

II YEAR CHEMISTRY IPE QUESTION PAPER – MARCH 2011

SECTION - A

I. **Answer all the following :**

10 × 2 = 20

1. What are the characteristics (a, b, c and α , β , γ values) in a tetragonal system ?
2. What is Tetrahedral hole ?
3. What is the pH of 0.1M NaOH ?
4. Define Rate of reaction.
5. Give the composition of Nichrome.
6. Give any two examples of Semi – synthetic polymers.
7. Give the sources and deficiency diseases of vitamin E and K.
8. What are Waxes ? Give one example.
9. What is carbylamine test (iso – cyanide test) ? Give equation.
10. Explain the action of HI on diethyl ether ($C_2H_5OC_2H_5$) in cold and hot conditions.

SECTION - B

II. **Answer any six of the following :**

6 × 4 = 24

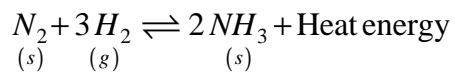
11. Define Molality (m).
What is the molality (m) of a solution containing 0.365gm of HCl in 100 gm of H_2O ?
12. State Faraday's laws of Electrolysis.
13. (a) What is Tyndall effect ?
(b) What is Brownian movement?
14. Explain Enthalpy (H). What is ($\Delta H - \Delta E$) for
$$CaCO_3 \xrightarrow{(s)} CaO + CO_2$$

(s) (s) (g)
15. How is Bauxite purified by Serpeck's process?
16. Write the structures of all the oxyacids of Cl_2
17. Write any two postulates of Werner's theory.
18. Define the following. Give one example for each.
(a) Analgesics
(b) Antiseptics

SECTION - C

III. Answer any two of the following: $2 \times 8 = 16$

19. Define Le Chatelier's principle and apply it to the following equilibrium.



20. (a) How is ozone prepared in Brodie's method ?

(b) Write balanced equations for the reaction of H_2O with



21. (a) Write any two methods of preparation of Acetic acid.

(b) Give the reactions of Acetic acid with the following.

