

**ASSIGNMENT -2**

**CLASS-XI**

**Date 16/05/2023**

**SUB-CHEMISTRY Chapter 1. Some basic concepts of Chemistry**

1-Express the following in scientific notation:

0.0048      ii)236,000   iii)8008   iv)600.0      v)783.4

2-How many significant figures are present in the following?

0.0025   ii)208      iii)3.0034      iv)126,000      v)50.0

3-Why do mixtures not obey the law of constant proportions.

4-Define Gay Lussac's law of gaseous volumes. Explain with one suitable example.

5-State and explain with example :

a)-Law of Constant proportions   b)Law of Multiple proportions   c) Avogadro's Law

6-Discuss the main features of Dalton's Atomic theory.

7-Define Molecular and Empirical formula of a compound.

8-An organo metallic compound on analysis was found to contain C=64.4% , H=5.5 % and Fe= 29.9 %. Determine its empirical formula.

9-Silicon forms a compound with chlorine in which 5.6 g of silicon is combined with 21.3g of chlorine. Calculate the empirical formula of the compound. ( At mass of Si-28;

10-A compound contains 42.3913 % K, 15.2173% Fe, 19.5652% C and 22.8260 % N. The molecular mass of the compound is 368u. Find the molecular formula of the compound.