**Printed Pages: 1** **Sub Code: MPC 202T**

**Paper Id:** | 2 | 5 | 7 | 2 | 0 | 7 | **Roll No.** | | | | | | | | | | |

**M. PHARM**
**(SEM II) THEORY EXAMINATION 2017-18**
**ADVANCED ORGANIC CHEMISTRY-II**

***Time: 3 Hours*** ***Total 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. "Green chemistry is sustainable chemistry" Explain.

b. Define heterogenous catalysts with examples.

c. Explain Enantiopure separation.

d. What are cis-trans isomerism and E and Z rotation?

e. Explain FMOC protocol.

f. Define Chiral pool and Chiral auxiliaries.

g. Write principles of photochemical reactions.

h. Write synthetic applications of ultrasound assisted reactions.

i. Name solid supports and linkers used in peptide synthesis.

j. Write types of pericyclic reactions.

**SECTION B**

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

a. Write principles of solid phase peptide synthesis. Explain with a case study.

b. Write twelve principles of Green Chemistry with explanation.

c. Write preparation and characterization of heterogenous catalyst with examples.

**SECTION C**

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

a. Write a note on Ziegler-Natta catalyst.

b. Write working principle and advantages of Continuous flow reactors.

c. Explain stereoselective synthesis with examples.

d. Explain sigmatrophic rearrangement with examples.

e. Write theory and applications of phase transfer catalysis.

f. Explain solution phase peptide synthesis with any one case study.

g. Explain microwave assisted reactions, solvents used and applications.