

<b>CHEMISTRY-11</b>	<b>Chapter#01 (Complete SMART) Test-2</b>		
	Name:	Class:	ID:
Date: / /	<b>Marks Total: 30</b>	<b>Marks Obtained:</b>	
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 mass of two moles of electrons is:
  - 1.10 mg
  - 1.00 mg
  - 0.184 mg
  - 1.673 mg
- The number of naturally occurring radioactive isotopes is:
  - 40
  - 92
  - 280
  - 300
- Stoichiometric calculations are not true for:
  - Irreversible reactions
  - Reversible reactions
  - Spontaneous reactions
  - Non-spontaneous reactions
- If 4 g of  $H_2$  is allowed to react with 64 g of  $O_2$ , the amount of  $H_2O$  formed will be:
  - 32 g
  - 64 g
  - 18 g
  - 36 g
- A practically inexperienced worker may affect:
  - Theoretical yield
  - Actual yield
  - Percentage yield
  - Both 'b' & 'c'

Maximum Marks: 24

**(SUBJECTIVE TYPE)**

Time Allowed: 40 Min.

**SECTION-I**

**Q.2: GIVE BRIEF ANSWERS TO THE FOLLOWING QUESTIONS: (16)**

- Neon has atomic mass 20.18 amu. But no individual atom in Neon has this value of mass. Explain.
- Justify that  $N_2$  and  $CO$  have same number of electrons, protons and neutrons.
- Calculate the number of gram atoms (moles) in 0.1 g of sodium.
- Calculate the mass in grams of 2.74 moles of  $KMnO_4$ .
  - Calculate the mass in grams of 5.136 moles of  $Ag_2CO_3$ .
  - One mole  $H_2SO_4$  requires 2 moles of  $NaOH$  to neutralize it. Explain.
  - Define molar volume.
  - Limiting reactant controls the amount of the product. Explain?

**SECTION-II**

**NOTE:** Attempt All Questions:

(08)

**Q.3: Mg metal reacts with HCl to give hydrogen gas. What is the minimum volume of HCl solution (27% by weight) required to produce 12.1 g of  $H_2$ ? The density of HCl solution is  $1.14 \text{ g/cm}^3$ .**

**An unknown metal M reacts with S to form a compound with a formula  $M_2S_3$ . If 3.12g of M reacts with exactly 2.88g of sulphur, what are the names of metal M and the compounds  $M_2S_3$ ?**