Assignment-1

XI chemistry

Q-1 Why atomic masses of most of the elements are not whole no while mass no. is always a whole no.?

Q-2 Under what conditions air is considered as a heterogeneous mixture?

Q-3 Explain law of multiple proportions with the help of oxides of nitrogen.

Q-4 How many atoms of Sodium will weigh 1 gram?

Q-5 Why the actual mass of atom is always lesser than total mass of electrons, protons and neutrons present in it?

Q-6 1 litre air at STP has 21 % oxygen by volume.Caluculate no. of molecules of Oxygen in 1 litre air.

Q-7 How many ml of Ozone gas at STP will have same mass as 224ml of oxygen gas is having at STP?

Q-8 How many molecules of water will be there in 1 dm3 of water at 298 Kelvin and 1 atm pressure?

Q-9 The average atomic mass of a sample of an element X is 16.2u. What are the percentages of isotopes 168X and 188X in the sample?

Q-10 Give limitations of Dalton's atomic theory.

Q-11 What do you mean by Stoichiometry? Discuss it's significance.

Q-12 Why in case of ionic compounds it is more correct to write formula mass instead of molecular mass?

Q-13 How many ml of ammonia will be produced on mixing 10 L of Nitrogen gas with 30 L of hydrogen gas at STP?

Q-14 What are the limitations of Gay-Lussac's law of gaseous volumes?

Q-15 Differentiate between Empirical Molecular, Structural and electrical formula by taking example of Acetic acid.