

CHEMISTRY-11	Chapter#01 (Complete) Test-1		
	Name: _____	Class: _____	ID: _____
Date: ___/___/___	Marks Total: 30	Marks Obtained:	
Time Allowed: 50 Min.			

Maximum Marks: 06 (OBJECTIVE TYPE) Time Allowed: 10 Min.

NOTE: Tick The Correct Option:

- Isotopes differ in:
 - Properties which depend upon mass
 - Arrangement of electrons in orbitals
 - Chemical properties
 - The extent to which they may be affected in electromagnetic field.
- The largest number of molecules are present in:
 - 3.6 g of H₂O
 - 4.8 g of C₂H₅OH
 - 2.8 g of CO
 - 5.4 g of N₂O₅
- The volume occupied by 1.4 g of N₂ at S.T.P is:
 - 2.24 dm³
 - 22.4 dm³
 - 1.12 dm³
 - 112 cm³
- Cadmium has isotopes:
 - 5
 - 6
 - 9
 - 2
- During combustion analysis, CO₂ produced is absorbed in:
 - Mg(ClO₄)₂
 - 50% KOH
 - CaCl₂
 - P₂O₅
- In mass spectrum, the relative abundance of an ion is represented by:
 - Number of peaks
 - Height of the peak
 - Both 'a' & 'b'
 - None of the above

Maximum Marks: 24 (SUBJECTIVE TYPE) Time Allowed: 40 Min.

SECTION-I

Q.2: Give Brief Answers To The Following Short Questions:

- Define the term atomicity? Give examples.
- Why do isotopes have same chemical but different physical properties?
- Write down any four methods used for the separation of isotopes.
- Calculate the percentage of nitrogen in NH₂CONH₂.
- 23 g of Na and 238 g of Uranium have equal number of atoms in them. Justify it.
- How many molecules of water are there in 10 g of ice?
- Define Stoichiometry. Give two assumptions for stoichiometric calculations.
- Why in most reactions, actual yield remains less than the theoretical yield?

SECTION-II

NOTE: Attempt All Questions:

(08)

Q.3: Ethylene glycol is used as automobile antifreeze. It has 38.7% carbon, 9.7% hydrogen and 51.6% oxygen. Its molar mass is 62.1 g mole⁻¹. Determine its empirical formula?

Q.3: A mixture of two liquids, hydrazine N₂H₄ and N₂O are used in rockets. They produce N₂ and water vapours. How many grams of N₂ gas will be formed by reacting 100 g of N₂H₄ and 200 g of N₂O₄? $2\text{N}_2\text{H}_4 + \text{N}_2\text{O}_4 \longrightarrow 3\text{N}_2 + 4\text{H}_2\text{O}$