

Exam Date & Time: 14-Mar-2022 (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) Explain how PCR, protein engineering and gene therapy works as useful tools in new drug discovery (10)
- 2) Give the structural elucidation and synthesis of atropine (10)
- 3) Explain the chemistry of quinine and azithromycin (10)
- 4) How enzymes support organic synthesis and enantiomeric separation of organic compounds? Justify with suitable examples (10)
- 5) Explain the stereochemistry of steroids and discuss in detail about adreno corticoids (10)

SECTION - B

Answer all the questions.

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

- 6) Discuss the chemistry of etoposide (5)
- 7) Write the SAR of quinine (5)
- 8) Classify marine natural products with their applications (5)

- 9) What are eicosanoids? Classify them in detail (5)
- 10) Classify flavonoids with examples and explain the isolation procedures of flavonoids (5)

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