

CHEMISTRY

For Class IX (marks 65)

- 1. Introduction to Chemistry**
 - 1.1 What is chemistry?
 - 1.2 A brief history of Chemistry
 - 1.3 Chemistry & Society
 - 1.4 Branches of Chemistry
 - 1.5 The Scientific approach in Chemistry

- 2. Chemical Combination**
 - 2.1 Laws of Chemical Combination
 - 2.2 Atomic mass, Empirical and molecular formulas
 - 2.3 The mole, and Avogadro's number
 - 2.4 Chemical reactions and chemical equations

- 3. Atomic Structure**
 - 3.1 Discovery of electron, proton & neutron
 - 3.2 Fundamental particles of an atom
 - 3.3 Rutherford's atomic model & Bohr's atomic model
 - 3.4 Atomic number of elements, Isotopes
 - 3.5 Arrangement of electrons in the 1st 20 elements

- 4. Periodicity of Elements**
 - 4.1 Periodic table
 - 4.2 Main features of periodic table
 - 4.3 Some periodic properties of atoms

- 5. Chemical Bonding**
 - 5.1 Formation of Chemical bond
 - 5.2 Ionic bond
 - 5.3 Covalent bond
 - 5.4 Coordinate covalent bond
 - 5.5 Metallic bond

- 6. States of Matter**
 - 6.1 Common states of matter
 - 6.2 Diffusion in gases and liquids
 - 6.3 Brownian movement

- 7. Solution and Suspension**
 - 7.1 Types of solution
 - 7.2 Saturated and Supersaturated solutions
 - 7.3 Factors affecting solubility
 - 7.4 Strength of a solution
 - 7.5 Crystallization
 - 7.6 Suspensions

- 8. Electrochemistry**
 - 8.1 Electrolyte & non-electrolyte
 - 8.2 Electrolysis
 - 8.3 Faraday's law of electrolysis
 - 8.4 Uses of electrolysis

- 9. Acids, Bases and Salts**
9.1 Acids & bases
9.2 Properties of Acids & Bases
9.3 Dissociation of acids and bases
9.4 Salts
9.5 pH
9.6 Acid, base titrations
- 10. Chemical Energetics**
10.1 Exothermic & Endothermic reactions
10.2 Heat content of reactions
10.3 Measurement of heat of reaction

PRACTICALS

For Class IX (marks 10)

Minor Experiments

1. Determination of melting points of a given compound having a melting point less than 100°C.
2. Determination of boiling points of a given liquid having a boiling point less than 100°C.
3. Preparation of potash alum.
4. Determination of pH of different solutions by pH paper.

Major Experiments

5. Preparation of saturated oxalic acid solution.
6. Standardize the given solution of sodium hydroxide using oxalic acid solution.
7. Standardize the given solution of sodium carbonate using hydrochloric acid solution.
8. Passage of electric current through electrolytes and non electrolytes and to record the observations and their classification.
9. Preparation of saturated solution and crystallization of CuSO_4 .

RECOMMENDED REFERENCE BOOKS FOR CLASS IX

The question paper will be syllabus oriented. However, the following books are recommended for reference and supplementary reading:

1. Chemistry
Punjab Textbook Board, Lahore
2. Chemistry
National Book Foundation, Islamabad
3. Chemistry
Sindh Textbook Board, Jamshoro
4. Chemistry
NWFP Textbook Board, Peshawar
5. Chemistry
Baluchistan Textbook Board, Quetta



Federal Board SSC-I Examination
Chemistry
Practical Model Question Paper

Time allowed: 2 hours

Total Marks: 10

1. Determine the pH of different solutions by pH paper. (Minor Exp). (2)
2. Standardize the given solution of sodium hydroxide by using oxalic acid solution. (4)
(OR)
Prepare the crystals of copper sulphate. (4)
3. Note Book (2)
4. Viva Voce (2)

Note: No Procedure is required for minor experiment (only performance).
