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# Fourth Semester B.Pharm Degree Regular/Supplementary Examinations March 2023 <br> 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
$(2 \times 10=20)$

1. Explain in detail about atropisomerism.
2. Discuss the reaction, mechanism and applications of Clemmensen reduction and Beckmanns rearrangement.

## Short Notes

3. Define resolution. Explain two methods of resolution.
4. Write short notes on nomenclature of heterocyclic compounds.
5. Explain aromaticity, basicity and reactions of pyrrole.
6. Give any three methods of preparations of quinoline.
7. Explain electrophilic substitution reactions of pyridine.
8. Write the synthesis of azepines. Mention one derivative containing azepine and its medicinal use.
9. Explain Birch reduction.

## Answer Briefly

10. Any two reactions of Furan.
11. Define optical activity.
12. Define Meso compounds.
13. Define enantiomers.
14. Mention any two synthetic reagents used for reduction reactions with chemical structure.
15. Define staggered and eclipsed conformations.
16. Draw the chemical structures of pyrazole, imidazole, oxazole and thiazole.
17. Define Dakin reaction.
18. Any one method of preparation of thiophene.
19. Any one medicinal drug having acridine nucleus.
