Chemistry

Recommended Time Table

Class-10

Chapter Names	Concepts	
1. Atomic Structure (4 hours)	• Rutherford's, Bohr's • Sommerfeld's models	**(1 hour)**
	• Quantum numbers • EC (of atoms) de Broglie's theory Heisenberg's principle	**(1 hour)**
	• Problems and exercises	**(1 hour)**
	• Doubts Clarification	**(1 hour)**
2. Periodic Table (4 hours)	• Mendeleev & Modern periodic table • Classification of elements	**(1 hour)**
	• Gradation in periodic properties	**(1 hour)**
	• Exercises	**(1 hour)**
	• Doubts Clarification	**(1 hour)**
3. Chemical Bonding (4 hours)	• Bonds - Ionic • Covalent • Coordinate covalent	**(1 hour)**
	• Overlapping of orbitals • shapes of molecules • Metallic bond	**(1 hour)**
	• Exercises	**(1 hour)**
	• Doubt Clarification	**(1 hour)**
4. Mole Concept and Stoichiometry (5 hours)	• At.wt • Mol.wt. • Mole	**(1 hour)**
	• Stoichiometry	**(1 hour)**
	• Problems and exercises	**(2 hours)**
	• Doubts Clarification	**(1 hour)**
5. Electrochemistry (3 hours)	• Electrolysis • Faraday's laws • Electrochemical cells	**(1 hour)**
	• Problems and exercises	**(1 hour)**
	• Doubts Clarification	**(1 hour)**
6. Chemical Kinetics and Chemical Equilibrium (4 hours)	• Rate of reaction • Rate laws • Collision theory • Factors affecting rate	**(1 hour)**
	• Chemical equilibrium • Factors affecting it	**(1 hour)**
	• Problems and exercises	**(1 hour)**
	• Doubts Clarification	**(1 hour)**
7. Acids, Bases and Salts (4 hours)	• Preparation • Properties of acids • bases & salts • Arrhenius theory • K_w, pH	**(1 hour)**
	• Problems and exercises	**(2 hours)**
	• Doubts Clarification	**(1 hour)**
8. Compounds of NItrogen (3 hours)	• Ammonia Preparation • Properties • Uses • Oxides of nitrogen • HNO_3	**(1 hour)**
	• Exercises	**(1 hour)**
	• Doubts Clarification	**(1 hour)**
9. Compounds of Sulphur (3 hours)	• Preparation • Properties and Uses, H_2S, SO_2, SO_3, H_2SO_3, H_2SO_4	**(1 hour)**
	• Exercises	**(1 hour)**
	• Doubts Clarification	**(1 hour)**

Chapter Names	Concepts
10. Compounds of Chlorine (3 hours)	• Preparation • Properties and Uses of NaCl, HCl • Bleaching powder **(1 hour)** • Exercises **(1 hour)** • Doubts Clarification **(1 hour)**
11. Organic Chemistry-I (4 hours)	• Unique features of carbon • Nomenclature • Hydrocarbons • Preparation • Properties • Uses **(2 hours)** • Exercises **(1 hour)** • Doubts Clarification **(1 hour)**
12. Organic Chemistry-II (5 hours)	• Nomenclature of various organic compounds • their preparation • Properties and Uses **(1 hour)** • Esters, Ether, Biomolecules **(1 hour)** • Exercises **(2 hours)** • Doubts Clarification **(1 hour)**
13. Metallurgy (4 hours)	• Metallurgical processes **(1 hour)** • Extraction of Al, Zn, Fe **(1 hour)** • Exercises **(1 hour)** • Doubts Clarification **(1 hour)**

Chemistry

Term - 1 (MCQ's: 50)	Term - 2 (MCQ's: 50)	Term - 3 (MCQ's: 50)
Chemistry: Chapters. 1 to 6	**Chemistry: Chapters. 1 to 10**	**Chemistry: Chapters. 1 to 13**

Physics

Term - 1 (MCQ's: 50)	Term - 2 (MCQ's: 50)	Term - 3 (MCQ's: 50)
Physics: Chapters. 1 to 4	**Physics: Chapters. 1 to 6**	**Physics: Chapters. 1 to 8**

Chapter Names	Concept	Problems	Total No.of hours
1. Atomic Structure	1	3	4
2. Periodic Table	2	3	4
3. Chemical Bonding	2	3	4
4. Mole Concept & Stoichiometry	2	2	5
5. Electrochemistry	1	3	3
6. Chemical Kinetics & Chemical Equilibrium	1	3	4
7. Acids, Bases & Salts	2	3	4
8. Compounds of Nitrogen	2	2	3
9. Compounds of Sulphur	1	2	3
10. Compounds of Chlorine	2	2	3
11. Organic Chemistry - I	1	2	4
12. Organic Chemistry - II	2	2	5
13. Metallurgy	1	2	4