

QP CODE: 212331

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
May 2022**

M.Pharm (Pharmaceutical Chemistry)

Paper II - Advanced Organic Chemistry-II (MPC 202T)

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. Elaborate on the cyclo-addition, electrocyclic reactions and sigmatropic rearrangement reaction with examples.
2. Explain formation of free peptides and peptide amides. Describe site specific chemical modifications of peptides.
3. Describe the merits and demerits of microwave assisted green synthesis reactions, Add a note on its applications in organic reactions and heterocycle synthesis.

Short Notes

(9x5=45)

4. Classify sonochemical reactions with examples.
5. Explain the basic principles of photochemical reactions.
6. Describe photo fragmentation with an example.
7. Activation process in solid phase synthesis.
8. Explain the applications of phase transfer catalysis.
9. What is asymmetric synthesis. Explain the catalysts used in asymmetric synthesis.
10. Define meso compound. Write a note on E and Z notation.
11. Write notes on working principle of continuous flow reactors.
12. Write the characteristics of homogeneous catalysis.
