

1. Calculate the no of atoms of each type and total no of atoms present in 2.2 g of CO_2 ?
2. From 200 mg of CO_2 , 10^{21} molecules are removed. How many moles of CO_2 are left?
3. How many molecules of CO_2 are present in one litre of air containing 0.03% volume of CO_2 at N.T.P?
4. One million atoms of a substance weigh 1.79×10^{-16} g. calculate the atomic mass of the substance.
5. An organic compound contains 48% carbon, 8% hydrogen, 28% nitrogen and 16% oxygen. Determine its empirical formula.
6. The vapour density of a mixture of NO_2 and N_2O_4 is 38.3 at 27°C . Calculate the no of moles of NO_2 in 100 g of the mixture.
7. *How many moles of Lead(II)chloride are formed from a reaction between 6.5 g of PbO and 3.2 g HCl ? (PMT 2008)*
