

[LI 804] APRIL 2016 Sub. Code: 3804

PHARM. D DEGREE EXAMINATION (2009-2010 Regulation) FIRST YEAR PAPER IV – PHARMACEUTICAL ORGANIC CHEMISTRY

Q.P. Code: 383804

Time: Three hours Maximum: 70 Marks

I. Elaborate on : $(4 \times 10 = 40)$

1. Explain theory of Resonance. Describe in detail Resonance hybrid, stability and orbital picture of Allyl Radical.

- 2. What are Alkanes? Explain the free radical substitution mechanism of chlorination of Methane in the presence UV light.
- 3. Discuss aromatic substitution reaction with Nucleophilies.
- 4. Explain the following reaction with mechanism:
 - a) Cannizzaro reaction b) Williamson synthesis

II. Write notes on: $(6 \times 5 = 30)$

- 1. Write a note on diazotisation and coupling reaction.
- 2. Write the structure, preparation and chemical uses of Mephensin.
- 3. Explain the mechanism and Stereochemistry of SN₂ reaction.
- 4. Explain the Kolbe reaction with mechanisms.
- 5. Define Isomerism with suitable examples.
- 6. Give the different methods for preparation of Alicylic compounds.
