PPSC Chemistry Full Book Test

Sr	Questions	Answers Choice
1	The number of moles of solute dissolved in 1000 gram of the solvent is called	A. Formality B. Molality C. Molarity D. Mole fraction
2	The number of gram equivalents of the solute per dm3 of the solution is called.	A. Formality B. Normality C. Molality D. Molarity
3	The number of mole of the solute dissolved per dm3 of the solution is called.	A. Molality B. Formality C. Normality D. Molarity
4	A 10% solution of sucrose contains 10 g of sucrose in how much volume of the solution.	A. 10 mL B. 100 mL C. 1000 mL D. 1 mL
5	If there are only two components in a solution with mole fraction X_A and X_B then which of the following relation is correct.	A. X_A + X _B = 0 B. X _A + X _B > 1 C. XA = XB < 1 D. XA = 1 - XB
6	Which of the following concentration term is used in respect of standard solutions.	A. Normality B. Formality C. Molarity D. All of above
7	If 20 ml of 0.5 N salt solution is diluted in one litre. what is the new concentration.	A. 0.01 N B. 0.001 N C. 1 N D. 10 N
8	Which parameter of a chemical reaction will change with the use of a catalyst.	A. Delta F, change in free energy B. Delta S, change in entropy C. Delta E , change in internal energy D. K, the rate constant
9	The pKa of acetic acid is 4.74 which implies that.	A. pH of 1N solution is 4.74 B. At pH 4.74 the dissociation of acetic acid is maximum C. At pH 4.74 half of the acetic acid molecules are dissociated in the solution. D. At pH 4.74 the dissociation of acetic acid is minimum.
10	Which is the following is not a buffer.	A. H2CO3/HCO3 B. NH4Cl/NH4OH C. CH3COOH/CH3COONa D. NH3OH/CH3COOH
11	Which of the following is a buffer solution.	A. CH3COOH + NH4OH B. CH3 COOH + HCl C. CH3COOH + NaOH D. CH3COOH + CH3COONa
12	A pH of a neutral solution at 100 ^{o}C when Kw = 1.0 x 10^{-12}	A. 0 B. 7 C. 6 D. 7
13	A 2M solution of H2SO4 would have how many moles of H+ ion in one liter	A. 1.0 B. 2.0 C. 4.0 D. 5.0
14	The degree of dissociation of weak acid increases with.	A. Decreasing pressure B. Increasing pressure C. Increasing concentration

		D. Decreasing concentration
15	Which of the following specie is stronger acid than formic acid, HCOOH, in aqueous solution.	A. CH3COOH B. NH+4 C. H2SO-3 D. H4P2O7
16	The correct order of acid strength is.	A. HIO4 > HBrO4 > HClO4 B. HClO4> HBrO4 > HIO4 C. HBrO4 > HIO4 > HClO4 D. HBrO4 > HClO4 > HIO4
17	The correct order of acidic strength is.	A. HF < HCl< HI < HBr B. HI <HBr < HCl < HF C. HI < HBr < HF < HCl D. HF < HCl < HBr < HI
18	The pink colour of phenolphthalen in in basic medium is due to the	A. Cationic form B. Anionic form C. Natural form D. OH- ions of the base
19	The pH of water 7 at 25 ^{o}C if water is heated to 70 ^{o}C . Which of the following should be true.	A. pH will decrees B. pH will increase C. pH will remain constant D. None of these
20	Which of the following will have the largest pH?	A. O.1 N HCl B. 0.1 N CH3COOH C. 0.1 N NaOH D. 0.01 N NaOH
21	The pKa of an acid having ionization constant 1 x 10^{-5} is	A. -5 B. 5 C. 9 D. -9
22	Which of the following solution has pH= 11?	A. 1 X 10⁻¹¹ m NaOH B. 1 x 10⁻¹¹ m HCl C. 1 x 10⁻³ M NaOH D. 1 X 10 ³ M NaOH
23	The sum of pH and pOH is aqueous solution is equal to.	A. 14 B. 7 C. zero D. pKw
24	Which of the following statement is not correct regarding Lewis acids and bases.	A. NH3 and H2O both behaves as Lewis bases B. Substances which donate a pair of electrons are called Lewis bases C. All Lewis bases are also Bronsted bases D. Lewis base must contain an atom having less than an octet of electron.
25	HS- is a conjugate base of.	A. S2- B. H2S C. H2SO3 D. H2SO4
26	What of the following is not a Lewis base.	A. CN- B. AlCl3 C. NH3 D. ROH
27	Which of the following can act both as a Bronsted acid and a Bronsted base.	A. Na2CO3 B. OH- C. HCO3- D. NH3
28	According to Arrhenius theory an acid is defined as substance which	A. Accepts and electron pair B. Donatees H+ ion in ammonia C. Contains Cl- ions D. Furnishes H3O + ion in water
29	The equilibrium constants Kp and Kc are related as	A. Kp = Kx Pdelta n B. K p= Ks/P delta n C. Ks = Kp (RT)delta n D. Kx = Kp (P/RT) delta n
30	Equilibrium constant Kp and Kc are related as	A. Kc = Kp (RT)delta n B. Kp = Kc (RT)an C. Kp = (Kc/RT)delta n D. Kp -Kc = (RT)delta n