

**Assignment II (Unit XI)**  
**(16<sup>th</sup> to 30<sup>th</sup> April)**

**Class XII**

Q1. Use a Grignard's reagent to prepare the following alcohols from butan-2-one;

- a) 3-Methyl pentan-3-ol
- b) 2-Phenyl pentan- 2-ol

Q2. Give the following reactions;

- a) Kolbe's reaction
- b) Friedal Craft acylation
- c) Fries rearrangement
- d) Reimer Tiemann reaction

Q3. Give reasons for the following;

- a) Why ethers are relatively inert compounds.
- b) Ortho and para nitrophenols are more acidic than Phenols.
- c) Why is the b.p. of glycol high.

Q4. Give a chemical test to distinguish between;

- a) propan-2-ol and benzyl alcohol
- b) Butan-1-ol and butan-2-ol

Q5. Write reaction for the preparation of phenol from cumene.

Q6. Describe the mechanism of the formation of diethyl ether from ethanol in the presence of conc.  $H_2SO_4$ .

Q7. Out of o-Nitrophenol and p-Nitrophenol which steam volatile and why?

Q8. How will you convert;

- a) Benzene to Phenol
- b) Phenol to Benzoic acid
- c) Aniline to Iodobenzene

Q9. How are ethers prepared by Williamson's synthesis? What are limitations for preparing unsymmetrical ethers in this method?

Q10. What happens when;

- a) Butanol is heated with  $SOCl_2$ .
- b) Methoxy propane is treated with HBr.
- c) Anisole is reacted with HI at 373K.

Q11. Explain Hydroboration oxidation of alkene.