

ASSIGNMENT- 1

MOLE CONCEPT

- Q-1) Find no. of gram atom, no. of gram molecule in 40g of oxygen gas(O=16).
- Q-2) Find the no. of He atoms in sample of he weighing 540amu(He=4).
- Q-3) Find no. of atoms in each type in 3.42g of $C_{12}H_{22}O_{11}$.
- Q-4) Find the no. of SO_2 molecules in 4.48lt at S.T.P.
- Q-5) Find the weight of Ca which has same no. of atoms in 4.6g of Na.
- Q-6) Find the no. of e^- in 3.2g of CH_4 .
- Q-7) Find weight of carbon in 3 moles of $Ku[Fe(Cn)_4]$.
- Q-8) Find no. of C_2H_5OH molecules in 50ml of C_2H_5OH having density 1.2g/mol.
- Q-9) 2×10^{21} molecules of X weigh 2g. Find molecular mass of X.
- Q-10) Find weight of 10 molecules of CO_2 in grams.
- Q-11) Find weight of NH_3 which has same atoms as in 3.6 g of H_2O .
- Q-12) Chlorophyll contains 20% Mg by weight. Find Number of magnesium atoms in 40g of chlorophyll.
- Q-13) Find weight of 50ml of SO_2 under S.T.P.
- Q-14) Find weight of 6 moles of H_2SO_4 and 10^{21} molecules of CO_2 .
- Q-15) Find number of neutrons in 3.6g of H_2O .
- Q-16) Find no. of e^- in 40g of CO_3^{2-} .
- Q-17) Find weight of oxygen present in 6 moles of $Na_2SO_4 \cdot 10H_2O$.
- Q-18) 20ml of H_2O evaporates in 1hr. Find no. of water molecules escaping in 1 second.
- Q-19) If a person spends 1 million rupees daily. Find the number years it would take him to spend Avagadro no. of rupees.
- Q-20) If 3.22g of $NO_2 \cdot XH_2O$ has 6.022×10^{22} molecules of water. What is the value of X?

1. Project on environmental chemistry.

Make project on

- Air pollution
- Water pollution
- Soil pollution
- Green chemistry