

QP Code: 222006

Reg. No.....

**Second Semester B. Pharm Degree Supplementary Examinations  
February 2025  
Pharmaceutical Organic Chemistry I  
(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 table/diagrams/flow charts wherever necessary

**Essays**

(2x10=20)

1. Explain the stereochemistry of SN<sub>1</sub>, SN<sub>2</sub> reactions and add a note on rearrangements of carbocation.
2. Discuss the reaction, mechanism and applications of Aldol condensation and Crossed Cannizzaro reaction.

**Short Notes**

(7x5=35)

3. Write the structure and uses of iodoform, propylene glycol, paraldehyde, lactic acid and salicylic acid.
4. Explain the basicity of amines and the effect of substituents on it.
5. Explain the qualitative tests for alcohols.
6. Describe the general IUPAC rules for naming of carboxylic compounds.
7. Define isomerism. Classify isomerism with suitable examples.
8. What is electrometric effect. Explain with examples.
9. Explain Saytzeff's orientation with suitable examples.

**Answer Briefly**

(10x2=20)

10. Any two reactions of aliphatic amines.
11. Mention the uses of paraffin.
12. Any two qualitative tests for amides.
13. Give the chemical structure and uses of amphetamine and ethanolamine.
14. Mention four carbonyl compounds with chemical structures.
15. Define Diel Alder reaction.
16. Write the factors affecting E<sub>2</sub> reactions.
17. Define benzoin condensation.
18. Any one method of preparation of alkene.
19. State Markownikoff's rule.

\*\*\*\*\*