

QP Code: 222006

Reg. No.....

**Second Semester B. Pharm Degree Supplementary Examinations  
August 2023**

**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 mechanism of electrophilic addition reactions of alkenes.
2. Discuss SN<sub>2</sub> reaction mechanism of substitution in alkyl halides.

**Short Notes**

**(7x5=35)**

3. Write the general qualitative tests for carboxylic acids.
4. Discuss E1 mechanism of dehydrohalogenation in alkenes.
5. Rearrangement of carbocation.
6. What is structural isomerism. Define with examples of any four types.
7. Factors effecting SN<sub>1</sub> an SN<sub>2</sub> reactions.
8. Allylic rearrangement.
9. Explain the effect of substituents on the basicity of aliphatic amines.

**Answer Briefly**

**(10x2=20)**

10. Explain the structure and use of Iodoform.
11. Compare E<sub>1</sub> and E<sub>2</sub> reactions.
12. Explain the structure and uses of Amphetamine.
13. State any four rules of naming aromatic compounds.
14. Explain anti Markownikoff's orientation. Give examples.
15. Write qualitative tests for alcohols.
16. Briefly explain free radical addition reactions of conjugated dienes.
17. Give the structure and uses of Acetyl salicylic acid.
18. Explain the reaction involved in Perkin condensation.
19. Write the structure of 1,4-pentadiene and Hex-5-ene-3-ol.

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