

**QP CODE: 212331**

**Reg. No:.....**

**Second Semester M. Pharm Degree Regular/Supplementary Examinations  
November 2024**

**M.Pharm (Pharmaceutical Chemistry)**

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

**(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 type of sonochemical reaction with examples. Write its synthetic applications.
2. What is pericyclic reaction. Describe its basic mechanisms and types with examples.
3. Using suitable examples explain transition-metal and organo-catalysis in organic synthesis.

**Short Notes**

**(9x5=45)**

4. Working principle and advantages of continuous flow reactors.
5. Basic principle of solution phase peptide synthesis.
6. Explain on Cahn, Ingold, Prelog sequence rule.
7. Wilkinson catalyst and its application.
8. Explain the hydrogenation and hydroformylation.
9. Method for the separation of racemic mixture with examples.
10. Methods of asymmetric synthesis.
11. Write the principle and two synthetic applications of microwave assisted reactions.
12. Merrifield solid phase peptide synthesis and its advantages.

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