Chemistry Practical Class 9 Preparation of a True Solution of Common Salt, Sugar and Alum Viva Questions with Answers

Q1: What is a True Solution?

Answer:

A true solution is one that has been properly dissolved and has all of the particles in the correct composition. A true solution is a mixture that is homogeneous and has consistent qualities. In a true solution, filtration cannot separate the solute from the solution. The particle size of the solute is similar to that of the solvent, and the solvent and solute pass through the filter paper simultaneously.

Q2: How to prepare the true solution of sugar?

Answer:

Fill a clean and dry beaker with 100 mL distilled water, a few sugar crystals, and a glass rod to mix the contents. The sugar dissolves in water to make a true solution.

Q3: Is milk a true solution?

Answer:

Milk isn't a solution since it has two phases: a liquid phase and a solid phase floating inside it. Because fat is less dense than water, it separates from the rest of the milk and floats to the surface, resulting in a suspension rather than a solution in homogenised milk.

Q4: In chemistry, what is a colloid solution?

Answer:

A mixture in which one ingredient has been broken down into minute particles (known as colloidal particles) and scattered throughout another. The mixture is referred to as a colloidal solution, colloidal system, or colloidal dispersion. The three states of matter are solid, liquid, and gas.

Q5: What are the types of True Solutions?

Answer:

We can get a variety of solutions depending on the composition of the solute and solvent. For Example, vinegar, air, brass, salt solution, copper sulphate solution, sugar and water solution.

Q6: What is a Suspension?

Answer:

It's a heterogeneous mixture in which solute particles don't dissolve but remain suspended, particles can be seen with the naked eye, scatters light, and particles may be filtered out of the mixture.

Q7: How to prepare a True solution of alum?

Answer:

In a clean and dry beaker, pour 100 mL distilled water, then add a pinch of alum powder and stir with a glass rod. When alum dissolves in water, it forms a true solution.

Q8: How to prepare a True solution of common salt?

Answer:

In a clean and dry beaker, pour 100 mL distilled water, then add dry common salt. Stir the contents with a glass rod. Common salt dissolves completely to form a true solution.

Q9: Why cannot we prepare a colloidal solution of a gas in a gas?

Answer:

A colloidal solution is always heterogeneous, but a mixture of any two gases is always homogeneous.

Q10: How do you tell the difference between a colloidal solution and a true solution of the same colour?

Answer:

By projecting a strong beam of light through true and colloidal solutions kept in glass vessels, a colloidal solution and a true solution of the same colour can be identified. The Tyndall Effect is only seen in colloidal solutions; true solutions do not.

Q11: How many types of alum are there?

Answer:

Potash alum, soda alum, ammonium alum, and chrome alum are all examples of alum.

Q12: What are the characteristics of a True solution?

Answer:

Characteristics of true solutions are:

It is homogenous in nature.
(a) Particles can flow through the filter paper; (b) They can't be observed under a microscope, and (c) They don't settle.
A true solution, as opposed to a compound, is a mixture.