2022	2.(d)	3.4	Ideal Gas Law	Dalton PP	
2023	2(f)	3.4	Ideal Gas Law	Dalton PP	
2023	5.(a)(i)	3.4	Ideal Gas Law		
2023	5.(a)(ii)	3.4	Ideal Gas Law		
2024	2.(a)(ii)	3.4	Ideal Gas Law		
2013	5.(a)	3.5	Kinetic Molecular Theory		
2019	4.(a)	3.5	Kinetic Molecular Theory		
2019	4.(c)	3.5	Kinetic Molecular Theory		
2021	7.(c)	3.5	Kinetic Molecular Theory		
2024	4.(b)	3.5	Kinetic Molecular Theory		
2019	4.(d)	3.6	Deviation from Ideal Gas Law		
2021	7.(d)	3.6	Deviation from Ideal Gas Law		
2019	3.(e)	3.7	Solutions and Mixtures		
2024	1.(c)	3.7	Solutions and Mixtures		
2021	3.(c)	3.8	Representations of Solutions		
2021	3.(d)	3.8	Representations of Solutions		
2021	6.(b)	3.8	Representations of Solutions	7.11	Introduction to Solubility Equilibria
2021	6.(c)	3.8	Representations of Solutions		
2023	5.(b)	3.8	Representations of Solutions		
2024	1.(b)	3.8	Representations of Solutions		
2014	1.(b)	3.9	Separation of Solutions and Mixtures		
2024	7.(c)	3.9	Separation of Solutions and Mixtures		

2023	1.(f)(iv)	4.1	Introduction for Reactions	4.5	Stoichiometry
2013	4.(a)(i)	4.2	Net Ionic Equations		
2013	4.(b)(i)	4.2	Net Ionic Equations		
2013	4.(c)(i)	4.2	Net Ionic Equations		
2014	1.(a)(i)	4.2	Net Ionic Equations		
2014	1.(a)(ii)	4.2	Net Ionic Equations		
2015	3.(a)	4.2	Net Ionic Equations		
2016	3.(f)	4.2	Net Ionic Equations		
2018	1(g)	4.2	Net Ionic Equations		
2018	6.(b)(ii)	4.2	Net Ionic Equations		
2019	3.(a)	4.2	Net Ionic Equations		
2019	3.(b)	4.2	Net Ionic Equations		
2020	1.(a)	4.2	Net Ionic Equations		
2021	1.(d)(i)	4.2	Net Ionic Equations		
2021	3.(a)	4.2	Net Ionic Equations		
2022	7.(b)(iii)	4.2	Net Ionic Equations		
2023	1.(f)(i)	4.2	Net Ionic Equations		
2023	3.(a)	4.2	Net Ionic Equations		
2024	3.(d)(i)	4.2	Net Ionic Equations		
2018	2.(a)	4.3	Representations of Reactions		
2023	7.(a)	4.3	Representations of Reactions		
2013	4.(a)(ii)	4.5	Stoichiometry		
2014	1.(c)	4.5	Stoichiometry		
2014	1.(d)	4.5	Stoichiometry		
2014	1.(e)	4.5	Stoichiometry		
2014	1.(f)	4.5	Stoichiometry		
2015	2.(a)(i)	4.5	Stoichiometry		
2015	2.(a)(ii)	4.5	Stoichiometry		
2015	2.(b)	4.5	Stoichiometry		
2015	7.(b)	4.5	Stoichiometry		
2016	2.(b)	4.5	Stoichiometry		
2016	3.(a)	4.5	Stoichiometry		
2017	1.(a)(ii)	4.5	Stoichiometry		
2017	5.(b)	4.5	Stoichiometry		
2018	1.(b)	4.5	Stoichiometry		
2018	1.(c)	4.5	Stoichiometry		
2018	3.(g)	4.5	Stoichiometry		
2018	3.(h)	4.5	Stoichiometry		
2018	3.(i)	4.5	Stoichiometry		
2019	3.(c)	4.5	Stoichiometry		
2019	3.(d)	4.5	Stoichiometry		
2020	2.(h)	4.5	Stoichiometry		
2021	3.(b)	4.5	Stoichiometry		
2021	4.(b)	4.5	Stoichiometry		
2021	4.(c)	4.5	Stoichiometry		
2021	5.(c)	4.5	Stoichiometry		
2022	1.(a)	4.5	Stoichiometry		
2022	3.(d)	4.5	Stoichiometry		
2022	4.(a)	4.5	Stoichiometry		
2023	1.(b)	4.5	Stoichiometry		
2023	1.(c)	4.5	Stoichiometry		
2023	1.(d)	4.5	Stoichiometry		
2023	1.(e)	4.5	Stoichiometry		
2023	2.(a)	4.5	Stoichiometry		
2023	3.(e)	4.5	Stoichiometry		
2023	4.(a)	4.5	Stoichiometry		
2023	7.(b)(i)	4.5	Stoichiometry		
2024	2.(a)(i)	4.5	Stoichiometry		
2024	2.(b)(iii)	4.5	Stoichiometry		
2024	2.(c)	4.5	Stoichiometry		
2024	3.(c)	4.5	Stoichiometry		
2024	7.(a)	4.5	Stoichiometry		
2018	2.(e)(i)	4.6	Introduction to Titration		
2018	3.(e)	4.6	Introduction to Titration		
2019	7.(c)	4.6	Introduction to Titration		
2020	2.(f)	4.6	Introduction to Titration		
2022	6.(b)(ii)	4.6	Introduction to Titration		
2016	2.(a)	4.7	Types of Chemical Reactions		
2021	2.(c)	4.7	Types of Chemical Reactions		
2013	4.(b)(ii)	4.8	Introduction to Acid-Base Reactions		
2013	4.(c)(ii)	4.8	Introduction to Acid-Base Reactions		
2016	3.(e)	4.9	Oxidation-Reduction (Redox) Reactions		
2018	1.(a)	4.9	Oxidation-Reduction (Redox) Reactions		
2018	3.(d)	4.9	Oxidation-Reduction (Redox) Reactions		
2019	2.(b)	4.9	Oxidation-Reduction (Redox) Reactions		
2019	7.(a)	4.9	Oxidation-Reduction (Redox) Reactions		
2021	1.(e)	4.9	Oxidation-Reduction (Redox) Reactions		
2022	2.(a)	4.9	Oxidation-Reduction (Redox) Reactions		
2024	3.(a)	4.9	Oxidation-Reduction (Redox) Reactions		
2024	3.(d)(ii)	4.9	Oxidation-Reduction (Redox) Reactions		
2024	3.(d)(iii)	4.9	Oxidation-Reduction (Redox) Reactions		

2013	5.(e)	5.1	Reaction Rates		
2013	5.(f)	5.1	Reaction Rates		
2020	2.(a)	5.11	Catalysis		
2021	1.(g)	5.11	Catalysis		
2014	7.(a)	5.3	Concentration Changes Over Time		
2014	7.(b)	5.3	Concentration Changes Over Time		
2014	7.(c)	5.3	Concentration Changes Over Time		
2014	7.(d)	5.3	Concentration Changes Over Time		
2015	5.(b)	5.3	Concentration Changes Over Time		
2015	5.(a)	5.3	Concentration Changes Over Time		
2016	5.(b)	5.3	Concentration Changes Over Time		
2016	5.(c)	5.3	Concentration Changes Over Time		
2017	2.(e)(i)	5.3	Concentration Changes Over Time		
2017	2.(e)(ii)	5.3	Concentration Changes Over Time		
2017	2.(f)	5.3	Concentration Changes Over Time		
2018	7.(b)	5.3	Concentration Changes Over Time		
2018	7.(c)	5.3	Concentration Changes Over Time		
2019	6.(a)	5.3	Concentration Changes Over Time		
2019	6.(b)	5.3	Concentration Changes Over Time		
2022	5.(a)	5.3	Concentration Changes Over Time		
2022	5.(c)	5.3	Concentration Changes Over Time		
2023	3.(d)	5.3	Concentration Changes Over Time		
2024	6.(a)	5.3	Concentration Changes Over Time		
2024	6.(b)	5.3	Concentration Changes Over Time		
2016	2.(c)	5.5	Collision Model		
2017	1.(b)(i)	5.5	Collision Model		
2024	2.(b)(i)	5.5	Collision Model		
2024	2.(b)(ii)	5.5	Collision Model		
2017	1.(b)(ii)	5.6	Reaction Energy Profile		
2020	2.(c)	5.6	Reaction Energy Profile		
2021	2.(f)	5.6	Reaction Energy Profile		
2013	5.(c)	5.8	Reaction Mechanism and Rate Law		
2013	5.(d)	5.8	Reaction Mechanism and Rate Law		
2019	6.(c)(i)	5.8	Reaction Mechanism and Rate Law		
2019	6.(c)(ii)	5.8	Reaction Mechanism and Rate Law		
2020	2.(b)	5.8	Reaction Mechanism and Rate Law		
2022	5.(b)	5.8	Reaction Mechanism and Rate Law		
2023	3.(f)	6.1	Endothermic and Exothermic Processes		
2013	3.(c)	6.4	Heat Capacity and Calorimetry		
2013	3.(f)	6.4	Heat Capacity and Calorimetry		
2015	7.(a)	6.4	Heat Capacity and Calorimetry		
2016	1.(a)(i)	6.4	Heat Capacity and Calorimetry		
2017	5.(a)	6.4	Heat Capacity and Calorimetry		
2017	5.(c)	6.4	Heat Capacity and Calorimetry		
2018	1.(d)	6.4	Heat Capacity and Calorimetry		
2018	1.(e)(i)	6.4	Heat Capacity and Calorimetry		
2018	1.(e)(ii)	6.4	Heat Capacity and Calorimetry		
2021	4.(a)	6.4	Heat Capacity and Calorimetry		
2022	1.(c)	6.4	Heat Capacity and Calorimetry		
2023	3.(g)(i)	6.4	Heat Capacity and Calorimetry		
2024	1.(e)(i)	6.4	Heat Capacity and Calorimetry		
2024	4.(c)	6.4	Heat Capacity and Calorimetry		
2024	4.(d)	6.4	Heat Capacity and Calorimetry		
2019	1.(e)	6.5	Energy of Phase Changes		
2022	4.(c)	6.5	Energy of Phase Changes		
2023	6.(b)(ii)	6.5	Energy of Phase Changes		
2013	3.(a)	6.6	Introduction to Enthalpy of Reaction		
2013	3.(b)	6.6	Introduction to Enthalpy of Reaction		
2013	3.(d)	6.6	Introduction to Enthalpy of Reaction		
2016	1.(a)(ii)	6.6	Introduction to Enthalpy of Reaction		
2018	1.(f)	6.6	Introduction to Enthalpy of Reaction		
2023	3.(g)(ii)	6.6	Introduction to Enthalpy of Reaction		
2024	1.(e)(ii)	6.6	Introduction to Enthalpy of Reaction		
2024	1.(e)(iii)	6.6	Introduction to Enthalpy of Reaction		
2017	2.(b)	6.7	Bond Enthalpies		
2019	2.(g)	6.7	Bond Enthalpies		
2013	3.(e)	6.8	Enthalpy of Formation		
2014	6.(c)	6.8	Enthalpy of Formation		
2019	1.(f)	6.9	Hess's Law	9.2	Absolute Entropy and Entropy Change
2021	2.(e)	6.9	Hess's Law		
2023	2.(b)	6.9	Hess's Law		

2024	5.(a)	7.1	Introduction to Equilibrium		
2024	5.(b)(ii)	7.1	Introduction to Equilibrium		
2024	5.(b)(iii)	7.1	Introduction to Equilibrium		
2013	1.(a)(i)	7.11	Introduction to Solubility Equilibria		
2013	1.(a)(ii)	7.11	Introduction to Solubility Equilibria		
2013	1.(a)(iii)	7.11	Introduction to Solubility Equilibria		
2013	1.(b)(i)	7.11	Introduction to Solubility Equilibria		
2013	1.(b)(ii)	7.11	Introduction to Solubility Equilibria		
2013	1.(b)(iii)	7.11	Introduction to Solubility Equilibria		
2015	4.(a)	7.11	Introduction to Solubility Equilibria		
2015	4.(b)	7.11	Introduction to Solubility Equilibria		
2015	4.(c)	7.11	Introduction to Solubility Equilibria		
2017	6.(a)	7.11	Introduction to Solubility Equilibria		
2020	1.(b)	7.11	Introduction to Solubility Equilibria		
2020	1.(c)	7.11	Introduction to Solubility Equilibria		
2020	1.(d)	7.11	Introduction to Solubility Equilibria		
2022	7.(b)(i)	7.11	Introduction to Solubility Equilibria		
2022	7.(b)(ii)	7.11	Introduction to Solubility Equilibria		
2023	7.(b)(ii)	7.11	Introduction to Solubility Equilibria		
2023	7.(c)	7.11	Introduction to Solubility Equilibria		
2021	6.(d)	7.12	Common-Ion Effect		
2016	6.(b)	7.3	Reaction Quotient and Equilibrium Constant		
2020	1.(e)	7.3	Reaction Quotient and Equilibrium Constant		
2022	2.(g)	7.3	Reaction Quotient and Equilibrium Constant		
2024	5.(b)(i)	7.3	Reaction Quotient and Equilibrium Constant		
2017	3.(a)	7.4	Calculating the Equilibrium Constant		
2019	2.(e)	7.4	Calculating the Equilibrium Constant		
2022	2.(e)	7.4	Calculating the Equilibrium Constant		
2022	2.(f)	7.4	Calculating the Equilibrium Constant		
2023	2.(e)	7.4	Calculating the Equilibrium Constant		
2016	6.(a)	7.5	Magnitude of the Equilibrium Constant		
2019	2.(f)	7.5	Magnitude of the Equilibrium Constant		
2014	4.(d)	7.7	Calculating Equilibrium Concentrations		
2017	3.(b)	7.7	Calculating Equilibrium Concentrations		
2019	3.(f)(ii)	7.7	Calculating Equilibrium Concentrations		
2013	1.(c)	7.9	Introduction to Le Châtelier's Principle		
2013	5.(b)	7.9	Introduction to Le Châtelier's Principle		
2018	2.(c)	7.9	Introduction to Le Châtelier's Principle		
2020	1.(f)	7.9	Introduction to Le Châtelier's Principle		
2014	2.(a)	8.1	Introduction to Acids and Bases		
2015	3.(f)	8.1	Introduction to Acids and Bases	8.8	Properties of Buffers
2017	3.(e)	8.1	Introduction to Acids and Bases		
2014	2.(c)(ii)	8.3	Weak Acid and Base Equilibria		
2016	4.(a)	8.3	Weak Acid and Base Equilibria		
2016	4.(b)	8.3	Weak Acid and Base Equilibria		
2018	5.(a)	8.3	Weak Acid and Base Equilibria		
2018	5.(b)	8.3	Weak Acid and Base Equilibria		
2018	5.(c)	8.3	Weak Acid and Base Equilibria		
2023	5.(c)	8.3	Weak Acid and Base Equilibria		
2014	2.(c)(i)	8.4	Acid-Base Reactions and Buffers		
2014	2.(d)	8.5	Acid-Base Titrations		
2014	2.(e)	8.5	Acid-Base Titrations		
2015	3.(b)	8.5	Acid-Base Titrations		
2015	3.(c)	8.5	Acid-Base Titrations		
2016	7.(b)	8.5	Acid-Base Titrations		
2016	7.(c)	8.5	Acid-Base Titrations		
2024	1.(d)(i)	8.5	Acid-Base Titrations		
2024	1.(d)(ii)	8.5	Acid-Base Titrations		
2024	1.(d)(iii)	8.5	Acid-Base Titrations		
2024	1.(a)	8.6	Molecular Structure of Acids and Bases		
2014	2.(b)	8.7	pH and pKa		
2015	3.(d)	8.7	pH and pKa		
2015	3.(e)	8.7	pH and pKa		
2018	2.(e)(ii)	8.7	pH and pKa		
2019	3(g)	8.7	pH and pKa		
2019	3.(h)	8.7	pH and pKa		
2021	1.(a)	8.7	pH and pKa		
2021	1.(b)	8.7	pH and pKa		
2022	1.(e)	8.7	pH and pKa		
2022	1.(g)	8.7	pH and pKa		
2022	1.(h)	8.7	pH and pKa		
2024	2.(f)	8.7	pH and pKa		
2016	2.(f)	8.8	Properties of Buffers		
2017	3.(c)(i)	8.8	Properties of Buffers		
2018	2.(f)	8.8	Properties of Buffers		
2021	1.(d)(ii)	8.8	Properties of Buffers		
2017	3.(c)(ii)	8.9	Henderson-Hasselbalch Equation		
2017	3.(d)	8.9	Henderson-Hasselbalch Equation		
2022	1.(f)	8.9	Henderson-Hasselbalch Equation		
2023	4.(c)	8.9	Henderson-Hasselbalch Equation		
2024	2.(g)	8.9	Henderson-Hasselbalch Equation		

2024	3.(e)	9.11	Electrolysis and Faraday's Law		
2017	2.(c)	9.2	Absolute Entropy and Entropy Change		
2019	1.(g)	9.2	Absolute Entropy and Entropy Change		
2021	2.(d)	9.2	Absolute Entropy and Entropy Change		
2022	2.(c)(i)	9.2	Absolute Entropy and Entropy Change		
2024	2.(d)	9.2	Absolute Entropy and Entropy Change		
2024	2.(e)	9.2	Absolute Entropy and Entropy Change		
2015	2.(c)	9.3	Introduction to Acids and Bases		
2016	2.(d)(i)	9.3	Introduction to Acids and Bases		
2016	2.(d)(ii)	9.3	Introduction to Acids and Bases		
2017	2.(d)	9.3	Introduction to Acids and Bases		
2017	7.(b)(i)	9.3	Introduction to Acids and Bases		
2017	7.(b)(ii)	9.3	Introduction to Acids and Bases		
2022	2.(c)(ii)	9.3	Introduction to Acids and Bases		
2018	2.(b)(i)	9.5	Free Energy and Equilibrium		
2018	2.(b)(ii)	9.5	Free Energy and Equilibrium		
2022	3.(g)	9.5	Free Energy and Equilibrium		
2019	1.(h)	9.6	Free Energy of Dissolution		
2013	2.(a)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2013	2.(b)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2013	2.(c)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2013	2.(d)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2013	2.(e)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2014	3.(a)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2014	3.(b)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2014	3.(c)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2014	3.(d)(ii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2014	3.(e)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2014	3.(e)(ii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2015	1(b)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2015	1.(a)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2015	1.(a)(ii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2015	1.(b)(ii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2015	1.(c)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2015	1.(c)(ii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2015	1.(d)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2015	1.(e)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2015	1.(e)(ii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2017	7.(a)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2017	7.(a)(ii)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2018	6.(a)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2018	6.(b)(i)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2021	5.(a)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2021	5.(b)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2022	3.(e)	9.8	Galvanic (Voltaic) and Electrolytic Cells		
2013	2.(e)(ii)	9.9	Cell Potential and Free Energy		
2014	3.(d)(i)	9.9	Cell Potential and Free Energy		
2018	6.(b)(iii)	9.9	Cell Potential and Free Energy		
2022	3.(f)	9.9	Cell Potential and Free Energy		
2023	1.(f)(ii)	9.9	Cell Potential and Free Energy		
2023	1.(f)(iii)	9.9	Cell Potential and Free Energy		
2023	3.(b)	data int.			
2016	7.(a)	lab eq.			
2018	3.(f)	lab eq.			
2019	3.(f)(i)	lab eq.			
2019	7.(b)	lab eq.			
2019	7.(d)	lab eq.			
2020	2.(g)	lab eq.			
2021	3.(e)	lab eq.		3.8	Representations of Solutions
2022	3.(c)	lab eq.			
2022	6.(c)	lab eq.			
2023	4.(b)	lab eq.			
2024	7.(b)	lab eq.			
2014	1.(g)(ii)	sig.fig.			
2022	6.(b)(i)	sig.fig.			
2024	4.(a)	sig.fig.			