ASSIGNMENT – I (10+1 CHEMISTRY)
CHAPTER 1 - (BASIC CONCEPTS)

1   Calculate the number of moles contained in 115 g of ethyl alcohol

2   How many atoms and molecules are there in 4g of nitrogen

3   How many atoms of oxygen are present in 1.0g of oxygen

4   Calculate the number of atoms of the constituents elements in 49g of H_2SO_4

5   Calculate the number of molecules present in one litre of water assuming that the density of water is 1 g mL^{-1}

6   Calculate the total number of electrons present in 1.6g of methane.

7   Calculate the weight the Na2CO3 which will have the same number of molecules as contained in 12.3g of $MgSO_4.7H_2O$

8   Calculate the number of carbon and oxygen atoms present in 11.2 litres of CO_2 at NTP.

9   A piece of copper weighs 0.635 g. How many atoms of copper does it have?

10   Calculate the number of molecules and number of atoms present in 11.2 litres of oxygen at NTP.

11   Calculate the no. of atoms of each type in 3.42 grams of cane sugar

12   How many moles of ammonia are there in 250cc of 30% solution , the specific gravity of which is 0.90

13   What is the molarity of a solution of NaCl which contain 60g of Nacl in 2000 cc of solution
        (0.513M)

14   How many moles and how many grams of NaCl are present in 250cc 0.50M NaCl solution
        (0.125, 7.3125)