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. Discuss in detail about the mechanism and thermodynamics of free radical halogenations of methane.

- 2. Briefly explain the mechanism and kinetics involved in nucleophilic unimolecular and bimolecular reactions.
- 3. Explain Kolbe's reaction and Fries rearrangement.
- 4. Discuss the 1, 2 addition and 1, 4 addition reactions of conjugated dienes.

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

- 1. Write a brief note about the basicity of amines.
- 2. Briefly explain Bayer's strain theory.
- 3. Write a note on Resonance.
- 4. Write the test for purity, assay and medicinal uses of salicylic acid.
- 5. Explain Markownikoff rule with example.
- 6. Explain the acid base on the basis of Lowry-Bronsted concept.
