

QP CODE:104326

Reg. No:

**First Year Pharm D Degree Regular/Supplementary Examinations
August 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 the reaction, mechanism, kinetics and stereochemistry of S_N2 reactions.
2. Write the reaction and mechanism involved in the following reactions
a) Nitration b) Sulphonation c) Halogenation.
3. Discuss the reaction, mechanism, kinetics, orientation and reactivity of E_2 reaction.

Short notes:

(8x5=40)

4. Write the reaction and mechanism of bimolecular displacement reaction.
5. Write a note on dehydration of alcohol and explain acid catalysis in dehydration.
6. Explain the preparation, test for purity, assay and medicinal uses of saccharin sodium.
7. Write the reaction and mechanism of Friedel Crafts alkylation.
8. Discuss basicity of amines and effect of substituents on basicity.
9. Write the reaction and mechanism of Fries rearrangement.
10. Explain about oxidation reduction reactions.
11. Write the reaction and mechanism of Cannizzaro reaction.
