

QB365 Question Bank Software Study Materials

Solutions 50 Important 1 Marks Questions With Answers (Book Back and Creative)

10th Standard

Science

Total Marks : 50

Multiple Choice Question

50 x 1 = 50

- 1) A solution is a _____ mixture.
(a) homogeneous (b) heterogeneous (c) homogeneous and heterogeneous (d) non homogeneous
- 2) The number of components in a binary solution is _____.
(a) 2 (b) 3 (c) 4 (d) 5
- 3) Which of the following is the universal solvent?
(a) Acetone (b) Benzene **(c) Water** (d) Alcohol
- 4) A solution in which no more solute can be dissolved in a definite amount of solvent at a given temperature is called _____.
(a) Saturated solution (b) Un saturated solution (c) Super saturated solution (d) Dilute solution
- 5) Identify the non aqueous solution.
(a) sodium chloride in water (b) glucose in water (c) copper sulphate in water **(d) sulphur in carbon di sulphide**
- 6) When pressure is increased at constant temperature the solubility of gases in liquid _____.
(a) No change **(b) increases** (c) decreases (d) no reaction
- 7) Solubility of NaCl in 100 ml water is 36 g. If 25 g of salt is dissolved in 100 ml of water how much more salt is required for saturation _____.
(a) 12g **(b) 11g** (c) 16g (d) 20g
- 8) A 25% alcohol solution means
(a) 25 ml alcohol in 100 ml of water (b) 25 ml alcohol in 25 ml of water **(c) 25 ml alcohol in 75 ml of water**
(d) 75 ml alcohol in 25 ml of water
- 9) Deliquescence is due to _____.
(a) Strong affinity to water (b) Less affinity to water (c) Strong hatred to water (d) Inertness to water
- 10) Which of the following is hygroscopic in nature?
(a) ferric chloride (b) copper sulphate penta hydrate **(c) silica gel** (d) none of the above
- 11) Sugar and copper sulphate crystals are dissolved in water. The solution is called as _____.
(a) binary **(b) trinary** (c) ternary (d) quartenary
- 12) 40 g of sodium chloride in 100 g of water at 25^o C forms _____ solution.
(a) Super saturated (b) Unsaturated (c) Saturated (d) Both (a) and (b)
- 13) 8% of NaCl solution is
(a) 8g of NaCl in 100g of water **(b) 8g of NaCl in 92g of water** (c) 92g of NaCl in 8g of water
(d) 92g of NaCl in 100g of water

White vitriol is

- 14) _____
(a) **CaSO₄·7H₂O** (b) MgSO₄·7H₂O (c) K₂SO₄·7H₂O (d) ZnSO₄·7H₂O
- 15) Anhydrous copper sulphate is _____ in colour.
(a) blue (b) bluish green (c) **colourless** (d) black
- 16) A beaker contains a solution of copper sulphate. precipitation of copper sulphate takes place when small amount of it added to _____ solution.
(a) **Saturated** (b) Super saturated (c) Unsaturated (d) Concentrated
- 17) Quick lime is dissolved in water is a _____ process.
(a) **exothermic** (b) endothermic (c) reversible (d) both (a) and (b)
- 18) Example for solid in solid _____
(a) Soda water (b) Camphor in air (c) Charcoal (d) **alloy**
- 19) The solubility of gases in liquid increases with _____
(a) increased volume (b) **increased pressure** (c) decreased pressure (d) none of these
- 20) Salt solution containing common salt in water is an example for _____
(a) **binary solution** (b) ternary solution (c) suspension (d) colloidal solution
- 21) Which is a non-aqueous solution?
(a) sugar in water (b) common salt in water (c) **sulphur in carbon disulphide** (d) None
- 22) In which of the following solutions, both solute and solvent are solids?
(a) cork (b) cheese (c) **alloys** (d) smoke
- 23) Which of the following factors affect solubility?
(a) temperature (b) pressure (c) nature of solute and solvent (d) **all the above**
- 24) Solubility of CO₂ gas in water _____ with the increase in pressure.
(a) **increases** (b) decreases (c) remains constant (d) None of these
- 25) Which of the following is a dehydrating agent (absorbs moisture)
(a) sodium hydroxide (b) **anhydrous calcium chloride** (c) sugar (d) None of these
- 26) _____ is a homogeneous mixture of two or more substances.
(a) **solution** (b) solute (c) solvent (d) colloid
- 27) In a solution that component which is present in lesser amount by weight is called _____
(a) solution (b) **solute** (c) solvent (d) colloid
- 28) Solution which are made of one solute and one solvent are called _____
(a) solutions (b) **binary solutions** (c) ternary solutions (d) tetranary solutions
- 29) A solution contain more than two components are called _____
(a) solution (b) binary solution (c) **ternary solution** (d) tetranary solutions
- 30) Give an example of liquid-solid mixture _____
(a) Alloys (b) **Amalgam** (c) NaCl in water (d) None
- 31) Give an example of solid-liquid mixture _____

(a) **Sodium chloride in water** (b) ethyl alcohol in water (c) CO₂ dissolved in water (d) Methyl alcohol in water

32) Give an example of gas-liquid mixture is _____

(a) C₂H₂OH in water (b) NaCl in water (c) **CO₂ in water** (d) none

33) _____ is called as universal solvent.

(a) **Water** (b) Acetone (c) Benzene (d) Ether

34) The solvent in which water acts as a solvent is called _____

(a) **aqueous solution** (b) non-aqueous solution (c) either a or b (d) neither a nor b

35) The solution in which any liquid other than water acts as a solvent is called _____

(a) aqueous solution (b) **non-aqueous solution** (c) either a or b (d) neither a nor b

36) Give an example of unsaturated solution _____

(a) **16g of NaCl in 100 g of water** (b) 36g of NaCl in 100 g of water (c) 45g of NaCl in 100 g of water

(d) 100 g of NaCl in 36 g of water

37) example of super saturated solution _____

(a) 16g of NaCl in 100 g of water (b) 36g of NaCl in 100 g of water (c) **45g of NaCl in 100 g of water**

(d) 100 g of NaCl in 16 g of water

38) In endothermic process, solubility increases with _____ in temperature.

(a) **increases** (b) decreases (c) either a or b (d) neither a nor b

39) The pressure is increased, the solubility of a gas in liquid _____.

(a) increases (b) **decreases** (c) either a or b (d) neither a nor b

40) Mass percentage is expressed as _____

(a) **weight / weight** (b) weight / mass (c) mass / weight (d) none

41) Volume percentage _____ with increases in temperature.

(a) **decreases** (b) increases (c) either a or b (d) neither a nor b

42) Formula for Phosphorus pentoxide is _____

(a) F₂O₃ (b) **P₂O₅** (c) P₂H₄O₇ (d) none

43) Dehydrating agent is _____

(a) **Anhydrous calcium chloride** (b) Anhydrous potassium chloride (c) hydrous calcium chloride

(d) hydrous potassium chloride

44) Formula for Silica gel is _____

(a) **SiO₂** (b) SiO₃ (c) SiO₄ (d) SiO

45) _____ is the human activity involved in the formation of solution with water.

(a) Dancing (b) Fighting (c) **Cleaning** (d) Laughing

46) Cloud is the example of _____ binary solution.

(a) Gas - Gas (b) **Liquid - Gas** (c) Gas - Liquid (d) Liquid - liquid

47) More amount of dissolved _____ is present in the water of cold regions.

(a) **oxygen** (b) carbon dioxide (c) sulphur (d) chlorine

- 48) Green vitriol has _____ water molecules in it.
- (a) Two (b) Five **(c) Seven** (d) Three
- 49) While doing a science practical experiment, a student left a bottle opened after usage which contained solid sodium hydroxide. When the student visited the laboratory again after few days and found only liquid sodium hydroxide in the bottle. This is due to _____ property of sodium hydroxide.
- (a) Hygroscopic **(b) Deliquescence** (c) Dehydration (d) Dehydration
- 50) 25 percent (25%) ethanol solution means
- (a) 25 ml ethanol in 100 ml of water (b) 25 ml ethanol in 25 ml of water **(c) 25 ml ethanol in 75 ml of water**
- (d) 75 ml ethanol in 25 ml of water