

**Second Year B.Pharm Degree Supplementary Examinations
December 2018
Pharmaceutical Chemistry III
(Advanced Organic Chemistry)
(2010 Scheme)**

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. Explain the stereochemistry of biphenyl compounds.
2. Discuss Hoffmann rearrangement and Birch reduction with mechanism.
3. Explain the important reactions of pyridine and discuss important methods of preparation of pyridine

Short notes

(14x5=70)

4. Define racemic modifications and explain the methods used for the resolution of racemic modifications.
5. Discuss the aromatic characters of naphthalene.
6. Important reactions of quinoline.
7. Give the applications of lead tetra acetate.
8. Mention the structure and numbering of phenothiazine, isoquinoline, thiazole, oxazole.
9. Explain stereo selective synthesis with an example.
10. Discuss Beckmann rearrangement with an example.
11. Outline the method of synthesis of acridine and imidazole.
12. What happens when: Isoquinoline is treated with KMnO_4 & Furan is treated with maleic anhydride.
13. Outline the structure, numbering and one method of preparation of pyrimidine and thiophene.
14. Define the terms chirality, enantiomers, meso compounds and asymmetric synthesis.
15. Mention two examples for oxidative reactions of mercuric acetate.
16. Explain geometrical isomerism.
17. What is Walden inversion and stereo mutation
