

Question Paper

Exam Date & Time: 15-May-2024 (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-S1]

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 asymmetric aldol reactions and discuss reagent controlled aldol reactions (10)
- 2) Explain the principles of green chemistry in detail. (10)
- 3) Explain chelation enforced chirality transfer with a suitable example and catalytic hydrogenation of carbon carbon double bond. (10)
- 4) What are the t-BOC and FMOC protocols? Discuss the advantages and disadvantages and explain about carbodiimides and Phosphonium Aminium salts along with their advantages and disadvantages (10)
- 5) What are electrocyclic and sigmatropic rearrangement reactions and explain the Jablonski energy diagram. (10)

SECTION - B

Answer all the questions.

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

- 6) What are photochemical and photo oxidation reactions? Explain with examples. (5)
- 7) Explain bio catalysis and phase transfer catalysis (5)
- 8) Building blocks and catalyst used for asymmetric Diels alder reactions. (5)
- 9) Discuss about Ziegler Natta catalyst and Wilkinson catalyst with a suitable example. (5)
- 10) Explain about strategy used for solution phase peptide synthesis. (5)

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