

QP CODE: 112331

Reg. No:.....

First Semester M.Pharm Degree Supplementary Examinations July 2025
M.Pharm (Pharmaceutical Chemistry)
Paper II: Advanced Organic Chemistry I (MPC 102T)
(Common for 2019 and 2024 Scheme)

Time: 3 Hours

Total 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

(3x10=30)

1. Explain elimination reactions with their mechanism, relative reactivity and examples. Add a note on significance of Hoffman and Saytzeff's rule in elimination reactions.
2. Write in detail about Baeyer–Villiger oxidation and Ozonolysis with the mechanism and synthetic applications.
3. Explain briefly about the mechanism and synthetic applications of titanium chloride and diazopropane.

Short Notes

(9x5=45)

4. Write a note on the protection of carboxyl group in organic synthesis.
5. Write a note on mechanism and applications of Debus-Radziszewski synthesis and Bernthsen Acridine Synthesis.
6. Outline the synthesis of Quinine and Ketoconazole.
7. Brief on the formation and synthetic applications of carbenes.
8. Outline the mechanism and synthetic applications of Mitsunobu reaction.
9. Give an account on the methods utilized for the synthesis of six membered rings.
10. Brief out on the Functional group interconversion methods in retrosynthetic analysis.
11. Write a note on C-C disconnection approaches in carbonyl compounds.
12. Write an account on the factors influencing bimolecular substitution reactions.
