



Library
Pharmaceutical Technology
Brainware University
Barasat, Kolkata-700125

BRAINWARE UNIVERSITY

Term End Examination 2024-2025
Programme – M.Pharm(PC)-2024
Course Name – Advanced Organic Chemistry-I
Course Code - MPC102T
(Semester I)

Full Marks : 75

Time : 3:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Short Answer Type Questions)

5 x 5=25

1. Describe the Synthon approach with examples. (5)
2. Explain application of Wittig reagent. (5)
3. Illustrate methyl shift in the context of carbocation stability. (5)
4. Describe the role of nonpolar solvents in SN2 reactions. (5)
5. Explain the Miconazole synthesis and its uses. (5)

OR

Explain the application of Ugi reaction. (5)

Group-B

(Long Answer Type Questions)

10 x 5=50

6. Briefly describe Mannich reaction, mechanism and applications. (10)
7. List the applications of Retrosynthesis. (10)
8. Write the synthesis and uses of Quinine and Chloroquine. (10)

9. Summarize the retrosynthetic disconnection strategies for 1,2- and 1,3 difunctionalized compounds. (10)

OR

- Explain the concept of C-X disconnections in retrosynthetic analysis and its application. (10)
10. Evaluate the mechanism of Baeyer-Villiger oxidation with application. (10)

OR

- Explain Markovnikov's rule for electrophilic additions to alkenes. (10)
