

## Equilibria

Sr	Questions	Answers Choice
1	A reverse reaction is one that	A. Speeds up gradually B. Proceeds from left to right C. In which reactants react to form products D. Slow down gradually
2	When the rate of the forward reaction takes place at the rate of reverse reaction the composition of the reaction mixture remains constant. It is called.	A. Chemical Equilibrium B. Static equilibrium C. Both a and b D. None of the above
3	What will happen if the rates of forward and reverse reactions are very high	A. The reaction will be practically irreversible B. The equilibrium point will reach very soon C. The equilibrium point will reach very late D. The reaction will not attain the state of dynamic equilibrium
4	An Inorganic chemistry places one mole of $\text{PCl}_5$ in container A and one mole of each $\text{Cl}_2$ and $\text{PCl}_3$ in container B. Both the containers were sealed and heated to the same temperature to reach the state of equilibrium. Guess about the composition of mixtures in both the containers.	A. Both the containers will have zero concentration of its reactants. B. Both the containers will have the same composition of mixtures C. Container A will have more concentration of $\text{PCl}_3$ than B. D. Container A will have less concentration of $\text{PCl}_3$ than B.
5	The reaction in which the products can recombine to form reactants are called.	A. Reversible Reaction B. Irreversible reactions C. Decomposition reactions D. Addition reactions
6	The colour of anhydrous copper (II) sulphate solid is	A. Pink B. Black C. White D. Blue
7	Which is true about the equilibrium state?	A. The forward reaction stops B. Both forward and reverse reactions stop C. Both forward and reverse reactions continue at the same rate D. The reverse reaction stops
8	If reversible reaction useful for preparing compounds on large scale.	A. Yes B. No C. They are useful only when equilibrium lies far to the left side D. They are useful only when equilibrium lies far to the right side
9	The colour of anhydrous cobalt(II) chloride solid	A. White B. Black C. Pink D. Blue
10	Which of the following does not happen, when a system is at equilibrium state.	A. Reaction continues to occur in both the directions B. Concentration of reactants and products stop changing C. Forward and reverse reactions stop D. Forward and reverse rates become equal
11	How much heat absorbed when $\text{NH}_3$ decomposed into $\text{N}_2$ and $\text{H}_2$ ?	A. 90.4 kJ/mol B. 92.4 kJ/mol C. 94.2 kJ/mol D. 95.2 kJ/mol
12	Predict which components of the atmosphere react in the presence of lightning.	A. $\text{N}_2$ and $\text{H}_2\text{O}$ B. $\text{O}_2$ and $\text{H}_2\text{O}$ C. $\text{N}_2$ and $\text{O}_2$ D. $\text{CO}_2$ and $\text{H}_2\text{O}$

		D. CO <sub>2</sub> and O <sub>2</sub>
13	The colour of hydrated cobalt(II) chloride solid is	A. White B. Black C. Blue D. Pink
14	Which compound is used a thinner is paint industry?	A. H <sub>2</sub> O B. C <sub>2</sub> H <sub>3</sub> OH C. CH <sub>3</sub> COOC <sub>2</sub> H <sub>5</sub> D. CH <sub>3</sub> COOH
15	CaO or lime is used extensive in steel, glass and paper industries. It is produced inan exothermic reversitble reaction by the decompositon of lie . Choose the conditions to produce maximum amount of lime.	A. Heating at high temperatur ein an open vessel B. Heating at high temperatur ein a closed vessel C. Cooling it in a closed vessel D. Colling it in an open vessel
16	Which type of reactions speed up gradully?	A. Decomposition reaction B. Forward reaction C. Reverse reactions D. Irreversibel reactions
17	In the beginning the rate of reverse reaction is.	A. Slow B. very fast C. Moderate D. Negligible
18	At what temperature , rate of ammonia formation and decomposition is the highest.	A. 200 <sup>o</sup>C B. 300<sup> o</sup>C C. 400 <sup>o</sup>C D. 500 <sup>o</sup>C
19	A complete reaction is in which	A. Only 10% reactants covert into products B. All the reactants covrt into products C. All the reactants do no covrt into products D. Half reactants covert into produts
20	What will hapen to the concentrations of the prodcut if a reversible reaction at equilibrium is not distrubed.	A. They will keepoon increasing B. They will keep on decreasing C. They will remain constant D. They wilremain constant for some time and then start decreasing