



Class: IX
Paper: Chemistry

Max. Marks: 60
Duration: 2 Hours

SECTION-"A" (COMPULSORY) MULTIPLE CHOICE QUESTIONS (MCQs)

Note: i) Attempt all questions of this section. ii) Do not copy down questions. Write only the answers against the proper number of questions. iii) Each question carries one mark.

Q1. Choose the correct answer for each from the given options: (30)

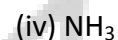
- The best disinfectant is:**
a) Chlorine b) Bromine c) iodine d) Oxygen
- Which one is polar covalent bond:**
a) H₂ b) N₂ c) O₂ d) HCl
- _____ chemistry deals with carbon compounds:**
a) Inorganic chemistry b) Organic chemistry
c) Bio chemistry d) Physical chemistry
- _____ chemistry deals with the study of changes occurring in the nucleus of atom:**
a) Inorganic chemistry b) Organic chemistry
c) Nuclear d) Physical chemistry
- In 1785, the French chemist Lavoisier proposed the law of:**
a) Conservation of mass b) Constant composition
c) Multiple proportion d) Reciprocal proportion
- Molecular mass expressed in gram is called:**
a) atomic mass b) Molar mass c) Formula mass d) Equivalent mass
- The empirical formula of Glucose is:**
a) C₄H₈O₄ b) CHO c) CH₂O d) C₂H₂O₂
- _____ discovered electron:**
a) Rutherford b) Neil Bohr c) Chadwick d) J.J Thomson
- The charge on electron is:**
a) -1.602×10^{-19} b) 1.602×10^{19} c) 1.75×10^{-17} d) 9.11×10^{-31}
- The total number of noble gases are:**
a) 2 b) 6 c) 4 d) 8
- Potassium "K" is allocated in _____ group:**
a) IA b) IIA c) IIIA d) IVA
- Which of the following molecule contains triple covalent bond?**
a) H₂ b) O₂ c) O₃ d) N₂

SECTION "B" (SHORT ANSWERS QUESTIONS)**(18 Marks)****Note: Answer any six (6) questions from this section. Each carry 3 marks.**

Q2. Define chemistry and explain any two branches of Chemistry.

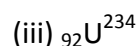
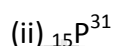
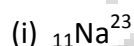
Q3. State and explain Faraday's First law of electrolysis.

Q4. State Graham's law of diffusion. Arrange the following gases as their fastest diffusion rates:



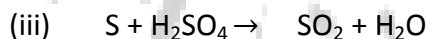
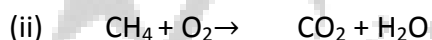
Q5. Write three points of differences between Ionic compounds & Covalent compounds

Q6. Find the number of electrons, protons and neutrons in:



Q7. Define (i) Atomic Radii (ii) Electronegativity (iii) Ionization Energy

Q8. Balance the following chemical equations.



Q9. What is Double Salt? Write the chemical formulae of any two double salts.

(OR)

Define:

(i) Saturated solution (ii) Unsaturated solution (iii) Super saturated solution

Q10. Write down the characteristics of group VIIA elements.

Q11. 56g of KOH are dissolved in 224 ml water, calculate the Molarity.

(Atomic masses: K=39, O=16, H=1)

SECTION 'C' (DESCRIPTIVE-ANSWER QUESTIONS) (12 Marks)**Note: Attempt any three (3) questions from this section. All questions carry equal marks:**

Q12. State law of conservation of mass and describe Landolt's experiment with diagram.

Q13. Define Solubility and describe all the factors which affect solubility.

Q14. Describe Rutherford experiment which led him to the discovery of nucleus.

Q15. Define co-ordinate covalent bond and describe the formation of Ammonium Chloride (NH_4Cl).