

2012 Scheme

QP CODE: 211006

Reg. No:

Second Year B.Pharm Degree Supplementary Examinations January 2023

Pharmaceutical Chemistry III (Advanced Organic Chemistry)

Time: 3 Hours

Total Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Essays

(3x10=30)

1. Define and classify Heterocyclic compounds with suitable examples. Add a note on Fisher Indole synthesis.
2. What is racemic modification. Discuss the methods of resolution of racemic modification with examples.
3. Write the synthesis and reactions of Isoquinoline and Imidazole.

Short notes

(14x5=70)

4. Explain the elements of symmetry.
5. What are geometric isomers and explain E and Z nomenclature.
6. Explain Birch reduction reaction with mechanism.
7. Write any three methods of preparation of Naphthalene.
8. Distinguish between the configuration and conformation with example.
9. Explain the stereochemistry of cyclic compounds.
10. Write the mechanism and applications of metal hydride reduction by NaBH₄.
11. Write the synthesis and reactions of Pyridine.
12. Explain the nomenclature of Polynuclear aromatic hydrocarbons.
13. Addition reactions.
14. Schmidt Rearrangement.
15. Explain the structure, resonance and reactivity of anthracene.
16. Write the structure and medicinal derivatives of Pyrrole.
17. Walden inversion with example.
