

Question Paper

Exam Date & Time: 31-Mar-2021 (01:30 PM - 04:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

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

Chemistry of Natural Products [PCH-MPC104T - S2]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

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

- 1) Explain the various tools used in biotechnology in the discovery of new drugs with relevant examples (10)
- 2) Explain the structural elucidation of flavones and flavonols (10)
- 3) Explain the chemistry of quinine and azithromycin (10)
- 4) Explain the structural elucidation of atropine (10)
- 5) a) Justify, how enzymes used in organic synthesis are superior to conventional organic synthesis? (10)
5M
b) Write the SAR of eicosanoids and mention how they are used in the development of drug candidates? 5M

SECTION - B

Answer all the questions.

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

- 6) Give the structural elucidation of morphine (5)
- 7) Classify cephalosporins and give one structure under each generation with specific examples (5)
- 8) Classify terpenoids giving one structure from each class and explain the isolation procedure for mono, di and tri terpenoids (5)
- 9) Discuss the nomenclature and stereochemistry of steroids (5)
- 10) Enlist four important marine natural products with their applications (5)

-----End-----