

2012 Scheme

QP CODE: 211006

Reg. No:

Second Year B.Pharm Degree Supplementary Examinations February 2024

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 racemic mixture, racemization and resolution. Add a note on asymmetric synthesis with example.
2. What are E_1 and E_2 reactions. Explain the mechanism, reactivity, orientation and stereochemistry of E_1 and E_2 reactions.
3. Enumerate any two methods of synthesis of Furan and electrophilic substitution reactions with suitable example. Compare its aromaticity with Thiophene.

Short notes

(14x5=70)

4. Stereochemistry of oximes.
5. Illustrate R and S Configuration with examples.
6. Define chirality, enantiomers and diastereomers with examples.
7. Explain conformational analysis and stereo mutation.
8. Explain the modern theory of double bonds.
9. Skraup Synthesis.
10. Write any two medicinal derivatives of Indole and Pyrimidine.
11. Explain any two methods of synthesis and reactions of Pyridine.
12. Distinguish between oxazole and isoxazole.
13. Explain the structure and aromatic character of anthracene.
14. Outline any three methods of preparation for Phenanthrene.
15. Explain, oxidation, reduction and electrophilic substitution reactions of naphthalene.
16. Clemmenson's reduction with its significance.
17. Explain Mannich reaction with example.
