Some Basic Concept Of Chemistry

1. **What is Accuracy?**

Ans:- The accuracy is a measure of the difference between the experimental value or the mean value of a set of measurements and the true value.

Accuracy= Mean value-True value.

2. **What is Precision?**

Ans:- Precision is expressed as the difference between a measured value and the arithmetic mean value for a series of measurement.

Precision= Individual value- Arithmatic value.

3. **What is significant figure?**

Ans:- The significant figures of a number written in positional notation are digits that carry meaningful contributions to its measurement resolution.

4. **What is atomic mass?**

Ans:- The average relative mass of an atom of an element as compared to the mass of an atom of carbon (C^{12}) taken as 12.

5. **What is molecular mass?**

Ans:- The average relative mass of its molecule as compared to the mass of an atom of carbon (C^{12}) taken as 12.

6. **Define mole.**

Ans:- The amount of substance that contains the same number of entities (atoms, molecules, ions or other particles), as the number of atoms present in 12g (or 0.012kg) of the C^{12} isotope.

7. **Define empirical formula.**

Ans:- The formula which gives the simple whole number ratio of the atoms of various elements present in one molecule of the compound is called empirical formula.

Ex:- empirical formula of Benzene is= C:H= 1:1

8. **Define molecular formula.**

Ans:- The formula which gives the actual number of atoms of various elements present in one molecule of the compound is known as molecular formula.

9. **What is the relation between empirical formula and molecular formula?**

Ans:- Molecular formula= n (empirical formula)

10. **What is limiting reagent?**

Ans:- The reactant which is completely consumed when a reaction goes to completion is called limiting reagent.

11. What is molarity?

Ans:- It is the number of moles of the solute dissolved per litre of the solution.

It is represented as 'M'.

The unit of molarity is= mol L^{-1}

12. Define molality.

Ans:- It is the number of moles of the solute dissolved per 1000g (or 1kg) of the solvent.

It is donated by 'm'.

The unit of molality is mol kg^{-1}.