

A-0569

Total Pages : 3

Roll No.

MCH-607

M.Sc. CHEMISTRY (MSCCH)

(Synthetic Organic Chemistry-II)

4th Semester Examination, Session December 2024

Time : 2:00 Hrs.

Max. Marks : 35

Note :- This paper is of Thirty Five (35) marks divided into Two (02) Sections '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 $2 \times 9\frac{1}{2} = 19$

Note :- Section 'A' contains Five (05) Long-answer type questions of Nine and Half ($9\frac{1}{2}$) marks each. Learners are required to answer any *two* (02) questions only.

1. Explain acyclic distereoselective reactions with example.
2. Discuss the principle of protection and deprotection of alcohol in detail.
3. Determine the relationship of homomorphc ligands and faces.
4. Explain one group C-C Disconnections in case of carbonyl compounds.
5. Write notes on the following :
 - (a) Synthons and synthetic equivalents with suitable examples
 - (b) Discuss protection of amines

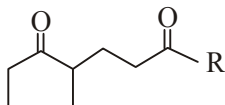
Section–B

Short Answer Type Questions 4×4=16

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.

1. What is functional group interconversion ? Discuss it with suitable example.
2. Explain the one group C–X disconnection with suitable example.

3. Discuss Regioselectivity with example.
4. What is the importance of order of event in the retrosynthesis.
5. Discuss asymmetric Diel's-Alder reaction-with suitable example.
6. Discuss the principle of protection of carbonyl group.
7. Show appropriate disconnection of following TM and suggest a suitable synthesis.



8. Write a note on reagent controlled synthesis.
