

CHEMISTRY-11	Chapter#08(Complete) Test-1B		
	Name:	Class:	ID:
Date: / /	Marks Total: 30	Marks Obtained:	
Time Allowed: 60 Min.			

Maximum Marks: 06

(OBJECTIVE TYPE)

Time Allowed: 10 Min.

NOTE: Tick The Correct Option:

- For which system does the equilibrium constant, K_c , has units of $(\text{conc.})^{-1}$?
 - $\text{N}_2 + 3\text{H}_2 \rightleftharpoons 2\text{NH}_3$
 - $\text{H}_2 + \text{I}_2 \rightleftharpoons 2\text{HI}$
 - $2\text{NO}_2 \rightleftharpoons \text{N}_2\text{O}_4$
 - $2\text{HF} \rightleftharpoons \text{H}_2 + \text{F}_2$
- The optimum pressure for Haber's process is:
 - 100-150 atm
 - 200-300 atm
 - 350-450 atm
 - 500-600 atm
- Acid having $K_a > 1$ will be:
 - Weak
 - Very weak
 - Moderate
 - Stronger
- The solubility of KClO_3 in water is suppressed by adding:
 - KClO_3
 - NaCl
 - KMnO_4
 - KCl
- K_c expression for the reaction $\text{PCl}_{5(g)} \rightleftharpoons \text{PCl}_{3(g)} + \text{Cl}_{2(g)}$ is:
 - $\frac{2x}{(a-2x)V}$
 - $\frac{x^2}{(a-2x)V}$
 - $\frac{x^2V^2}{(a-2x)}$
 - $\frac{x^2}{(a-x)V}$
- If K_{sp} is equal to the ionic product of the salt, the result is:
 - Un-saturation
 - Saturation
 - Precipitation
 - None

Maximum Marks: 24

(SUBJECTIVE TYPE)

Time Allowed: 50 Min.

SECTION-I

Q.2: Give brief answers to the following questions:

(16)

- Differentiate between reversible and irreversible reactions.
- State law of mass action.
- How does K_c predict about the extent of chemical reaction?
- What is the effect of catalyst on a system at equilibrium?
- Calculate the pH of 10^{-3} mole dm^{-3} HCl .
- What is Ostwald's dilution law?
- What is the effect of common ion on solubility?
- What is solubility product? Derive solubility product expression for PbCl_2 .

SECTION-II

NOTE: Attempt All Questions:

(08)

- $\text{N}_2(\text{g})$ and $\text{H}_2(\text{g})$ combine to give $\text{NH}_3(\text{g})$. The value of K_c in this reaction at 500°C is 6.0×10^2 . Calculate the value of K_p for this reaction.
- $\text{Ca}(\text{OH})_2$ is a sparingly soluble compound. Its solubility product is 6.5×10^{-6} . Calculate the solubility of $\text{Ca}(\text{OH})_2$.