

Second Year B.Pharm Degree Supplementary Examinations February 2017

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. Mention the definition, reaction, mechanism and applications of Birch reduction and Hoffmann rearrangement
2. Describe the stereochemistry of cyclic compounds
3. What are conformational isomers and write in detail about conformational analysis

Short notes

(14x5=70)

4. Explain the Schmidt rearrangement with mechanism
5. Any three reactions given by pyrimidine
6. Give any three methods of preparation of furan
7. Explain the various methods of nomenclature of geometrical isomers
8. Sequence rule for assigning configuration of optical isomers
9. Synthesis of isoxazole
10. Give reasons for the following
 - Pyrrole undergoes electrophilic substitution at 2nd position
 - Pyridine undergoes nucleophilic substitution at 2nd and 4th position
11. Define and explain plane of symmetry
12. Explain the aromatic character of naphthalene
13. Describe the resonance structures of naphthalene
14. List out any three reducing agents and explain its role in synthesis
15. List elements of symmetry
16. Explain DL system of nomenclature and mention its disadvantages
17. Compare and contrast Clemmensen reduction and Wolf Kishner reduction
