

Question Paper

Exam Date & Time: 29-Nov-2023 (10:00 AM - 01:00 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) Give the historical perspective for the development of semisynthetic and synthetic derivatives of Taxol. (10)
- 2) Explain the general methods of structural elucidation of Terpenoids. (10)
- 3) How do you determine the nature of nitrogen present in an alkaloid while elucidating the structure? Explain the steps involved in the structure elucidation of Ephedrine. (4+6) (10)
- 4) Explain the steps involved in the structure elucidation of Estradiol. Classify steroids giving examples. (6+4) (10)
- 5) Explain the significance of Hydrolases in organic synthesis. Discuss the different types of Prostaglandins present with their structure. (5+5) (10)

SECTION - B

Answer all the questions.

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

- 6) Give the historical development of Curare alkaloids. (5)
- 7) Write about the various methods for the purification of flavonoids. Enlist the recent advancements in Gene therapy. (5)
- 8) What is epitope mapping? Explain the process with suitable illustrations. (5)
- 9) Write a note on Reductive degradation of alkaloids. (5)
- 10) Give the structure and biological significance of any two marine isolates. (5)

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