

## MDCAT Chemistry Chapter 20 Macromolecules Online Test

Sr	Questions	Answers Choice
1	The solubility product is only applicable for those substance whose molar concentrations is	A. 0.01 B. Equal to 1 C. Less than 0.01 D. Greater than 10
2	If ionic product is equal to $K_{sp}$ then the solution is	A. Unsaturated B. Ideal C. Supersaturated D. Saturated
3	The pH of ideal buffer is	A. 10 B. 7 C. Less than 7 D. 0
4	Which one is best buffer those have	A. $pH = pK_a$ B. $pH > pK_a$ C. $pOH < pK_b$ D. $pK_a = 0$
5	A basic buffer solution can be prepared by mixing	A. Strong acid and its salt with weak base B. Weak base and its salt with strong acid C. Strong base and its salt with weak acid D. Weak acid and its salt with strong base
6	Which one increases by common ion effect except?	A. Crystallization B. Solubility C. Association of ions D. All of these
7	Which one is correct about conjugate acid-base concept?	A. Conjugate base of a very weak acid is relatively very strong B. Conjugate base of a very weak acid is relatively very weak C. Conjugate base of a very strong acid is relatively very weak D. Both A and C
8	Which one is very weak acid	A. HF B. HCl C. $H_2CO_3$ D. $H_2O$
9	pH of an aqueous solution is 3.0 at $25^\circ C$ . The hydrogen ion concentration in the solution would be	A. 0.001 B. 0.01 C. 0.0001 D. $10(-5)$
10	Which statement is incorrect	A. pH and $[OH^-]$ are inversely related to each other B. pOH and $[OH^-]$ are inversely related to each other C. pH and $[OH^-]$ are directly related to each other D. pOH means potential of hydroxyl ion concentration
11	If the volume term is present in denominator of $K_c$ expression, then which one is correct	A. Increase in pressure will shift the reaction backward B. Increase in pressure will shift the reaction forward direction C. Decrease in volume will shift the reaction forward direction D. Reaction will not effected
12	If the temperature is increased of following reaction, then will go in $N_2 + 3H_2 \rightleftharpoons 2NH_3$ , $\Delta H = -Ve$	A. Forward direction B. Reverse direction C. Remain constant D. Cannot be predicted

13	Correct relationship b/w $K_c$ and $K_p$ can be written as	B. $K_c = K_p (RT)^{\Delta n}$ C. $K_p = K_c (RT)^{\Delta n}$ D. $K_p = K_c (R/N)^{\Delta n}$
14	In which of the following Equilibria will $K_c$ and $K_p$ have not the same value	A. $2HI \rightleftharpoons H_2 + I_2$ B. $2SO_2 + O_2 \rightleftharpoons 2SO_3$ C. $N_2 + O_2 \rightleftharpoons 2NO$ D. All of these
15	For what value of $K_c$ almost forward reaction is complete	A. $K_c = 10^{-30}$ B. $K_c = 1$ C. $K_c = 10^{30}$ D. $K_c = 0$
16	When HCl gas is passed through saturated solution of rock salt, the solubility of NaCl	A. Increases B. May increase or decrease C. Decreases D. None of these
17	The $K_w$ of water at $25^\circ C$ is given by	A. $10^{-7}$ B. $10^{-10}$ C. $10^{-12}$ D. $10^{-14}$
18	The most suitable temperature for preparing ammonia gas is	A. $250^\circ C$ B. $450^\circ C$ C. $350^\circ C$ D. $550^\circ C$
19	pH of $10^{-4}$ mole $dm^{-3}$ of HCl	A. 2 B. 4 C. 3 D. 5
20	An excess of silver nitrate is added to the aqueous barium chloride and the precipitate is removed by filtration. What are the main ions in the filtrate?	A. $Ag^+$ and $NO_3^-$ , only B. $NO_3^-$ and $Ba^{+2}$ only C. $Ag^+$ and $NO_3^-$ , and $Ba^{+2}$ only D. $Cl^-$ and $NO_3^-$ , and $Ba^{+2}$ only