

QP Code: 106331

Reg No: .....

First Year M.Pharm Degree Examinations – September 2013

(2011 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. Explain in detail the mechanism and stereo chemistry of aromatic electrophilic substitution and nucleophilic substitution reactions.
2. Discuss various methods of determining reaction mechanisms. Explain in detail about retro synthesis and asymmetric synthesis.

Short Essays:

(6x10=60)

3. Explain the generation, fate and biological significance of free radicals and carbanions
4. What are forbidden transitions. Explain the various types of excitations and the fate of excited molecules in photochemical reactions.
5. Describe alkylation and explain in detail phase transfer catalysis.
6. Explain the regio and stereo selective enolate generation. Add a note on 'O' versus 'C' alkylation
7. Explain localized and delocalized bonds with examples.
8. What are chiral compounds. Explain the characterization of enantiomers by chiroptical methods.

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