PAPER ID-411457

Roll No: | | | | | | | | | | | | | |

MPHARM
(SEM II) THEORY EXAMINATION 2023-24
ADVANCED ORGANIC CHEMISTRY-II

TIME: 3 HRS **M.MARKS: 75**

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	Write a short note on the E and Z notation used for Geometric isomers.
b.	Define chiral pool.
c.	Explain green chemistry with example.
d.	Give applications of ultrasound assisted reactions.
e.	Explain Enantiopure separation.
f.	Define heterogenous catalyst with example.
g.	Name some supports and linkers used in peptide synthesis.
h.	Write principle and use of Continuous flow reactors.
i.	Outline theory of phase transfer catalysis.
j.	Explain C-terminal residue analysis.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Define Sonochemical reactions. Discuss the different classes of Sonochemical reactions.
b.	Discuss in detail microwave assisted organic synthesis with suitable examples. What are the advantages over conventional synthesis and describe their limitations.
c.	Define pericyclic reactions. What are the different types of pericyclic reactions? Explain in detail with suitable examples.

SECTION C

3. Attempt any *five* parts of the following: **5 x 7 = 35**

a.	Write briefly about photochemical reactions.
b.	Give the role of enzymes in organic synthesis.
c.	Elaborate the different methods of resolution of racemic mixture.
d.	Explain solid phase peptide synthesis and coupling synthesis.
e.	Explain the Cahn, Ingold, Prelog sequence rule.
f.	Explain the role of transition-metal and organo catalysis in organic synthesis.
g.	Give the applications of Wilkinson catalyst and Ziegler Natta catalyst.