

## Chemistry (New Book) - 9th Class Chemistry English Medium Chapter 6 Preparation

Q1. Why iodine is soluble in CCL<sub>4</sub> than water?

**Ans 1:** Because iodine is non polar so dissolve in non polar solvent CCl<sub>4</sub> than solvent like water.

Q2. What is concentration?

**Ans 1:** It is the ratio of the amount of solute to the amount of solution or the amount of solution or the amount of solute to the amount of solvent.

Q3. What is tyndall effect and on what factors it depends?

**Ans 1:** The scattering of beam of light by particles of colloidal solution is called tyndall effect. It depends upon the size of particles.

Q4. Define supersaturated solution?

**Ans 1:** The solution that is more concentrated than a saturated is known as supersaturated solution.

Q5. What is the size of solution particles?

**Ans 1:** The size of solution particles are 10<sup>-8</sup> cm in diameter.

Q6. Why are the colloids quite stable?

**Ans 1:** A colloid appears to be a homogeneous but actually it is a heterogeneous mixture, Hence they are not true solution. Particles do not settle down for a long time, there colloids are quite stable.

Q7. What do you mean like dissolve like? Explain with examples?

**Ans 1:** The general principle of solubility is like dissolves like. The ionic and polar substances are soluble in polar solvents. Ionic solids and polar covalent compounds are soluble in water e.g. KCl, Na<sub>2</sub>CO<sub>3</sub>, CuSO<sub>4</sub> etc. Non-Polar substances are not soluble in polar solvents. None polar covalent compounds are not soluble in water but dissolve in petrol and benzene etc.

Q8. What is the major difference between a solution and a mixture.

**Ans 1:** The solution exists in one phase and homogeneous while mixture exists in more than one phase and may be homogeneous or heterogeneous.

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Q9. What is the difference between dilute and concentrated solution?

**Ans 1:** Dilute solutions are those which contain a relatively small amount of dissolved solute in solution.

**Ans 2:** Concentrated:

Concentrated solutions are those which contain a relatively large amount of dissolved solute in a solution.

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Q10. What do you mean by %volume/volume?

**Ans 1:** It is a volume in  $\text{cm}^3$  of a solute dissolved per 100  $\text{cm}^3$  of solution for example 30% alcohol solution means 30  $\text{cm}^3$  of alcohol dissolved in sufficient amount of water, so total volume would be 100  $\text{cm}^3$

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