ZIAUDDIN UNIVERSITY
EXAMINATION BOARD

MODEL PAPER, 2023

Subject: Chemistry	Grade - IX	M. Marks: 60	Time: 3 Hours

SECTION "A"

(MULTIPLE CHOICE QUESTIONS)

Q1. Choose the correct answer for each from the given options. Each question carries one mark. (12)

(i) Oxygen was discovered by:

(a) J. Priestly (b) J. Black (c) Robert Boyle

(ii) The empirical formula of Glucose is:

(a) $C_6H_{12}O_6$ (b) CH_2O (c) CH_2O_2

(iii) He discovered electron:

(a) Rutherford (b) J. J. Thomson (c) Chadwick

(iv) All transition elements are:

(a) Metals (b) Non metals (c) Metalloids

(v) Iodine belongs to this family:

(a) Nitrogen (b) Carbon (c) Halogen

(vi) Atom which loses two electrons from its outer shell to form ion is called:

(a) Oxygen (b) Potassium (c) Magnesium

(vii) Its electronegativity is 4:

(a) Chlorine (b) Fluorine (c) Nitrogen

(viii) Hydrogen bind is a type of:

(a) Metallic bond (b) Intermolecular force (c) Chemical bond

(ix) Which of the following have sharp melting point in solids:

(a) Plastic (b) Diamond (c) Glass

(x) 2 moles of sodium chloride is equal to:

(a) 123 grams (b) 117 grams (c) 158 grams

(xi) Example of sodium hetergenous mixture is:

(a) Sugar and water (b) Sand and water (c) Salt and water

(xii) Which gas can turn lime water milky?

(a) CO_2 (b) O_2 (c) NO_2

SECTION "B"

(SHORT ANSWER QUESTIONS)

Note: Answer any eight questions from this section.

Each question carries 3 marks. (24)

Q2. Balance the following chemical equation:

(i) $KI + Cl_2 \longrightarrow KCl + I_2$

(ii) $CacO_3 + HCl \longrightarrow CaCl_2 + H_2Ol + CO_2$

(iii) $NaHCO_3 \longrightarrow Na_2CO_3 + H_2O + CO_2$

Q3. What is chemistry? Define any three branches of chemistry.

Q4. State Faraday's first and second law of electrolysis.

Q5. Define mole, calculate the no of moles in 20gm of Glucose ($C_6H_{12}O_6$).

Q6. Write any three characteristics of ionic compound OR properties of cathode rays?

Q7. Define isotopes, write any three applications of isotopes.

Q8. Define the following:

(a) Group (b) Electronegativity (c) Oxidation

Q9. The 800cm3 of a gas is enclosed in a contain under a pressure of 750mm. if the volume is reduced to 250cm3, what will be the pressure?

Q10. Write the name, symbol and properties of Group VII-A OR a Group-II-A elements?

Q11. Define molarity. What is the molarity of the solution prepared by dissolving 1.25 gm of HCl gas into enough water to make 300 cm3 of solution?

Q12. Write down the chemical and empirical formula of the following compound:

(a) Benzene (b) Glucose (c) Acetic Acid

Q13. Write any three differentiate between amorphous and crystalline solid. OR compound and mixture.

SECTION "C"

(DETAILED ANSWER QUESTIONS)

Note: Answer any four questions from this section. Each question carries 6 marks. (24)

Q14. State Boyle's law and derive its mathematical expression $p_1v_1 = p_2v_2$.

Q15. Describe discharge tube experiment with labeled diagram?

Q16. Discuss Rutherford gold metal foil experiment in the light of structure of atom.

Q17. Define covalent bond, explain different types of covalent bond with example

OR

Define solution. Explain saturated, unsaturated and super saturated solution.

Q18. Describe dry cell with diagram OR what is electroplating, how steel object can be electroplated with Tin OR Zinc?

Q19. What is evaporation, discuss the factors that affects the evaporation process OR what is rusting? How can it be prevented?