

QP Code: 421006

Reg. No.....

**Fourth Semester B.Pharm Degree Supplementary Examinations  
November 2022**

**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. Explain the stereochemistry of biphenyls and conditions for optical activity.
2. Discuss the reaction, mechanism and applications of Clemmenson reduction and Dakin reaction.

**Short Notes**

**(7x5=35)**

3. Basicity of pyrrole and compare its basicity with pyridine.
4. Give the synthesis and reactions of indole.
5. What are stereospecific and stereoselective reactions, explain with suitable examples.
6. Define racemic modification. Explain any three methods for the resolution of racemic modification.
7. Explain the aromaticity of pyrrole, thiophene and furan.
8. Explain the various conformational isomers in cyclohexane.
9. Write the synthesis and reactions of acridine.

**Answer Briefly**

**(10x2=20)**

10. Mention the synthetic importance of lithium aluminium hydride.
11. Write the resonance structures of thiophene.
12. Define meso compound with example.
13. Define Fischer projection formula.
14. Write the structure and medicinal uses of pyrazole derivative.
15. Define D and L system of nomenclature.
16. Give the reduction reaction for Furan.
17. Define R and S configuration with example.
18. Write the structure and medicinal uses of purine derivative.
19. Define geometrical isomerism.

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