

2012 Scheme

QP CODE: 211006

Reg. No:

Second Year B.Pharm Degree Supplementary Examinations July 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. Discuss the general reaction and mechanism of Beckmann rearrangement. Mention a detailed note on its applications.
2. Elaborate on the stereochemistry of nitrogen compounds and biphenyl.
3. List out the fused ring basic moieties with chemical structures. Describe the preparation and properties of indole.

Short notes

(14x5=70)

4. Define the term chirality and explain in brief with examples.
5. Discuss on Walden inversion.
6. What do you mean by asymmetric synthesis and explain the methods.
7. Discuss briefly SN_1 reactions.
8. Explain sequence rules with examples.
9. Mechanism and uses of Schmidt rearrangement.
10. Describe the mechanism of oxidation with lead tetra acetate.
11. Applications of metal hydride reduction and Curtius rearrangement.
12. Reactions of phenothiazine and acridine.
13. Preparation and reactions of furan.
14. Preparation and reactions of pyrazole.
15. Explain enantiomers, diastereomers and meso compounds.
16. The aromaticity and electrophilic substitution reactions of phenanthrene.
17. Explain the mechanism of E_2 reactions.
