QP Code: 106331 Reg No:

First Year M.Pharm Degree Examinations – July 2015 (Pharmaceutical Chemistry) Paper II– Advanced Organic Chemistry

Time: 3 hrs Maximum Marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays: (2x20 =40)

1. What is asymmetric synthesis. Discuss the factors influencing the selectivity of chiral reagents, catalysts and solvents. Add a note on double asymmetric induction.

2. Explain:

- Solvation and media effect
 - pKa Rule
- Hyper conjugation
- π bond Stabilization

Short Essays: (6x10=60)

- 3. Discuss the chemistry of electron rich σ bond and simple pi-bonds with examples.
- 4. Discuss free radical substitution with examples. Explain multiple bond elimination reactions.
- 5. Explain the Franck and Condon principles with examples. Add a note on singlet photosensitization.
- 6. Explain the phase transfer catalysis in epoxide and sulphide formation.
- 7. Discuss the region and stereo selective enolate generation and mention symbiotic effects.
- 8. Discuss about carbocations and carbenes.
