# Equilibria

| Sr | Questions | Answers Choice |
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| 1 | Predict which components of the amosphere react in the presence of lightening. | A. N2 and H2O<br>B. O2 and H2O<br>C. N2 and O2<br>D. CO2 and O2 |
| 2 | The colour of anhydrous copper (II)sulphate solid is | A. Pink<br>B. Black<br>C. White<br>D. Blue |
| 3 | Which of the following does not happpen, when a system is at equilibrium state. | A. Reaction continues to occur in both the directions<br>B. Concentration of reactants and products stop changig<br>C. Forward and reverse reactions stop<br>D. Forward and reverse rates become equal |
| 4 | An Inorganic chemistry places one mle of PCl5 in container A and one mole of each Cl2 and PCl3 in container B. Both the containers were sealed and heated to the same temperture to reach the stte of equilibrium Guess about the composition of mixtures in both the containers. | A. Both the containers wil have zero concentration of its reactants.<br>B. Both the containers wil hae the same composition of mixtures<br>C. Container A will have more concentraion of PCl3 than B.<br>D. Container A will have less concentraion of PCl3 than B. |
| 5 | The forward reaction takes place from | A. Right to left<br>B. Left to right<br>C. Both a and b<br>D. None of these |
| 6 | Whcih is true about the equilibrium state? | A. The forard reaction stops<br>B. Both forward and reverse reactions stop<br>C. Both foward and reverse reactions continue at the same rate<br>D. The reverse reaction stops |
| 7 | In an irrversibel reaction equilibrium | A. Never establised<br>B. Established quickly<br>C. Established slowly<br>D. Established when reaction stops |
| 8 | The colour of anhydrous cobalt(II) cholride solid | A. White<br>B. Black<br>C. Pink<br>D. Blue |
| 9 | 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<br>B. Heating at high temperatur ein a closed vessel<br>C. Cooling it in a closed vessel<br>D. Colling it in an open vessel |
| 10 | A reverse reaction is one that | A. Speeds up gradually<br>B. Proceeds from left to right<br>C. In which reactants react to form products<br>D. Slow down gradually |
| 11 | In an irreversibel reaction equiirbrium is. | A. The forward reaction will be fovoured<br>B. No effect on forward or backward reaction<br>C. No effect on bakcwars reaction<br>D. The backward reaction will be favoured |
| 12 | Which type of reactions speed up gradully? | A. Decomposition reaction<br>B. Forward reaction<br>C. Reverse reactions<br>D. Irreversibel reactions |

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| 13 | The reaction in which the products can recombine to formreactants are called. | A. Reversible Reaction<br>B. Irreversible reactions<br>C. Decomposition reactions<br>D. Addition reactions |
| 14 | What will hapen to the concentrations of the prodcut if a reversible reaction at eqiulibrium is not distrubed. | A. They will keepon increasing<br>B. They will keep on decreasing<br>C. They will remain constant<br>D. They willremain constant for some time and then start decreasing |
| 15 | If reversibe reaction useful for preparing compounds on large scale. | A. Yes<br>B. No<br>C. They are useful only when equilirbium lies far to the left side<br>D. They are useful only when equilibrium lies far to the right side |
| 16 | Why the gas starts coming out when you open a can of fizzy drink. | A. Because gteh solubiliyt of the gas increases<br>B. Because the gas is dissolved under pressure hence it comes out when pressur eis decreased<br>C. Becaue the gas is insoluble in water<br>D. Because the solubility of hte gas decreases at high pressure. |
| 17 | What conditon Should be met for the reversible reactio to achieve the state of equilibrium. | A. The concentratio of all the reactants and the prodduct should become constant<br>B. all the reactants should be converted into the product<br>C. 50% of the reactant shuld be converted into prodcuts.<br>D. One of the product should be removed from the reaction mixture. |
| 18 | When a reaction will be come a reversible one? | A. If the actvation eneryg of the forward reaction is comparrble to that of backward reaction<br>B. If the activation energy of the forward reaction is higher than that of backward reaction<br>C. If the activationenergy of the forward reaction is lower than that of backward reaction<br>D. If the enthalpy change of both the reactions is zero. |
| 19 | In chemical reaction, the substances that combine are called. | A. Masses<br>B. Materials<br>C. Products<br>D. Reactants |
| 20 | Such reaction which continue in both directins are called. | A. Dynamic<br>B. Irreversible<br>C. Reversible<br>D. Non- reactive |