



Brain International School

Vikas Puri, New Delhi

ASSIGNMENT NO 1

SUBJECT: CHEMISTRY

CLASS-XI

APRIL,25

Chapter 1- Some basic concept of chemistry

1. Explain the following terms:
(a) Avogadro number (b) Gay-Lussac law of gaseous combination
2. Find moles and atoms in 10g calcium.
3. Define the following : (a) Molarity (b) Mole fraction
4. Find molarity, molality and mole fraction for 40% aqueous solution of urea, if density of solution is 1.2g/ml.
5. In 0.5M, 50ml aqueous solution if glucose 150ml water is added find molarity after adding water.
6. An organic compound contains 75% carbon, 25% hydrogen, if molar mass of compound is 16g/mol then find empirical and molecular formula.
7. What is limiting reagent? Explain with example.
8. 1kg hydrogen reacts with 2Kg nitrogen gas to prepare ammonia, Find the following:
(a) Limiting reagent (b) mass of ammonia produced (c) How much other reactant left.
9. How much CaCO_3 will react with 0.4M, 200ml HCl solution?
10. Find molality and molarity of 1L water.