

Chemical Equilibrium

Sr	Questions	Answers Choice
1	Kp is used for.	A. Solid state reactions B. Gaseous reactions C. Aqueous reactions D. Liquid reactions
2	$K_p = K_c(RT)$ is used to related.	A. K_p and K_c B. Temperatur eand pressure C. Energy and volume D. Gibbs free energy
3	Dynamic equilibrium occurs.	A. In open systems B. Only in gases C. In closed systems D. Only at low temperature
4	Untis of K_c depend on	A. Catalyst B. Reaction stoichimometty C. Activation energy D. Delta H
5	Catalyst used in contact process	A. Fe B. V_2O_5 C. Ni D. Al_2O_3
6	Le Chatelier's Principle applies to.	A. Irreversibel reactions B. Static equilibrium C. Dynamic equilibrium D. Precipitation reactions
7	Removing a reactant shifts equilibrium to	A. Left B. Right C. No shift D. Depends on tempepture
8	Consider the gas phase equilibrium sysem represented by teh equation $2H_2O \rightleftharpoons 2H_2 + O_2$ Given that the forward reactio is endothermic, which of the following chagnes will decrease the equilibrium amount of H_2O .	A. Adding more oxygen B. Adding a solid phase catalyst C. Decreasing the volume of the container D. Increaseing the temperature at constant pressure
9	Which statement is true at dynamic equilibrium.	A. No reactio is occurring B. Concentrations are changing C. Rates of forward and reverse reactions are equal D. Rate forward reaction < reverse
10	The reversibel reation cannot be achieved in	A. Open system B. Closed system C. Both a and b D. None of these
11	Which is NOT a feature of dynamic equilibrium.	A. Closed system B. Constant Temperature C. Uequal reaction rates D. No net change
12	Which one of the following is not an example of reversible reaction.	A. Formation of ammonia B. Foramtion ow water C. Decomposition of PCl_5 D. Decomposition of NO_2
13	At equilirbium the observabel properties.	A. Keep changing B. Fluctuae randomly C. Remain constant D. Oscillate
14	Position of equilibrium is affected by	A. Temperature B. Catalyst C. Inert gas D. Surface area

A. Greater than K_c

15	If Delta n is positive, then Kp is	B. Less than Kc C. equal Kc D. Zero
16	According to law of mass action rate of reaction is proportional to.	A. Temperature B. Pressure C. Product of active masses D. Atomic mass
17	Reaction in Haber process is	A. Endothermic B. Exothermic C. Irreversible D. Neutral
18	A saturated solution represents a dynamic equilibrium Macroscopically, the concentration of dissolved solute is constant, Microscopically this occurs because.	A. No more solute particles are dissolving B. The rate of dissolution of solute is zero C. Solute particles are dissolving and precipitating at the same rate D. All solute particles have dissolved
19	Which of the following is an irreversible reaction.	A. Haber process B. Precipitation of Ag Cl C. Synthesis of ammonia D. Esterification
20	Equilibrium constant depends on	A. Pressure B. Temperature C. Volume D. Concentration