

QP Code: 222006

Reg. No.....

**Second Semester B. Pharm Degree Regular/Supplementary
Examinations January 2024**

Pharmaceutical Organic Chemistry I

(Common for 2017 and 2022 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. Describe the classification of organic compounds with examples.
2. Explain the mechanism of free radical addition in butadiene.

Short Notes

(7x5=35)

3. Explain the mechanism of uni-molecular nucleophilic substitution reaction.
4. Aldol condensation.
5. With an example, explain the mechanism of Benzoin condensation.
6. Describe ozonolysis of alkenes.
7. Discuss the effect of polarity and solvent on the rate of SN₁ and SN₂ reaction.
8. Explain the structure of carboxylic group. Why are carboxylic compounds more acidic than phenols and alcohols.
9. Explain Diels-Alder reaction with suitable examples.

Answer Briefly

(10x2=20)

10. Enlist four important rules in IUPAC naming.
11. Explain the structure and uses of trichloroethylene.
12. Why are the first few members of carboxylic acids soluble and higher members insoluble in water.
13. Give the structure and uses of formaldehyde.
14. Explain the structure and uses of benzoic acid.
15. Qualitative test for esters.
16. Explain the different types of aliphatic amines with examples.
17. Give the structure and uses of propylene glycol.
18. Write an example of nucleophilic addition to a carbonyl compound.
19. How are monohydric alcohols classified. Give examples.
