Question 1:
If 1 gram of sulphur dioxide contains x molecules, how many molecules will be present in 1 gram of oxygen ?
(S = 32 u ; O = 16 u)

Question 2:
The mass of one molecule of a substance is 4.65×10^{-23} g. What is its molecular mass ? What could this substance be ?

Question 3:
The mass of one molecule of a substance is 4.65×10^{-23} g. What is its molecular mass ? What could this substance be ?

Question 4:
Which contains more molecules, 10 g of sulphur dioxide (SO_2) or 10 g of oxygen (O_2) ?
(Atomic masses : S = 32 u ; O = 16 u)

Question 5:
What weight of oxygen gas will contain the same number of molecules as 56 g of nitrogen gas ? (O = 16 u ; N = 14 u)

Question 6:
What mass of nitrogen, N_2, will contain the same number of molecules as 1.8 g of water, H_2O? (Atomic masses : N = 14 u ; H = 1 u ; O = 16 u)

Question 7:
If one gram of sulphur contains x atoms, calculate the number of atoms in one gram of oxygen element, (Atomic masses : S = 32 u ; O = 16 u)

Question 8:
How many grams of magnesium will have the same number of atoms as 6 grams of carbon ?
(Mg = 24 u ; C = 12 u)

Question 9:
The mass of one atom of an element X is 2.0×10^{-23} g.
(i) Calculate the atomic mass of element X.
(ii) What could element X be ?