

Question Paper

Exam Date & Time: 04-May-2019 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

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

MPharm - Pharmaceutical Chemistry

MPharm Semester II - End Semester Examination, May-2019

Date : 04/05/2019

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 and discuss chelation enforced chirality transfer with a suitable example. (10)
- 2) Explain the asymmetric epoxidation reactions and retro Diels-alder reactions. (10)
- 3) Explain in detail, with an example, about the solid phase peptide synthesis. (10)
- 4) Write a note on N-protective groups used in peptide synthesis. Mention their merits and demerits. (10)
- 5) What is green synthesis? Give any four principles of green chemistry with examples. (10)

SECTION - B

Answer all the questions.

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

- 6) Discuss metal catalysed reactions with an example. (5)
- 7) What is $\tan\delta$ of solvents in microwave synthesis? How do you calculate it? (5)
- 8) Define and discuss with an example of the following: (5)
a) cyclo addition reactions b) sigmatropic rearrangement
- 9) Explain chiral separation by column chromatographic method. (5)
- 10) Enlist the important catalyst and building blocks used in asymmetric aldol reactions. (5)

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