ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	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
2	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
3	(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.
4	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>
5	Molarity of pure water is :	A. 33.3 B. 55.5 C. 44.4 D. 66.6
6	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
7	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
8	The number of moles of solute in 1000g (1 Kg) of the solvent is called :	A. Molarity B. Molarity C. Normality D. Mole fraction
9	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.
10	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
11	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
12	Solutions containing relatively lower concentrations of solute are called :	A. Concentrated solutions. B. Lighter solutions. C. Dilute solutions. D. None of above.

13	The substance which is present in large quantity is called a :	A. Solute B. Solvent C. solutiion D. None of Above
14	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)
15	Every sample of matter with uniform properties and a fixed composition is called a :	A. Solid B. Liquid. C. Phase. D. Gas.
16	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)
17	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.
18	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.
19	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.
20	An azeotropic mixture showing it's 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.
21	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.
22	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.
23	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
24	$N_2 + 3H_2 \rightleftharpoons 2NH_3$ + Heat for above equation, themaximum product will be obtained at :	A. Low temperature at high pressure. B. High temperature and low pressure. C. High temperature and high pressure. D. Low temperature at low pressure.
25	The substance which increases rate of reaction but remains unchanged at the end of reaction is called :	A. Catalyst. B. Indicator. C. Promoter. D. Activator.
26	$N_2 3H_2 \rightleftharpoons 2NH_3$ Which of the following change will favorthe formation of more NH_3 at equilibrium in above reaction :	A. By adding NH_{3.} B. By removing<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">H_{2.} C. By decreasing pressure. D. By increasing pressure

		B. By increasing pressure.
27	Extent to $H_2 + L_2 \rightarrow 2HI$ can be increased by :	A. Increasing temperature.<o:p></o:p> B. Increasing product. <o:p></o:p> C. Increasing pressure. <o:p></o:p> D. Adding a catalyst.<o:p></o:p>
28	$2SO_2 + O_2 \rightleftharpoons 2SO_2H = 188KJ\ mole^{-1}$ Which statement about following equilibrium is correct :	A. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">The value ofK_pfalls with arise in temperature.<o:p></o:p> B. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">The value ofK_pis equal tok_{c.<o:p></o:p>} C. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">The value ofK_pfalls with the increase pressure.<o:p></o:p> D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">Adding V₂<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">O₅<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">catalyst increase the equilibrium yield of Sulphur trioxide.<o:p></o:p>

29	$2SO_2 + O_2 \rightleftharpoons 2SO_2$ H= 188KJ $mole^{-1}$ Which statement about following equilibrium is correct :	A. The value of<span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:"Times New Roman";mso-bidi-theme-font:minor-bidi; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">K_pfalls with arise in temperature. B. The value ofK_pis equal to<span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:"Times New Roman";mso-bidi-theme-font:minor-bidi; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">k_{c.} C. The value ofK_pfalls with the increase pressure. D. Adding V₂O₅ catalyst increase the equilibrium yield of Sulphur trioxide. <o:p></o:p>
30	A large value of $K_c$means that at equilibrium :	A. Less reactant and more products. B. Reactants and product in same amounts. C. More reactants and less products. D. None of above.