

QP Code: 421006

Reg. No.....

**Fourth Semester B.Pharm Degree Supplementary Examinations
December 2021**

Pharmaceutical Organic Chemistry III

(2017 Scheme)

Time: 3 Hours

Max. Marks: 75

- *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 diagrams wherever necessary*

Essays

(2x10=20)

1. Discuss the aromaticity and chemical reactivity of furan, thiophene and pyrrole.
2. Define racemic modification, racemization and resolution. Explain any four methods for the resolution of racemic modification

Short Notes

(7x5=35)

3. Explain the stereochemistry of biphenyls.
4. Give the synthesis and reactions of quinoline.
5. Discuss the reaction, mechanism and applications of metal hydride reduction.
6. Give the synthesis and reactions of imidazole.
7. Explain the various conformations of ethane.
8. Explain elements of symmetry.
9. Basicity of pyrrole and compare its basicity with pyridine.

Answer Briefly

(10x2=20)

10. Give the reaction for conversion of furan to furoic acid.
11. Explain the reduction reaction of thiophene.
12. Define asymmetric synthesis.
13. Outline Chichibabin reaction.
14. E and Z nomenclature.
15. Sequence rules.
16. Importance of Oppenauer oxidation.
17. Explain the structure and medicinal uses of pyridine derivative.
18. Define diastereomers with example.
19. Explain the derivatives of azepine and mention its uses
