ECAT Chemistry Chapter 8 Chemical Equilibrium

Sr	Questions	Answers Choice
1	Question Image	A. Reversible reaction B. Irreversible reaction C. Spontaneous reaction D. None of these
2	pH of water is 7, if 0.01 M NaOH is added, than its pH is	A. 12 B. 14 C. zero D. 10
3	Question Image	A. Shift reaction toward forward direction B. Shift reaction backward C. Lower the value of K_c D. No change in reaction
4	Question Image	A. K_p K_c B. K_c K_p C. K_p= K_c D. None of these
5	Question Image	A. HF is stable and does not decompose even at 2000°C B. HF is stable and slowly decomposes at 2000°C C. HF is strong acid D. HF produces equal moles of hydrogen and fluorine
6	A chemical reaction A----------->B is said to be in equilibrium when :	A. Rate of transformation of A to B is equal to B to A. B. 50% reactant has been changed to B. C. Conversion of A to B is 50% complete D. Complete conversion of A to B has taken place.
7	Which one of the following is a buffer	A. HCl + NaCl solution B. CH₃COOH + CH₃COONH₄solution C. H₂SO₄+ CaSO₄solution D. CH₃COOH + CH₃COONa
8	The pH of 10^{-3}mole $dm^{-3}$of an aqueous solution of $H_2SO_4$is	A. 3.0 B. 2.7 C. 2.0 D. 1.5
9	Reactions that proceed on both sides and never go to completion are called	A. Irreversible reactions B. Reversible reactions C. Opposing reactions D. Spontaneous reactions
10	When rate of forward reaction is equal to rate of backward reaction, then the equilibrium established is called	A. Chemical equilibrium B. Static equilibrium C. Dynamic equilibrium D. None of these
11	Question Image	A. 0.02 B. 0.2 C. 50 D. 25
12	Question Image	A. High temperature and low pressure B. Low temperature and high pressure C. Low temperature and low pressure D. High temperature and high pressure
13	The rate of reaction :	A. Remain same as reaction proceeds. B. May decrease or increase as reaction proceeds . C. Increase as reaction proceeds. D. Decreases as reaction proceeds.
		A. T value of K<sub>p falls witha rise in

14	Which statement about the following equilibrium in correct? $2SO_{2\,(g)} + O_{2(g)} \text{----------} 2sO_{3(g)} H = -188.3$ KJ mol-1	temperate.</sub> B. The value of K_{p falls withincreasing pressure} <o:p></o:p> C. Adding V_{2O} ₅catalyst increase the equilibrium yield of sulfur trioxide <o:p></o:p> D. The value of K_{p is equal to}K_p E. <o:p></o:p> <o:p></o:p>
15	Question Image	A. 4 mole per dm³ B. 2 mole per dm³ C. 0.33 mole per dm³ D. 0.67 mole per dm³
16	Question Image	A. [A] = [B] B. [A] < [B] C. [B] = [C] D. [A] > [B]
17	The rate of which the reaction proceeds is directly proportional to the product of the active masses of the reactants is according to	A. Law of mass action B. Le Chateliers principle C. Equilibrium law D. Law of constant proportion
18	The solubility of PbF_2 is 2.6 x 10^{-3} mole dm^{-3} then its solubility product is	A. 2.6 x 10⁻³ B. 6.76 x 10⁻⁶ C. 5.2 x 10⁻⁶ D. 7.0 x 10⁻⁸
19	Question Image	A. Increases B. Decreases C. Remains same D. Cannot be predicted
20	In a reversible reaction, two substances are in equilibrium. If the concentration of each one is reduced to half, the equilibrium constant will be	A. Reduced to half of its original value B. Doubled C. Same D. Reduced to one fourth its original value