Solution

Sr	Questions	Answers Choice
1	Use of glycol as anti freeze in the automobile is an important application of	A. Colligative property B. Raoult's law C. Fractional crystallization D. Prrhenivs law
2	The temperature at which the vapour pressure of a liquid becomes equal to external pressure is	A. Melting point B. Sublimation point C. Inversion point D. Boiling point
3	Which one of the following mixture shows positive deviation form Rault's law and forms an azetrope with minimum boiling point	A. Methanol + CCl₄ B. Methanol + acetone C. Ether + HCl D. Acetone + chloroform
4	10% aqueous solution of NaCl has molarity	A. 1.7 M B. 2.7 M C. 0.17 M D. 3.7 M
5	Which is not a colligative property?	A. Osmotic pressure B. Lowering of vapour pressure C. Depression of freezing point D. Elevation of boiling point
6	The vant Hoff factor (1) accounts for	A. Degree of solubilisation of solute B. The extent of dissolution of solute C. The extent of dissolution of solute D. The degree of decomposition of solution
7	The osmotic pressure of a dilute solution is directly proportional to the	A. Diffusion rate of the solute B. Ionic concentration C. Elevation in boiling point D. Flow of solvent from a concentrated to a dilute solution
8	Solubility cure of $Na_2SO_410H_2$shows	A. Constant increase of solubility B. Constant decreases of solubility C. Discontinuously solubility wit temperature D. None of above
9	Aqueous solution of glucose $C_6H_{12}O_6$, boils at 100.052°C. The solution contains	A. 180 grams glucose in 1 kg water B. 18 grams glucose in 1 kg water C. 1.8 grams glucose in 1 kg water D. 3.6 grams glucose in 1 kg
10	A solution sucrose is 34.2%. The volume of solution containing one mole of solute :	A. 342cm³ <o:p></o:p> B. 1000cm³ <o:p></o:p> C. 500cm³ D. 242cm³
11	50 $cm^3$of 0.05 molar nrea (N_2H_4CO) solution has % W/N concentration	A. 6% B. 3% C. 0.3 % D. 0.6 %
12	A solutiion of 0.5 mole camphor in 100 grmas chloroform (K_b= 0.322) has rise in boiling point than that of chloroform by	A. 0.81°C B. 1.61°C C. 1.81°C D. 0.61°C
13	Water shows maximum density at	A. 4°C B. 0°C C. 100°C D. -4°C
14	To calculate volume of the solvent, we need to know, the :	A. Density of solute B. Normality of solute

		C. Mass of solute D. Molarity of solute
15	The number of moles of solute in 1000g (1 Kg) of the solvent is called :	A. Molarity B. Molarity C. Normality D. Mole fraction
16	The relative lowering of vapour pressure is equal to the mole fraction of the solute, This law is called	A. Henry's law B. Raoult's law C. Ostwald's law D. Arrhenius law
17	In cold countries ethylene glycol is added to water in radiators of cars during winter. It results in	A. Lowering in b.pt B. Reducing viscosity C. Reducing specific heat D. Lowering in freezing pt
18	The substance which contains the water of crystallization is called	A. Hydrated B. Solvated C. Crystal D. None
19	Units of molarity are	A. gm/lit B. mol/lit C. kg/lit D. None of these
20	How much of NaOH is required to neutralize 1500 $cm^3$of 0.1 N HCl?	A. 60 g B. 6 g C. 4 g D. 40 g
21	Camphor is often used in molecular mass determination because	A. It is solvent for organic substances B. It is readily available C. It has a very high cryoscopic constant D. It is volatile
22	Which substances are mixed to form a buffer solution?	A. A strong acid and its salt of a strong base B. Strong acid and its salt of weak base C. Weak acid and its salt of strong base D. Weak acid and its salt of weak base
23	Solution which distill without change in composition or temperature are called	A. Amorphous B. Azeotropic mixture C. Ideal D. Super saturated
24	The weight of pure NaOH required to prepare 250 $cm^3$of 0.1 N solution is	A. 4 g B. 1 g C. 2 g D. 5 g
25	Solutions with same osmotic pressures are called	A. Hypertonic B. Hypotonic C. Isotonic D. Normal
26	The vapour pressure of two liquids 'p' and 'Q' are 80 and 60 torr respectively. The total vapour pressure of solution obtained by mixing 3 mole of P and 2 mol of Q would be	A. 140 torr B. 20 torr C. 68 torr D. 72 torr
27	Which statement is incorrect for and ideal solution	A. The forces of attractions between solute and solvent molecules are same B. There is no evolution or absorption of heat C. Volume of the solution is less than sum of volumes of individual components D. Vapour pressure of solution is directly proportional to the mole fraction of solvent
28	Which one of the following has continuous solubility curve	A. NH₄NO₃ B. CaCl C. CaCl₂. 6H₂O D. Na₂SO₄. 10H₂O
29	17.1 grams sucrose ($C_{12}H_{22}O_{11}$) dissolved in 250 cm^3 of solution. This has molarity	A. 0.1 M B. 0.2 M C. 0.01 M D. 0.02 M
30	Ifα us the degree of dissociation of $Na_2SO_4$the vant Hoff's factor (1) used for calculating the molecular mass is	A. 1 +α B. 1 -α C. 1 + 2<span style="color: rgb(34, 34, 34);

	the molecular mass is	C. 1 - 2α D. 1 - 2α
31	In which type of following solutions the total volume of solutions may not be necessarily equal to sum of volumes of solute and solvent ?	A. Percentage volume/volume B. Percentage volume/weight C. Percentage weight/volume D. Percentage weight/weight
32	A solution of glucose is of methanol in water has vapor pressure :	A. Equal that of water. B. Equal to that of methanol. C. More than that of water. D. Less than that f water.
33	3.6% WN solution of HCl has the molairity	A. 1.0 B. 1.15 C. 0.98 D. 1.98
34	5g of glucose is dissolved fro 100 cm of solution. Percentage of solution is :	A. 5 % v/w B. 5 % v/w C. 5 % w/v D. 5 % w/w
35	Which statement is not true. A solution is a homogeneous mixture of	A. Two ionic substance like NaCl and HCl B. Two molecular substances sugar and water C. A solute and a solvent 1% NaHCO₃in water D. NaCl and sand
36	The molarity of solution containing 14.5 grams urea (N_2H_4CO) dissolved in 100 $cm^3$of the solution is	A. 1 molar B. 0.1 molar C. 0.2 molar D. 0.25 molar
37	Solubility of a substance in water decreases with rise in temperature except	A. CaCl₂. 6H₂O B. Pb(NO₃)₂ C. K₂Cr₂O₇ D. Ce₂(SO₄)₃
38	A solution is a homogeneous mixture of two or more kinds different :	A. Molecular. B. Covalent substance C. Ionic Substances D. Both (a) and (c)
39	An azeotropic mixture of two liquids boils at a lower temperature than either of them when lower temperature	A. It is saturated B. it shows positive deviation from Raoult's law C. It shows negative deviation form Raoult's law D. It is metastable
40	Partial pressure of a solution component is directly proportional to its mole fraction. This statement is known as	A. Henry's law B. Raoult's law C. Distribution law D. Ostwald's dilution law
41	Isotonic solutions have same	A. Molar concentration B. Molality C. Normality D. None of these
42	What is the molarity of the solution that contains 20 grams of NaOH in 500 ml of solution [Na = 23, O = 16, H = 1]	A. 0.25 B. 0.5 C. 1 D. 20
43	Coligative properties are the properties of	A. Dilute solution which behave as nearly ideal solutions B. Concentrated solutions which behave as nearly non-ideal solution C. Both (i) and (ii) D. Neither (i) and (ii)
44	How many $cm^3$of 1 M H_2SO_4required to neutralize 10 $cm^3$of 1 M NaOH	A. 2 cm³ B. 2.5 cm³ C. 5 cm³ D. 10 cm³
45	The molarity of the solution containing x grams $(NH_4)_2SO_4$in 500 $cm^3$of the solution is 0.6 what is x	A. 39.6 B. 45.1 C. 40.5 D. 42.7
46	If 5.85 g of NaCl are dissolved in 90 g of water, the mole fraction of NaCl is	A. 0.1 B. 0.01

	If 5.85 g of NaCl are dissolved in 90 g of water, the mole fraction of NaCl is	C. 0.2 D. 0.0196
47	The depression of freezing point is directly proportional to	A. Mole fraction of the solution B. Molarity of the solution C. Molality of the solution D. Molarity of the solvent
48	A solution has 92 g of ethyl alcohol, 96 g of methyl alcohol and 90 g of water. Mole percentage of ethyl alcohol in the solution is	A. 10 B. 20 C. 25 D. 50
49	Which inorganic precipitate acts as semipermeable membrane?	A. Calcium sulphate B. Barium oxalate C. Nickel phosphate D. Copper ferrocyanide
50	Saturated solution of a solid is prepared at a constant temperature. 100 $cm^3$of this saturated solution is evaporated in a china dish. The mass of the residue is called	A. Azetropic mixture B. Solubility C. Solubility product D. Equilibrium constant
51	According to Raoult's law	A. Relative lowering of V.P. is equal to mole fraction of solute B. The lowering of V.P. is directly proportional to mole fraction of solute C. V.P. of solvent above solution is equal to product of V.P. of pure solvent and mole fraction of solvent ins solution D. All of the above
52	A solution consisting of 92 grams ethyl alcohol (C_2H_5OH) 96 grams methyl alcohol (CH_3OH) 90 grams water the mole fraction and mole percent of methyl alcohol is	A. 0.3. 30% B. 0.2, 30% C. 0.5, 30% D. 0.2, 20%
53	10g of NaOH has been dissolved per kg of solvent. The molality of solution is :	A. .25 m B. 1.5 m C. .5 m D. 2.5 m
54	50 mL of 10 N H_2SO_4. 25mL of 12 N Hcl and 40 mL of 5N $HNO_3$are mixed and the volume of the mixture is made 100 mL by adding water. The normality of resulting will be	A. 1 N B. 2 N C. 3 N D. 9 N
55	A homogeneous mixture of two or more than two chemical substances is called	A. Solute B. Solution C. Solvent D. Salvation
56	Which of the following liquid pairs shown a positive deviation from Raoult's law	A. CH₃COOH₃+ CH₃Cl B. C₆H₆+ CH₄OH C. H₂O + HCl D. H₂O + HNO₃
57	Which of the following will have the highest boiling point at 1 atm pressure?	A. 0.1 M NaCl B. 0.1 M Sucrose C. 0.1 M BaCl₂ D. 0.1 M Glucose
58	Freezing point depression is measured by	A. Beckmann's apparatus B. Lands Berger's method C. Antifreeze apparatus D. All of the above
59	The movement of solvent molecules through a semipermeable membrane is called	A. Electrolysis B. Electrophoresis C. Osmosis D. Cataphoresis
60	What happens when isotonic solution of A (mol.wt.342) and B (mol.wt 60) are put in to communication through semipermeable membrane?	A. Transference of solvent from solution A to that of B take place B. Transference of solvent from solution B to that of A takes place C. No transference of solvent from solution A to that of B takes place D. Change in temperature of solutions takes place
61	0.1 molar glucose ($C_6H_{12}O_6$) solution has the % W/N	A. 1.8% B. 18% C. 0.18% D. 2.8%
		A. Slightly more than the total volume of the

62	An azeotropic mixture showing it's positive deviation from Raoult's law, the volume of the mixture is :	components. B. Slightly less than the total volume of the components. C. Equal to the total volume of the components. D. None of these.
63	The substance which is present in large quantity is called a :	A. Solute B. Solvent C. solutiion D. None of Above
64	Number of moles of solute dissolved in 1 Kg of solvent is knowns as	A. Molarity B. Formality C. Molality D. Mole fraction
65	In azeotropic mixture showing negative deviation form Raoult's law show	A. Higher b.p. than either B. Lower b.p. than either C. No change in b.p. D. None of these
66	Solution may have units	A. Molarity B. Molality C. Mole fraction D. All of them
67	A solution of two component is called	A. Binary solution B. Dilute solution C. Original solution D. Standard solution
68	A solution containing 5.8 grams acetone (CH_3OCH_3), 4.6 gram ethyl alcohol (C_2H_5OH) and 12 grams chloroform (CHI_3) has mole fraction and mole percent of acetone	A. 0.11, 10% B. 0.33, 33% C. 0.22, 22% D. 0.11, 33%
69	Every sample of matter with uniform properties and a fixed composition is called a :	A. Solid B. Liquid. C. Phase. D. Gas.
70	The term ebullioscopy is used for	A. Depression of freezing point B. Elevation in boiling point C. Lower of vapour pressure D. None of the above
71	The ionic strength of a solution containing 0.1 mole/kg of KCl and 0.2 mole/kg of $CuSO_4$is	A. 0.3 B. 0.6 C. 0.9 D. 0.2
72	The process in which solvent particles surround solute particles is called	A. Hydrolysis B. Hydration C. Solvation D. Dissolution
73	If 18 g glucose ($C_6H_{12}C_6$) is present in 1000 g of an aqueous of glucose it is said to be	A. 1 molal B. 1.1 molal C. 0.5 molal D. 0.1 molal
74	What will be the molarity of solution if 103 g $(NH_4)_2SO_4$is dissolved per 600 $cm^3$of water	A. 2.32 M B. 3.32 M C. 4.32 M D. 1.30 M
75	The molarity of toluene solution in benzene is 0.22 if 5 grams of toluene dissolved, then mass of benzene is grams is	A. 267 B. 260 C. 240 D. 247
76	18 g glucose is dissolved in 90 g of water. The relative lowering vapor pressure is equal to :	A. 1/5 B. 5.1 C. 1/51 D. 6
77	Saturated solution of NaCl on heating becomes	A. Super saturated B. Unsaturated C. Remains saturated D. None
78	Colligative properties are the properties of :	A. Dilute solutions which behave as nearly ideal solutions. B. Concentrated solutions which behave as nearly non-ideal solutions. C. Both(i) and (ii) D. Neither (i) nor (ii)
		A. Dilute and concentrated

79	A solution can be	A. Dilute and concentrated B. Saturated and dilute C. Saturated and unsaturated D. Supersaturated and saturated
80	The example of colligative property is	A. Boiling point B. Osmosis C. Freezing point D. Osmotic pressure
81	10g Of NaOH Has Been Dissolved Per$dm^3$of solution. The morality of solution is :	A. 0.025 M B. 1.5 M C. 0.1 M D. .25 M
82	The number of moles of NH_4Cl dissolved in 500 $cm^3$of its 15%, W/N solution is	A. 1 mole B. 1.4 mole C. 2.0 mole D. 2.4 mole
83	Precipitation will occur until the ionic product becomes	A. Equal to K_{sp} B. Lesser than K_{sp} C. Greater than K_{sp} D. None of these
84	Maximum freezing point falls in	A. Camphor B. Naphthalene C. Benzene D. Water
85	The osmotic pressure of solution increases if	A. Temperature is decreased B. Solution constant is increased C. Number of solute molecules are increased D. Volume is increased
86	If liquids A and B form an ideal solution	A. The enthalpy of mixing is zero B. The entropy of mixing is zero C. The free energy of mixing is zero D. The free energy as well as the entropy of mixing are each zero
87	1.0 g pure calcium carbonate was found to require 50 ml of dilute HCl for complete reaction. The strength of HCl solution is given by	A. 4 N B. 2 N C. 0.4 N D. 0.2 N
88	The amount of solute present in the given amount of solvent is called	A. Molarity B. Molality C. Concentration D. Solubility
89	Which one of the following solution will have higher vapour pressure than that of water	A. Aqueous solution of methanol B. Aqueous solution of HCl C. Aqueous solution of glucose D. Aqueous solution of urea
90	Equal volumes of ethylene glycol (molar mass = 62) and water (molar mass = 18) are mixed. The depression in freezing point of water is (given $K_f$of water = 1.86 K mol^{-1}kg and specific gravity of ethylene glycol is 1.11)	A. 0.003 B. 3.33 C. 0.333 D. 33.3
91	(A) is one molar NaCl solution and (b) is 1 molal NaCl solutin :	A. A and B are of same strength. B. A is more Concentrate than B. C. b is more Concentrate than A. D. None of above.
92	The freezing point of 1 molal NaCl solution assuming NaCl to be 100% dissociated in water in	A. -1.86°C B. -3.72°C C. +1.86°C D. +3.72°C
93	A solution of glucose is 10% The volume to which 1g mole of it dissolved will be :	A. 8.1 dm³ <o:p></o:p> <o:p></o:p> B. 1.7 dm³ <o:p></o:p> C. 1.8 dm³ <o:p></o:p> D. 6.1 dm³ <o:p></o:p>

94	If the ionic product of a solution is less than the solubility product, the solution is	A. Supersaturated B. Unsaturated C. Ideal D. Saturated
95	Which one of the following is a colligative property?	A. Surface tension B. Osmotic pressure C. Viscosity D. Refractive index
96	What is the molarity of a solution containing 15.0 g urea in 500 $cm^3$of solution	A. 0.5 M B. 1 M C. 1.5 M D. 2 M
97	The sum of mole percent of all the components of solution is always equal to :	A. Less than 100 B. One C. 100 D. 10
98	Solutions containing relatively lower concentrations of solute are called :	A. Concentrated solutions. B. Lighter solutions. C. Dilute solutions. D. None of above.
99	Which of the following half molar solutions will have lowest freezing point	A. Solution of non-volatile, none electrolyte B. Solution of non volatile, weak electrolyte C. Solution of non volatile strong electrolyte D. Solution of volatile, non electrolyte
100	The concentration units independent of temperature would be	A. Normality B. Mass-volume precent C. Molality D. Molarity
101	What mass of NaOH is required to prepare 2.5 $dm^3$of 1.5 M NaOH solution	A. 130 g B. 140 g C. 150 g D. 160 g
102	The process in which water molecules surround solute particles is called	A. Hydration B. Salvation C. Hydrolysis D. Dehydration
103	The volume of 0.1 M H_2SO_4required to neutralize completely 40 ml of 0.2 M NaOH solution is	A. 10 ml B. 40 ml C. 20 ml D. 50 ml
104	Cane sugar is not soluble in benzene but soluble in water because	A. Cane sugar is a macro molecule B. Cane sugar is an ionic compound C. Can sugar has hydrogen bonding D. Can sugar is an organic molecule
105	Which if the following has the highest freezing point at one atmosphere	A. 0.1 M NaCl B. 0.1 M sugar solution C. 0.1 M BaCl₂ D. 0.1 M FeCl₂solution
106	Azeotropic mixture of HCl and water has	A. 48% HCl B. 22.2% HCl C. 36% HCl D. 20.2% HCl
107	Which one of the following is used as antifreeze in the radiator	A. Methanol B. Ethanol C. Ethylene glycol D. Glycerin
108	How many g of dibasic acid (mol. wt. 200) should be present in 100 ml of the aqueous solution to give 0.1 Normality?	A. 1 g B. 2 g C. 10 g D. 20 g
109	An azeotropic mixture of two liquids boils at a lower temperature than either of them when :	A. It is saturated. B. It shows positive deviation from Raoult's law. C. It show negative deviation from Raoult's law. D. It is metastable.
110	The process in which the solvent molecules are surrounded and interact with solute ions or molecules is called	A. Solvation B. Hydration C. Hydrogenation D. None
111	When the solute is present in trace quantities the following expression is used	A. Gram per million B. Milligram percent C. Microgram percent

		D. Parts per million
112	The relative lowering of vapour pressure is equal to the mole fraction of the solute is statement of	A. Rault law B. Henry law C. Dalton law D. Grahms law
113	At room temperature, the mole fraction of a solution in 0.25 and the vapour pressure of the solvent is 0.80 atm. Then the lowering of vapour pressure is	A. 0.75 B. 0.512 C. 0.80 D. 0.0512
114	The sum of mole fractions (X) of components of solution is equal to	A. 100 B. 200 C. One D. Zero
115	The molar boiling point constant is the ration of elevation in boiling point to :	A. Molarity B. Molarity C. Mole fraction of solvent D. Mole fraction of solute.
116	The solutions of NaCl and KCl are prepared separately by dissolving same amount of solute in water, which of the following statements is true fro these solutions ?	A. KCl solution will have higher boiling point than NaCl solution. B. Both the solutions have same boiling points. C. KCl and NaCl solutions possess same vapour pressure. D. KCl solution possesses lower freezing point than NaCl solution.
117	Dust particles in smoke is a solution of the type	A. Liquid is solute and solid is solvent B. Solid is solute and liquid is solvent C. Solid is solute and gas is solvent D. Gas is solute and solid is solvent
118	Two solutions of NaCl and KCl are prepared separately by dissolving 0.1 M of the solute in water. Which of the following statements is not true for these solution	A. KCl solution will have higher boiling point than NaCl solution B. Both the solutions have same boiling C. KCl and NaCl solution possess same vapour pressure D. KCl solution possess same freezing point at NaCl solution
119	Osmotic pressure of a solution increases by	A. Decreasing the temperature B. Increasing the volume C. Increasing the number of molecules of the solute D. None of the above
120	Zeotropic mixture	A. Obey Henry's law B. Obey Raoult's law C. Does not obey Raoult's law D. Obey Dalton's law
121	The process of osmosis was first discovered by	A. Nollet B. Pfeffer C. Traube D. Dutrochet
122	What is the molarity of H_2SO_4solution that has density of 1.84 gm/cc at 35°C and contains 98% by weight?	A. 4.18 M B. 8.14 M C. 18.4 M D. 18 M
123	Which is independent of temperature	A. Molarity B. Molality C. Normality D. Mole fraction
124	10 ml of 1.5 M NaOH solution is neutralized by 20 ml of a-M HCl solution. The value of 'a' will be	A. 1.0 B. 0.75 C. 0.5 D. 0.25
125	Which one of the following is an ideal solution that obeys Rault's law	A. Ethanol + water B. Benzene + toluene C. HCl + water D. Acetone + chloroform
126	A solution containing maximum amount of solute dissolved at a given temperature is called	A. Saturated solution B. Unsaturated solution C. Supersaturated solution D. Impure solution
127	Number of moles of the solute dissolved per $dm^3$of the solution is knows as	A. Molarity B. Formality C. %age D. None of these

128	0.5 M of $H_2SO_4$is diluted from 1 litre to 10 litre, normality of resulting solution is	A. 1 N B. 0.1 N C. 10 N D. 11 N
129	If 5.85 of NaCl are dissolved in 90g of water the mole fraction of NaCl is	A. 0.1 B. 0.01 C. 0.2 D. 0.0196
130	The osmotic pressure of 1 m solution at 27°C is	A. 2.46 atm B. 24.6 atm C. 1.21 atm D. 12.1 atm
131	Elevation of boiling point is measured by	A. Beckmann's apparatus B. Lands Berger's method C. Antifreeze apparatus D. None of these above
132	Equal volumes of 0.1 M $AgNO_3$and 0.2 M NaCl are mixed. The concentration of NO^-_3 ions in the mixture will be	A. 0.1 M B. 0.05 M C. 0.2 M D. 0.15 M
133	At 25°C, the highest osmotic pressure is exhibited by 0.1 M solution of	A. CaCl₂ B. KCl C. Glucose D. Urea
134	A one thousand dm^3sample of water contains one gram of iron (iii) ions what is the concentration in parts per million of Fe^{3f}(eq) in parts per million	A. 0.001 B. 0.01 C. 0.1 D. 1.0
135	Which one of the following has discontinuous solubility curve	A. CaCl₂6H₂O B. NaCl C. KCl D. NaNO₃
136	Molarity of pure water is :	A. 33.3 B. 55.5 C. 44.4 D. 66.6
137	As compared to molar solution, in the molal solution the quantity of solvent is :	A. Comparatively lesser B. More or less equal C. Comparatively greater D. Very large
138	Compared to a 1.0M aqueous solution of calcium chloride will have	A. The same freezing and boiling point B. A lower freezing point and lower boiling point C. A lower freezing point and higher boiling point D. A higher freezing point and higher boiling point
139	If ionic product of a solution is greater than solubility product, the solution is	A. Supersaturated B. Saturated C. Unsaturated D. None of these
140	Hydrolysis of potassium acetate produces	A. Acidic solution B. Neutral solution C. Basic solution D. None of these
141	The molal depression constant depends upon	A. Nature of solute B. Nature of solvent C. Δ H_{solution} D. Vapour pressure of solution
142	Which of the following is a colligative property?	A. Melting point B. Osmotic pressure C. Freezing point D. Sublimation temperature
143	Which of the following is not a colligative property?	A. Depression in freezing point B. Elevation of boiling point C. Osmotic pressure D. Modification of refractive index
144	Vant Hoff's factor of $Ca(NO_3)_2$is	A. 1 B. 2 C. 3 D. 4
		A. That solution is highly saturated

145	The boiling point of an a zeotropic mixture of water and ethye alcohol is less than that of water and alcohol. The mixture shows	A. That solution is highly saturated B. No deviation from Raoult's law C. Positive deviation from Raoult's law D. Negative deviation from Raoult's law
146	In which type of following solutions we don't know the total volume of the solutions :	A. Percentage weight/weight B. Percentage weight/volume C. Percentage volume/volume D. Percentage volume/weight
147	Which of the following aqueous solutions have the lowest freezing point	A. 5.85% NaCl B. 6% urea C. 34.2 sucrose D. All of them have same freezing points
148	Which of the statements given below concerning properties of solution, describe a colligative effect?	A. Boiling point of pure water decreases by the addition of ethanol B. Vapour pressure of pure water decreases by the addition of nitric acid C. Vapour pressure of pure benzene decreases by the addition of naphthalene D. Boiling point of pure benzene increases by the addition of toluene
149	Mixture of alcohol and water can be separated by	A. Solvent extraction techniques B. Crystallization C. Precipitation and filtration D. Fractional distillation
150	The solubility of a gas in water depends upon	A. Nature of the gas B. Temperature C. Pressure of the gas D. All of the above
151	Hydrochloric acid available in the laboratory is 36% w/w. The density of HCl solution is 1.19 g cm^{-3}. The molarity of HCl solution is	A. 10.23 moles dm⁻³ B. 11.55 moles dm⁻³ C. 11.73 moles dm⁻³ D. 12.67 moles dm⁻³
152	Which of the following mixture of liquids show negative deviation form Raults law	A. Ethyl alcohol and ether B. HCl and water C. Phenol- water D. Chlorobenene-bromobenene
153	A Solution containing 6.8 g of non-ionic solute in 100g of water was found to freeze at -0.93°C. If $k_f$for water is 1.86 and molecular mars of solute is	A. 13.6 B. 34 C. 68 D. 136
154	The percentage by weight of NaCl, if 6.0 g of NaCl is dissolved in 120 g of water is	A. 10.5 % B. 5% C. 8.02% D. 11.5%
155	Which of the following salts mixed with ice to make the freezing mixture used in ice cream machine	A. KNO₃ B. NH₄NO₃ C. AgNO₃ D. Mg(NO₃)₂
156	The weight of pure NaOH required to prepare 250 $cm^3$of 0.1 N solution is	A. 4 g B. 1 g C. 2 g D. 5 g
157	The number of moles of solute dissolved per dm^3 of the solution is called :	A. Normality. B. Molarity. C. Molarity. D. None of above.
158	The term cryoscopy is used for	A. Depression of freezing point B. Elevation in boiling poing C. Lowering of vapour pressure D. Osmotic pressure
159	A solution contains 1.2046 x 10^{24}hydrochloric acid molecules in one $dm^3$of the solution. The strength of the solution is	A. 6 N B. 2 N C. 4 N D. 8 N
160	The molal elevation constant is the ratio of the elevation in boiling point to	A. Molarity B. Molality C. Mole fraction of solute D. Mole fraction of solvent
161	The freezing mixture used in ice cream machine consists of ice and	A. NaCl B. KCl C. MgCl₂ D. NaNO₃

162	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 same boiling points.
163	Which of the following solution 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
164	The ratio of moles of a particular component of solution to total moles of all components of solution is :	A. Mole fraction. B. Molality. C. Molarity. D. Normality.