

CLASS –IX CHEMISTRY

1. State, Law of Reciprocal Proportion.
2. Explain Gay Lussac's law of Gaseous Volume.
3. Calculate the molar mass of Glucose and the number of atoms of each kind of it.
4. How many molecules of water of hydration are present in 252mg of oxalic Acid?
5. Calculate number of moles in 1.12 litres of CO₂ at S.T.P?
6. Calculate the mass percent of different elements present in ethyl alcohol? (C₂H₅OH)
7. A compound has the following composition Na- 43.4%, C- 11.3% and O- 45.3%. Calculate its empirical formula. (Na- 23u, C-12u and O-16u).
8. What is the difference between molality and molarity?
9. Calculate the molarity of NaOH in the solution prepared by dissolving 4g in enough water to form 250ml of the solution.
10. The density of 3M solution of NaCl is 1.25g ml⁻¹. Calculate the molality of the solution.
11. How much copper can be obtained from 100g of copper sulphate (CuSO₄)? (Atomic Mass- Cu- 63.5).
12. How are 0.50 mole Na₂CO₃ and 0.50 M Na₂CO₃ different?
13. Calculate the molarity of distilled water if its density is 10³kg/m³?
14. If the speed of light is 3.0x10⁸ms⁻¹, calculate the distance covered by light in 2.00 ns. [1ns= 10⁻⁹s]
15. What volume of Oxygen at S.T.P can be produced by 6.125 g of Potassium Chlorate according to the reaction 2KClO₃ → 2KCl + 3O₂