Reg No:

First Year M.Pharm Degree Examinations- February 2013

(2011 Admn- New Scheme)

(Pharmaceutical Chemistry)

Paper II- Advanced Organic Chemistry

Time: 3 hrs

Maximum Marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays:

(2x20=40)

- 1. Discuss the mechanism including stereochemistry involved in Birch reduction, Oppeneauer oxidation, Meerwin-Pondroff's reduction and Wolff Kishner reduction
- 2. What are chiral compounds. Explain with suitable examples: molecules with one chiral center, molecules with a chiral axis, molecules with a chiral plane of symmetry and molecules with two chiral centers.

Short Essays:

(6X10=60)

- 3. Explain the methods for determining reaction mechanisms. Add a note on hyper conjugation
- 4. Explain the asymmetric synthesis of amino acids and betalactams
- 5. Discuss the physical and chemical processes involved in the fate of the excited molecules.
- 6. Discuss, briefly, the principles of synthetic planning. Add a note on retro-synthesis.
- 7. What is phase transfer catalysis. Discuss the principle involved in it by emphasizing on the formation of nitryl and anhydride.
- 8. Discuss in detail the mechanisms involved in elimination reactions.
