

QP Code: 222006

Reg. No.....

**Second Semester B. Pharm Degree Supplementary Examinations
January 2022**

**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. Discuss SN₁ and SN₂ reactions with the help of suitable examples and discuss its mechanism.
2. Explain any four methods of preparation of alkenes. Add a note on E₁ reactions.

Short Notes

(7x5=35)

3. Explain the mechanism of electrophilic addition reactions of alkenes with any two examples.
4. Summarize the qualitative analysis of primary secondary and tertiary amines.
5. Describe the mechanism of Diel-Alder reaction.
6. What are carbocations. Explain the stability of carbocations with suitable examples.
7. Explain the following: Cannizzaro reaction, Saytzeffs rule
8. Explain the structural isomerism. Draw the structural isomers for C₄H₈O₂ containing the group



9. Outline any four methods for the preparation of aldehydes.

Answer Briefly

(10x2=20)

10. Electromeric effect
11. SP³ hybridization
12. Ozonolysis
13. Perkin condensation
14. Tollens' reagent and its importance.
15. Structure and uses of methyl salicylate and cetosteryl alcohol.
16. Mention any one qualitative test for amide and carboxylic acid.
17. Alkenes are more reactive than alkanes. Justify
18. Medicinal uses of iodoform and amphetamine
19. Complete the reaction: CH₃CH₂NH₂+CHCl₃ + 3KOH →
