

QP CODE:104326

Reg. No:

**First Year Pharm D Degree Supplementary Examinations March 2025
Pharmaceutical Organic Chemistry**

Time: 3 Hours

Total Marks: 70

- *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*
- *Write equation wherever necessary.*

Essay

(3x10=30)

1. Discuss about the S_N^1 and S_N^2 reactions with its mechanism, kinetics and order of reactivity.
2. Explain Electrophilic and Free radical addition reactions of alkenes with its mechanism.
3. Discuss mechanism of nucleophilic addition in aldehydes and ketones with examples.

Short notes:

(8x5=40)

4. Define and classify isomerism. Write an example of a geometrical and an optical stereoisomer along with their structures.
5. Write the general mechanism involved in free radical chain reactions of alkanes.
6. Comment on E2 Versus E1.
7. Write nucleophilic aliphatic substitution reaction through allylic rearrangement.
8. Define aldol condensation with its mechanism.
9. Acidity of phenols.
10. Discuss about the Fries-rearrangement.
11. Write the preparation, assay and uses of Aspirin.
