ECAT Chemistry Chapter 8 Chemical Equilibrium Online Test

Sr	Questions	Answers Choice
1	For which system does the equilibrium constant, kc has units of (concentration) ?	A. N₂+3H₂₋₋-----2NH₃<o:p></o:p> B. H₂+L₂--------2HL<o:p></o:p> C. 2NO₂----------N₂O₄<o:p></o:p> D. 2HF--------H2+F₂<o:p></o:p>
2	Question Image	A. 0.5 B. 4.0 C. 2.5 D. 0.25
3	Ammonium carbonate when heated to 200°C gives a mixture of $NH_3$and CO_2vapour with a density of 13.0. What is the degree of dissociation of ammonia carbonate?	A. 3/2 B. 1/2 C. 2 D. 1
4	Question Image	A. Increase in concentration of 1 B. Decrease in concentration of I₂ C. Increase in temperature D. Increase in total pressure
5	Which of the following is a characteristic of a reversible reaction?	A. It never proceeds to completion B. It can be influenced by a catalyst C. It proceeds only in the forward direction D. Number of moles of reactants and products are equal
6	When the rate of formation of reactants is equal to the rate of formation of products, this is known as	A. Chemical reaction B. Chemical equilibrium C. Chemical kinetics D. None
7	In a lime kiln, to get higher yield of CO_2, the measure that can be taken is	A. To main high temperature B. To pump out CO₂ C. To remove Cao D. To add more CaCO₃
8	Question Image	A. High temperature B. Low temperature C. Low pressure D. High pressure
9	Question Image	A. High temperature and low pressure B. Low temperature and low pressure C. Low temperature and high pressure D. High temperature and high pressure
10	Under what condition of temperature and pressure the formation of atomic hydrogen from molecular hydrogen will be favourd	A. High temperature and high pressure B. Low temperature and low pressure C. High temperature and low pressure D. :Low temperature and high pressure
11	A chemical reaction is in equilibrium when	A. Formation of product is minimum B. Reactants are completely transformed into products C. Rates of forward and backward reactions are equal D. Equal amounts of reactants and products are present
12	The rate of forward reaction is two times that of the reverse reaction at a given temperature and identical concentration, K equilibrium is	A. 0.5 B. 1.5 C. 2.5 D. 2.0
13	1 mole of $N_2$and 2 moles of $H_2$are allowed to react in a 1 dm^3vessel. At equilibrium 0.8 mole of $NH_3$is formed. The concentration of H_2in the vessel is	A. 0.6 mole B. 0.8 mole C. 0.2 mole D. 0.4 mole

14	Which of the following favours the reverse reaction in chemical equilibrium?	A. Increasing the concentration of the reactant B. Removal of the least one of the products at regular intervals C. Increasing the concentration of one or more of the products D. None of these
15	When $H_2$and $I_2$are mixed and equilibrium is attained, then	A. Amount of HI formed is equal to the amount of H₂dissociated B. HI dissociation stops C. The reaction stops completely D. None of these
16	A gas bulb is filled with NO_2gas and immersed in an ice bath at 0°C which becomes colourless after sometimes. This colourless gas will be	A. NO₂ B. N₂O C. N₂O₄ D. N₂O₅
17	Question Image	A. K_p> K_c B. K_c> K_p C. K_p= K_c D. None of these
18	Question Image	A. Pressure change B. Temperature change C. Concentration change D. Catalyst
19	Question Image	A. 0.12 B. 0.50 C. 0.25 D. 4.00
20	Question Image	A. Increases B. Decreases C. Remains same D. Cannot be predicted
21	Question Image	A. Low pressure B. High pressure C. High temperature D. High concentration of SO₂
22	Question Image	A. 1 B. 10 C. 5 D. 0.33
23	Question Image	A. Introduction of an inert gas at constant volume B. Introduction of PCl₃(g) at constant C. Introduction of PCl₅(g) at constant volume D. Introduction of Cl₂at constant volume
24	Question Image	A. 8 B. 4 C. 9 D. 3
25	The concentration of reactants is increased by x, then equilibrium constant K becomes	A. ln K/x B. K/x C. K + x D. K
26	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
27	Question Image	A. 0.073 B. 0.147 C. 0.05 D. 0.026
28	Question Image	A. 32 B. 64 C. 16 D. 4
29	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
30	1.1 mol of A is mixed with 2.2 mol of B and the mixture is kept in on litre flask till the equilibrium is reached. At equilibrium, 0.2 mol of C is formed. If the equilibrium reaction is A+2B 2C+D, the value of equilibrium constant is	A. 0.002 B. 0.004 C. 0.001 D. 0.003