MORE QUESTIONS SOLVED

I. Multiple Choice Questions
Choose the correct option:
1. Fog, clouds are an example of
(a) aerosol
(b) colloid
(c) suspension
(d) emulsion
2. Sponge can be compressed, it is a
(a) solid
(b) liquid
(c) gas
(d) foam
3. An impure sample of potash alum can be purified by
(a) evaporation
(b) crystallisation
(c) centrifugation
(d) filtration
4. Chalk dissolved in water is an example of
(a) true solution
(b) colloid
(c) suspension
(d) saturated solution
5. 50 gm sugar is dissolved in a glass of water at 30°C. On heating this solution it will
(a) crystallise
(b) evaporate
(c) become unsaturated
(d) sugar will char
6. Which of the following shows tyndall effects?
(a) salt solution
(b) sugar solution
(c) starch solution
(d) copper sulphate solution
7. Pick up the odd one out.
(a) brass
(b) air
(c) sand
(d) graphite
8. Which of the following is liquid-liquid solution?
(a) face-cream
(b) emulsion
(c) milk
(d) all of these
9. To separate two miscible liquids by fractional distillation, it should have one of the following condition
(a) should be miscible
(b) should be immiscible
(c) difference in the boiling point should be less than 25 K
(d) none of these

10. To obtain toned and double toned milk from full-cream milk we can
(a) filtrate it
(b) sediment it
(c) distillate it
(d) centrifuge it
11. The separation technique which involves the difference in their densities is
(a) sublimation
(b) separation by separating funnel
(c) centrifugation
(d) both (b) and (c)
Answer: 1—(a). 2—(a), 3—(b), 4—(c), 5—(c), 6—(c), 7—(d), 8—(d), 9—(c), 10—(d), 11-(d).

II. Very Short Answer Type Questions
Question 1. Define solvent.
Answer: The component of the solution that dissolves the other component in it is called the solvent.

Question 2. Define solute.
Answer: The component of the solution that is dissolved in the solvent is called solute.

Question 3. What is 'tincture of iodine'?
Answer: A solution of iodine in alcohol is known as tincture of iodine. It has iodine (solid) as the solute and alcohol (liquid) as the solvent.

Question 4. What are alloys?
Answer: The homogeneous mixture of two or more metals or a metal and non-metal is called an alloy. E.g., steel is an alloy of iron and carbon.

Question 5. Give one example of gas in liquid solution.
Answer: Cold-drinks, carbon dioxide gas as solute is mixed with water as a solvent.

Question 6. How can a solution be dilute or concentrated?
Answer: The amount of solute dissolving in a solvent decides whether the solution is dilute or concentrated.

Question 7. What is "concentration of a solution"?
Answer: The concentration of a solution is the amount of solute present in a given amount of solution or the amount of solute dissolved in a given mass or volume of solvent.

Question 8. State the difference between aqueous and, non-aqueous solution.
Answer: Aqueous solutions have water as solvent and non-aqueous solutions do not haVe water as solvent.

Question 9. What is "solubility" of a solute?
Answer: The amount of the solute present in the saturated solution at the given temperature is called its solubility.

Question 10. What is saturated solution?
Answer: The maximum amount of solute dissolved in a solvent at given temperature is called saturated solution, where no more solute can dissolve further.

Question 11. What is unsaturated solution?
Answer: If the amount of solute contained in a solution is less than the saturation level, it is called an unsaturated solution.

Question 12. How can you convert saturated solution into unsaturated or vice-versa?
Answer: Saturated solution on heating becomes unsaturated and

unsaturated solution on cooling becomes saturated.

Question 13. Why water is called universal solvent?
Answer: Water can dissolve large number of substances in it.

Question 14. What is Tyndall effect?
Answer. The scattering of light by colloidal particles is known as Tyndall effect.

Question 15. How can we separate colloidal mixtures?
Answer: By centrifugation, in a centrifuge machine the colloidal solution is kept in a test tube, rotated very fast and due to centrifugal force the colloidal particles are separated.

Question 16. What is emulsion?
Answer: When both the dispersed phase and dispersing medium is liquid, it is called emulsion. E.g., milk, face cream.

Question 17. What is aerosol?
Answer. When the solid or liquid is dispersed in a gas it is called aerosol. E.g., smoke, fog.

Question 18. What is the principle for separation of immiscible liquids?
Answer: The principle of separating immiscible liquids into layers depending on their densities. The less denser liquid collects at the top and more denser liquid at the bottom. ′

Question 19. What is chromatography?
Answer: Chromatography is the technique used for separation of those solutes that dissolve in the same solvent.

Question 20. What is distillation?
Answer: Distillation is the separation technique of two miscible liquids that boils without decomposition and have sufficient difference in their boiling points.

Question 21. How can you separate two liquids that have less than 25 K difference of boiling points?
Answer: To separate a mixture of two or more miscible liquids for which the difference in boiling points is less than 25 K, is fractional distillation.

Question 22. What is condenser?
Answer: It is an apparatus used to convert gas into liquid by cooling it.

Question 23. What is crystallisation?
Answer: When a saturated solution is heated and allowed to cool slowly, crystal of the solute dissolved in the saturated solution are separated from it. It is used to purify solids.

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