Chemistry (Hons.) Paper-VII

Answer five questions in which Q.No. 1 is compulsory.

1. Predict the product and give the mechanism: LNMUonline.com

(b)
$$\frac{conc\ HNO_3}{conc.\ H_2SO_4} ?$$

(c)
$$\frac{CH_2I_2}{C_2H_5ONa} \rightarrow ?$$

(d)
$$+ (CH_3)_3 CoCl \frac{anh}{AlCb} \rightarrow$$

- 2. Give a brief account of the following:
 - (a) Fries rearrangement (b) Claisen rearrangement (c) Michael addition reaction
- Discuss the chemistry of the following reagents involved in organic synthesis
 (a) Lithium aluminium iodide (b) Periodic acid (c) Diazomethane
- Establish the structure of Napthalene by degradation and synthesis. Discuss the isomerism involved in monosubstituted and disubstituted products of naphthalene.
- 5. (a) What are urcides? Discuss the constitution of uric acid.
 - (b) How is uric acid detected in laboratory?
 - (c) Uric acid has no carboxyl group but is an acid and forms salt at 3 and 9 positions. Explain why? LNMUonline.com
- 6. (a) What do you mean by dyes? Discuss Witt's theory of dyes.
 - (b) Write down the names of four Azodyes with structural formula.
 - (c) Give synthesis of the following: (i Fluorescein (ii) Crystal violet (iii) Eosin
- 7. Write notes on any four of the following: