# SIR CV RAMAN COACHING CENTRE IDAPPADI, SALEM X SCIENCE UNIT – 7 "SLIP TEST

## TOTAL MARK : 25 M

## DATE : 17.06.2024

## CHOOSE THE CORRECT BEST ANSWER ( 5 X 1= 5M )

1. Which of the following statement is incorrect?

a. 12 gram of C – 12 contains Avogadro's number of atoms.

- b. One mole of oxygen gas contains Avogadro's number of molecules.
- c. One mole of hydrogen gas contains Avogadro's number of atoms.

d. One mole of electrons stands for  $6.023 \times 1023$  electrons

- 2. Which of the following is a triatomic molecule?
- a. Glucose b. Helium c. Carbon dioxide d. Hydrogen
- 3. Which of the following has the smallest mass?
- a.  $6.023 \times 10^{23}$  atoms of He b. 1 atom of He c. 2 g of He d. 1 mole atoms of He
- 4. Mass of 1 mole of Nitrogen atom is
- a. 28 amu b. 14 amu c. 28 g d. 14 g
- 5. The volume occupied by 1 mole of a diatomic gas at S.T.P is
- a. 11.2 litre b. 5.6 litre c. 22.4 litre d. 44.8 litre

## ANSWER ANY FIVE QUESTIONS ( 5 X 2= 10 M)

- 6. Define: Relative atomic mass.
- 7. Define: Atomicity
- 8. What is Molar volume of a gas?
- 9. Find the percentage of nitrogen in ammonia.
- 10. Give any two examples for hetero diatomic molecules.

#### Kindly Send me Your Key Answer to Our email id - Padasalai.net@gmail.Com

- 11. Calculate the % of oxygen in  $Al_2(SO_4)_3$ . (Atomic mass: Al-27, O-16, S -32)
- 12. (i)Atomicity of phosphorous is \_\_\_\_\_
  - (ii) The number of atoms present in a molecule is called its \_\_\_\_\_\_

## ANSWER ANY TWO QUESTIONS (2 X 5 = 10 M)

13. Give the salient features of "Modern atomic theory"

- 14. Derive the relationship between Relative molecular mass and Vapour density
- 15. How many grams are there in the following?
- i. 2 moles of hydrogen molecule,  $\mathrm{H}_{2}$
- ii. 3 moles of chlorine molecule,  $Cl_2$
- iii. 5 moles of sulphur molecule,  $S_8$
- iv. 4 moles of phosphorous molecule, P<sub>4</sub>

## PREPARED BY

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