

ASSIGNMENT NO. 3

SUBJECT: CHEMISTRY CLASS-IX JULY'2025

Chapter-2: Is Matter Around Us Pure.

- 1. What do you understand by the term Mixture?
- 2. What is meant by a substance? How can we check the purity of a substance? Illustrate the difference between a substance and a mixture giving an example.
- 3. What happens when: (i) a saturated solution is heated?
 - (ii) a saturated solution is cooled slowly?
- 4. How a pure substance is different from a mixture?
- 5.Read the case and answer the questions that follows:

A solution is a homogeneous mixture of two or more substances. You come across various types of solutions in your daily life. Lemonade, soda water etc. are all examples of solutions. Usually we think of a solution as a liquid that contains either a solid, liquid or a gas dissolved in it. But, we can also have solid solutions (alloys) and gaseous solutions (air). In a solution, there is a homogeneity at the particle level. For example, lemonade tastes the same throughout. This shows that particles of sugar or salt are evenly distributed in the solution. A solution has a solvent and a solute as its components. The component of the solution that dissolves the other component in it is called the solvent. The component of the solution that is dissolved in the solvent is called the solute.

- (i) What is a solution? Give one characteristic of a solution.
- (ii) Do solutions always means a liquid mixture ?Justify.
- (iii) How the two components of a solution differs from each other?