School Education Department – Villupuram District

ASSIGNMENT – DECEMBER 2021

Subject : Chemistry

Two marks 10 x 2 = 20

1. Define half-life period.
2. Give two examples for zero order reaction.
3. What is an elementary reaction?
4. Identify the order for the following reaction
   2A + 3B ----------> Products, rate = k $[A]^{1/2}$ $[B]^{2}$
5. Define rate law with example.
6. Differentiate Ethanol and Phenol.
7. Write a short note on Swern Oxidation.
8. Write a note on Dow process.
9. How will di ethyl ether be prepared by Williamsons Ether Synthesis?
10. Write a note on TNG preparation.

Three marks 10 x 3 = 30

1. Differentiate order and molecularity.
2. Derive integrated rate law for a first order reaction A ----------> Product.
3. Explain pseudo first order reaction with an example.
4. Write Arhenious equation and explain the terms involed.
5. Derive the equation for half-life period for first order reaction.
6. Describe the Lucas test to differentiate the primary, secondary and tertiary alcohols.
7. Explain Kolb's synthesis.
8. How phenol react with benzene diazonium chloride and Ammonia.
9. Find X and Y for the following reaction.
   Acetyl chloride $\frac{CH_3MgBr}{H_3O^+}$-> X $\frac{Acidified}{K_2Cr_2O_7}$ > Y
10. How will you prepare the following compounds from Glycol.

    (i)Acetaldehyde (ii) Acrolein