TURNING POINT®

IN ASSOCIATION WITH PYRAMID CLASSES®

XII CHEMISTRY TEST ON CHEMICAL KINETICS, SOLUTIONS, ALCOHOLS, SOLID STATES, HALOALKANES, CHEMISTRY IN EVERYDAY LIFE

TIME: 2 HRS. **M.M.: 45**

1. Illustrate the following reaction by giving a chemical equation : Williamson's synthesis **3**

2. What is F-center? **3**

3. Give reason for the following : **3 + 3 = 6**

a. Compare acidity of alcohol and phenol **b.** Alcohols act as weak bases.

4. Draw a mechanism of converting : **3 + 3 = 6**

a. Alchol into alkene **b.** Alkene into alcohol

5. Explain : **3 + 2 + 2 = 7**

a. Antacids **b.** Antiseptics **c.** Disinfectant

6. The rate of a reaction becomes four times when the temperature changes from 300 K to 320 K. Calculate the energy of activation of the reaction, assuming that it does not change with temperature.

($R = 8.314\ J\ K^{-1}\ mol^{-1}$). **5**

7. Explain the term order of reaction. Derive the unit for first order rate constant. **5**

8. What is DDT? Explain its structure. **5**

9. Calculate the freezing point of an aqueous solution containing 10.50 g of $MgBr_2$ in 200 g of water.

(Molar Mass of $MgBr_2$ = 184 g, K_f for water 1.86 K kg mol^{-1}). **5**

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