

Question Paper

Exam Date & Time: 29-Nov-2017 (02:00 PM - 05:00 PM)



MANIPAL UNIVERSITY

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

PROGRAM: MPHARM SEMESTER 1

DATE: 29/11/2017

TIME: 2:00PM - 5:00PM

Advanced Pharmacognosy I [PCO-MPG102T]

Marks: 50

Duration: 180 mins.

Answer all the questions.

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

- 1) Give a detailed account of Traditional plant growth regulators (5)
- 2) Enlist the marine anti-inflammatory drugs and their source. Add a note on marine sponges (5)
- 3) Discuss on the various methods of disease prevention (5)
- 4) Give the source and structure of any five marine cardio vascular drugs. (5)
- 5) Give an account of Fat soluble vitamins (5)
- 6) Discuss briefly functional foods, PUFA, probiotics, prebiotics and dietary fibers with examples (5)
- 7) Give the chemistry, isolation and uses of Limonoids (5)
- 8) Define minerals as dietary supplement. Add a note on major and trace minerals as Nutraceuticals (5)

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

- 9) Mention the functions of National Pharmacovigilance Centre (2)
 - A)
 - B) Define Herbal medicines as per the WHO Glossary (2)
 - C) What is Adverse reaction as per Glossary of WHO (2)
 - D) Define Pharmacovigilance and enlist its goals (2)
 - E) Comment on Green tea as nutraceutical (2)

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Question Paper

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



MANIPAL UNIVERSITY

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 all the questions.

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) (2)
 - 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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Question Paper

Date & Time: 04-Dec-2017 (02:00 PM - 05:00 PM)



MANIPAL UNIVERSITY

**MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES
END SEMESTER THEORY EXAMINATIONS - NOVEMBER 2017
PROGRAM : MPHARM SEMESTER I**

**DATE : 04-12-2017
TIME : 2:00PM - 5:00PM**

Industrial Pharmacognostical Technology [PCO-MPG104T]

Duration: 180 mins.

Marks: 50

Answer all the questions.

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

- 1) Enlist the various types of audits. Discuss the steps for certification and maintaining the Certification of ISO 9000. (5)
- 2) Briefly discuss the GMP for herbal medicines as per WHO guidelines. (5)
- 3) Explain the challenges for Entrepreneurship. (5)
- 4) Define and discuss the general contents of a monograph. (5)
- 5) Discuss the plant design, layout and construction for the manufacturing of Liquid Orals. (5)
- 6) Write a note on GLP for Herbal Medicines. (5)
- 7) Discuss the various phases of Clinical Trials for Herbal Medicines. (5)
- 8) Define patent and describe briefly the procedures for filing a patent in India. (5)

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

- 9) Revocation of patent (2)
 - A) (2)
 - B) Swelling index and its significance (2)
 - C) Flow chart for manufacturing of Dry Extract (2)
 - D) Criteria for the selection of a Project (2)
 - E) Conditions for Accelerated Stability Studies (2)

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