

**BRAIN INTERNATIONAL SCHOOL**

**SUBJECT: CHEMISTRY**

**Class: XI**

**WORKSHEET**

**Nov.'24**

**CHAPTER: Equilibrium**

- Q1. What is homogenous and heterogeneous equilibrium?
- Q2. Why concentration of solid and liquid is taken as one in finding equilibrium constant
- Q3. One mole of  $\text{PCl}_5$  is taken in 5L container at equilibrium state it decomposes 40% then find equilibrium constant.
- Q4. What is reaction quotient?
- Q5. Explain the Le-chatelier, Give three examples.
- Q6.  $2\text{NH}_3$  eq.state  $\text{N}_2 + 3\text{H}_2$ , Find direction of reaction on increasing pressure.
- Q7. Find relation between  $K_c$  and  $K_p$ .
- Q8. 1 mole of  $\text{PCl}_5$  taken in 2L close container, if decomposed 40% at equilibrium state.
- Q9.  $2\text{A} + 3\text{B}$  equilibrium state  $2\text{C}$   $K_c = 1.2 \times 10^{-3}$  find  $K_c$  if Equation is multiplied by 2.
- Q10.  $\text{X} + 2\text{Y}$  gives  $2\text{Z}$  if  $K_c = 2.4 \times 10^{-5}$  comment about quantity of product and reactant.
- Q11. Find PH of 0.0004M HCl and 0.0003M NaOH solution.
- Q12. What is a solubility product? Explain giving examples.
- Q13 what will happen if ionic product will be greater than solubility product?