

A-072

Total Pages : 3

Roll No. -----

MCH-607

Synthetic Organic Chemistry-II

M.Sc. Chemistry (MSCCH)

4th Semester, Examination 2024 (June)

Time: 2:00 hrs

Max. Marks: 35

Note : This paper is of Thirty five (35) marks divided into Two (02) Section A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

Section-A (Long-Answer-Type Questions)

Note : Section 'A' contains Five (05) long-answer-type questions of Nine and Half (9.5) marks each. Learners are required to answer any Two (02) questions only.

[2x9.5=19]

P.T.O.

- Q.1. Explain the two group C-X disconnection with suitable example.
- Q.2. Explain the following terms with suitable examples,
- Reterosynthetic analysis
 - Functional group interconversion
- Q.3. Explain the one group C-C disconnection taking the alcohol and ketone as example.
- Q.4. Write the retrosynthesis analysis of benzocaine.
- Q.5. Explain the three membered and four membered ring cyclisation reaction.

Section-B (Short-Answer-Type Questions)

Note : Section 'B' contains Eight (08) short-answer-type questions of Four (04) marks each. Learners are required to answer any Four (04) questions only.

[4x4=16]

- Q.1. Write short notes on:
- Felkin-Anh model
 - Cram's dipolar model
- Q.2. Discuss about asymmetric Diel's-Alder reaction with suitable example.
- Q.3. Write the reterosynthetic analysis and synthesis of Z-Jasmone.

- Q.4. Explain the principle of stereoselectivity?
- Q.5. Define the following:
- a. Disastereotopic ligands
 - b. Homotopic faces
- Q.6. Write a short note on consecutive synthesis.
- Q.7. Write a short note on transform.
- Q.8. What is protecting group. Discuss the protection of ketone.
