

QP CODE: 112331

Reg. No:.....

**First Semester M.Pharm Degree Regular/Supplementary Examinations
April 2023
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. Explain the mechanism of synthesis and applications of pyrazole and imidazole. Write the synthesis of chloroquine
2. Explain the synthetic applications of titanium chloride and Wilkinson reagent
3. Describe Elimination reaction. Differentiate E1 and E2 reactions.

Short Notes

(9x5=45)

4. Strategies for synthesis of six membered rings.
5. The basic principle and applications of retrosynthesis.
6. C-C disconnections with suitable example
7. Explain the mechanism of Sharpless asymmetric epoxidation.
8. What are the applications of N-bromosuccinimide.
9. Explain the synthesis and uses of mercaptopurine and quinacrine
10. Explain briefly protection for the carboxylic group as hydrazides.
11. Explain the mechanism and application of Bernthsen acridine synthesis
12. Free radicals.
