

QP CODE: 112331

Reg. No:.....

**First Semester M.Pharm Degree Supplementary Examinations
January 2021**

M.Pharm (Pharmaceutical Chemistry)

Paper II: Advanced Organic Chemistry I (MPC 102T)

(Common for 2017 and 2019 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. Discuss the mechanism and reactivity of aromatic nucleophilic substitution reaction with example
2. Explain the mechanism and synthetic applications of Mannich reaction and Michael addition reaction
3. Describe the role of protection in organic synthesis. Explain the protection for hydroxyl group.

Short Notes

(9x5=45)

4. Stability and synthetic applications of carbanions
5. Brook rearrangement
6. Explain the E₁ mechanism
7. "N-bromosuccinamide" Corrected as "N-bromosuccinimide"
8. Protection of carboxyl group
9. Berntsen acridine synthesis
10. Principle and advantages of retrosynthesis
11. Describe the synthon approach for carbon-carbon disconnections
12. Describe the synthesis and medicinal uses of imidazole nucleus
