

Chemistry Fsc Part 1 Chapter 9 Online Test

Sr	Questions	Answers Choice
1	Molarity of pure water is	A. 1 B. 18 C. 55.5 D. 6
2	18 g of glucose is dissolved in 90 g of water. The relative lowering of vapour pressure is equal to	A. 1/5 B. 5.1 C. 1/51 D. 6
3	A solution of glucose is 10% to volume in which 1 g mole of it is dissolved will be	A. 1 dm ³ B. 1.8 dm ³ C. 200 cm ³ D. 900 cm ³
4	An aqueous solution of ethanol in water has vapour pressure	A. Equal to that water B. Equal to that of ethanol C. More than that of H ₂ O D. less than that of water
5	Azeotropic mixture of two liquids boils at a lower temperature than either of them, when	A. It is saturated B. Is shows positive deviation from Raoult's law C. It shows negative deviation from Raoult's law D. Is is metastable
6	In azeotropic mixture showing positive deviation from Raoult's law the volume of the mixture is	A. Slightly more than the total volume of the components B. Slightly less than the total volume of the components C. Equal to the total volume of the components D. None of these
7	Which of the following solutions has the highest boiling point	A. 5.85% solution of sodium chloride B. 18.0% solution of glucose C. 6.0% solution of urea D. All have the same boiling points
8	Two solution of NaCl and KCl are prepared separately by dissolving same moles of them in the fixed amount of solvent. Which of the following statements is true for these solution	A. KCl solution will have higher boiling point than NaCl solution B. Both the solutions have different boiling point C. KCl and NaCl solution possess same vapour pressure D. KCl solution possesses lower freezing point than NaCl solution
9	The molal boiling point constant is the ration of the elevation in boiling point to	A. Molarity B. Molality C. Mole fraction of solvent D. Mole fraction of solute
10	Colligative properites are the properties of	A. Dilute solutions which behave as nearly ideal solution B. Concentrated solution which behave as nearly non-ideal solution C. Both a and b D. Neither a nor b
11	The liquid pair which is not completely miscible is	A. CH ₃ OH and water B. Alcohol and water C. Phenol and water D. Benzene and toluene
12	The unit of mole fraction is	A. Moles dm ⁻³ B. Moles kg ⁻¹ C. Gram dm ⁻³ D. None
13	The relative lowering of vapour pressure is equal to the mole fraction of the solute. This law is known as	A. Ostwald dilution law B. Raoult's law C. Vant hoff's law D. None

		D. Henry's law
14	Azeotropic mixture can be separated into pure components by	A. Distillation B. Fractional distillation C. Vacuum distillation D. None
15	Which of the following solutions will have the highest boiling point	A. 0.1 M NaCl B. 0.1 M CaCl_2 C. 0.1 M FeCl_3 D. 0.1 M glucose
16	Depression in the F.P is directly proportional to	A. Molarity of solution B. Molarity of solvent C. Molality of solvent D. Molality of solution
17	Depression of freezing point method is used for determination of molar masses of	A. Electrolytes B. Non-volatile solids C. Volatile solids D. Volatile liquids
18	Upper consolute temperature for water phenol system is.	A. 150 $^{\circ}\text{C}$ B. 65.9 $^{\circ}\text{C}$ C. 120 $^{\circ}\text{C}$ D. 130 $^{\circ}\text{C}$
19	Melting of ice can be forwarded by the use of.	A. LiCl B. BeCl_2 C. NaCl D. Ag Cl
20	18 g glucose is dissolved in 90 g of water. The relative lowering of vapour pressure is equal to.	A. 1/5 B. 5.1 C. 1/51 D. 6
21	An aqueous solution of ethanol in water has vapour pressure.	A. Equal to that of water B. Equal to that of ethanol C. More than that of H_2O D. Less than that of water
22	Relative lowering of vapour pressure is equal to.	A. Mole fraction of solute B. Mole fraction of solvent C. Molarity D. Molality
23	The molar boiling point constant is the ratio of the elevation of boiling point to .	A. Molarity B. Molality C. Mole fraction of solvent D. Mole fraction of solute
24	18 g glucose is dissolved in 90 g of water, The relative lowering of vapour pressure is equal to.	A. 1/5 B. 5.1 C. 1/51 D. 6
25	A solution of glucose is 10% The volume in which 1 g mole of it dissolved will be.	A. 1 dm ³ B. 1.8 dm ³ C. 900 cm ³ D. 200 cm ³
26	An aqueous solution of ethanol in water has vapour pressure.	A. Equal to that of water B. Equal to that of ethanol C. More than that of water D. Less than that of water
27	An azeotropic mixture of two liquids boils at lower temperature than either of them when.	A. It is saturated B. It shows positive deviation from Raoult's law C. It shows negative deviation from Raoult's law D. It is metastable
28	In azeotropic mixture showing positive deviation from Raoult's law, the volume of the mixture is.	A. slightly more than the total volume of the components B. Slightly less than the total volume of the component C. Equal to the total volume of the components D. None of these
29	Which of the following solutions has the highest boiling point.	A. 5.85% solution of sodium chloride B. 18.0 % solution of glucose C. 6.0% solution of urea D. All have the same boiling point
		A. KCl solution will have higher boiling point than NaCl solution

30	Two solutions of NaCl and KCl are prepared separately by dissolving same amount of the solute in water. Which of the following statements is true for these solution.	<p>higher than NaCl solution</p> <p>B. Both the solutions have different boiling point</p> <p>C. KCl and NaCl solutions possess same vapour pressure</p> <p>D. KCl solution possesses lower freezing point than NaCl solution</p>
31	The molal boiling point constant is the ratio of the elevation in boiling point to.	<p>A. Molarity</p> <p>B. Molality</p> <p>C. Mole fraction of solvent</p> <p>D. Mole fraction of solute</p>
32	Colligative properties are the properties of.	<p>A. Dilute solution which behave as nearly ideal solutions</p> <p>B. Concentrated solutions which behave as nearly non ideal solutions</p> <p>C. Both a and b</p> <p>D. Neither a nor b</p>
33	A solution of sucrose is 34.2% The volume of solution containing one mole of solute.	<p>A. 500 cm³</p> <p>B. 1000 cm³</p> <p>C. 342 cm³</p> <p>D. 3420 cm³</p>
34	10 g of NaOH has been dissolved per dm ³ of solution. The molarity of solution is.	<p>A. 0.5 M</p> <p>B. 0.25 M</p> <p>C. 1 M</p> <p>D. 2 M</p>
35	10 g of NaOH have been dissolved per kg of solvent The molality of solution.	<p>A. 0.25 m</p> <p>B. 0.5 m</p> <p>C. 1.0 m</p> <p>D. 2.0 m</p>
36	The sum of mole percent of all the components of solution is always equal to.	<p>A. Unity</p> <p>B. 100</p> <p>C. Less than one</p> <p>D. Less than 100</p>
37	The molarity of 2% w/v NaOH solution is	<p>A. 2</p> <p>B. 0.25</p> <p>C. 0.05</p> <p>D. 0.5</p>
38	In a solution 7.8 g of benzene and 46 g of toluene is present The mole fraction of benzene is.	<p>A. 1/2</p> <p>B. 1/3</p> <p>C. 1/5</p> <p>D. 1/6</p>
39	Which concentration unit is independent of temperature.	<p>A. Molarity</p> <p>B. Molality</p> <p>C. ppm</p> <p>D. both a and b</p>
40	What amount of NaOH is required to prepare 500 g of 0.5 molal solution.	<p>A. 10 g</p> <p>B. 20 g</p> <p>C. 30 g</p> <p>D. 40 g</p>
41	Unit of mole fraction is	<p>A. mol dm⁻³</p> <p>B. mol kg⁻¹</p> <p>C. g dm⁻³</p> <p>D. No unit</p>
42	Which of the following mixtures of liquids show negative deviation	<p>A. Methyl alcohol water</p> <p>B. Hydrochloric acid water</p> <p>C. Carbon di sulphide chloroform</p> <p>D. Chlorobenzene bromobenzene</p>
43	In case of non volatile solute, lowering of vapour pressure is proportional to.	<p>A. Mass fraction of solute</p> <p>B. Mole fraction of solvent</p> <p>C. Mole fraction of solute</p> <p>D. None of the above</p>
44	Relative lowering of vapour pressure is equal to.	<p>A. Mole fraction of solute</p> <p>B. Mole fraction of solvent</p> <p>C. Mole fraction of solute and solvent</p> <p>D. Molality of solution</p>
45	Azeotropic mixture	<p>A. Obey Raoult's law</p> <p>B. Do not obey Raoult's law</p> <p>C. Boils at low temperature only</p> <p>D. Boils at high temperature only</p>
46	A negative deviation from Raoult's law in solution means the solution has	<p>A. High boiling point and high vapour pressure</p> <p>B. High boiling point and low vapour pressure</p>

46	A negative deviation from Raoult's law in solution means, the solution has	C. Low boiling point and low vapour pressure D. Low boiling point and high vapour pressure
47	Which pair of mixture is called ideal solution.	A. Chlorobenzene and bromobenzene B. Water alcohol C. Water ether D. HCl and water
48	The temperature which partially immiscible pair of liquid leads to the formation of a single phase is called.	A. Transition temperature B. Absolute temperature C. Consulate temperature D. Room temperature
49	Butter is solution of	A. Liquid in liquid B. Solid and liquid C. Liquid and solid D. Liquid and gas
50	Which solution is an example of solid in gas	A. Fog B. Steel C. smoke D. Air
51	Water and Phenol are partially miscible to each other at room temperature when both liquids are mixed together which is upper layer.	A. Water in Phenol B. Phenol and water C. Pure phenol D. Pure water
52	Solubility curve of $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$ shows	A. Decrease in solubility with increase of temperature B. Increase in solubility with increase of temperature C. Discontinuous increase in solubility with temperature D. No effect of temperature on solubility
53	Solubility of which substance decreases by increasing temperature.	A. NaNO_3 B. KNO_2 C. NaCl D. $\text{Ce}_2(\text{SO}_4)_3$
54	Solubility of which substance decreases by increasing temperature.	A. NaNO_3 B. KNO_2 C. NaCl D. $\text{Ce}_2(\text{SO}_4)_3$
55	The molal boiling point constant is the ratio of elevation of boiling point to	A. Molarity B. Mole fraction of solvent C. Molality D. Mole fraction of solute
56	Molal boiling point elevation depends upon	A. Nature of solvent B. Nature of solute C. Vapour pressure of solution D. None of these
57	Molal boiling constant for water is 0.52°C . If 6 g of urea is dissolved in 100 g of water, what will be its boiling point.	A. 100.52°C B. -100.52°C C. 100°C D. 99°C
58	The vapour pressure of an aqueous solution of glucose is.	A. Equal to vapour pressure of water B. Independent of temperature C. More than vapour pressure of pure water D. Less than vapour pressure of pure water
59	Colligative properties are used to determine the	A. Freezing points B. Boiling point C. Atomic mass of an element D. Molar mass of solute
60	Heat of solution of an ionic compound is equal to.	A. Hydration energy B. Lattice energy C. Sum of both 'a' and 'b' D. Difference of both a and b
61	When an ionic compound is dissolved in water, it dissociate into positive and negative ions, which are surrounded by H_2O molecule, This process is known as.	A. Hydrolysis B. Hydration C. Saturation D. solvolysis
62	When an ionic compound is dissolved in water, it dissociate into positive and negative ions, which are surrounded by H_2O molecule. This process is known as	A. Hydrolysis B. Hydration C. Saturation

which are carried out by H_2O molecules, this process is known as:

- C. saponification
- D. solvolysis

63	Salt of weak acid with strong base when dissolved in water gives.	A. Acidic solution B. Basic solution C. Neutral solution D. None of above
64	Which one of the following salts dissolved in water to form a solution with a pH greater than 7	A. NaCl B. CuSO_4 C. Na_2CO_3 D. NH_4Cl
65	Which one of the following salts dissolved in water to form a solution with a pH greater than 7	A. NaCl B. CuSO_4 C. Na_2CO_3 D. NH_4Cl
66	Which one of the following salts dissolved in water to form a solution with a pH lesser than 7	A. NaCl B. CuSO_4 C. Na_2CO_3 D. NH_4Cl
67	Which one of the following salts do not hydrolyses	A. CuSO_4 B. Na_2CO_3 C. NaCl D. AlCl_3