

# Question Paper

Exam Date & Time: 01-Dec-2017 (02:00 PM - 05:00 PM)



**MANIPAL ACADEMY OF HIGHER EDUCATION**

**MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES  
END SEMESTER THEORY EXAMINATIONS - NOVEMBER 2017**

**PROGRAM: MPHARM SEMESTER 1**

**DATE: 01/12/2017**

**TIME: 2:00PM - 5:00PM**

**Phytochemistry [PCO-MPG103T]**

**Marks: 50**

**Duration: 180 mins.**

## **Answer the following (5 marks x 8 = 40 marks)**

- 1) Describe Isoprenoid pathway in the biosynthesis of secondary plant metabolites (5)
- 2) What is a 'Target'? Discuss identification and validation of a target. Write a note on the development of an assay for the evaluation of the identified target. (5)
- 3) Give the spectral characteristics of Menthol (5)
- 4) Give a detail account of isolation of Strychnine (5)
- 5) Elaborate on Percolation method of extraction (5)
- 6) Citing an example of alkaloid describe structural elucidation by chemical methods. (5)
- 7) What is a study protocol? Discuss its components in detail (5)
- 8) Give the spectral characteristics of Luteolin (5)

## **Answer the following with specific answers (2 marks x 5 = 10 marks)**

- 9) Write the principles involved in liquid chromatography (2)
  - A)
  - B) Write a note on the sample injection port of GC (2)
  - C) What are the different types of nitrogen present in organic compounds? Give one example for each (2)

- D) Write a short note on GM counter (2)
- E) Write a note on Advanced Phytonics method of extraction (2)

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