

Exam Date & Time: 09-Sep-2021 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal Academy of Higher Education, Manipal MPharm Theory End-Semester Examinations.

Advanced Organic Chemistry II [PCH-MPC202T]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

Answer the following (10 marks x 5 = 50 marks)

- 1) What are the different types of chirality transfer? Explain chelation enforced chirality transfer. (10)
- 2) What is green synthesis? Mention its advantages over conventional synthesis. Give any four principles of green chemistry with examples. (10)
- 3) Enlist the important catalyst and building blocks used in asymmetric aldol reactions. Discuss Hetero and Retro Diels -Alder reactions with examples. (5+5=10) Marks (10)
- 4) A) Explain about cycloaddition reactions in detail.
B) What is Jablonski Diagram? Explain with neat and labelled diagram. (5+5=10) Marks (10)
- 5) Write a note on protective and deprotective groups used in peptide synthesis. 5 marks
What are greenhouse gases? Give their effects on environment. 5 marks (10)

SECTION - B

Answer all the questions.

Answer the following (5 marks x 5 = 25 marks)

- 6) Discuss in detail the asymmetric catalytic hydrogenation of carbon carbon double bond and dihydroxylation reactions. (5)
- 7) What is meant by side reactions in peptide synthesis? Give few examples. (5)
- 8) What are the different types of Photochemical reactions? Give examples. (5)
- 9) Write a note on methods used to immobilize the enzyme. (5)
- 10) Explain about deactivation of catalysts. (5)

-----End-----