

Exam Date & Time: 03-May-2018 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES  
END SEMESTER THEORY EXAMINATIONS- MAY 2018  
PROGRAM: MPHARM SEMESTER 2 (PHARMACOGNOSY)

DATE: 03/05/2018

TIME: 2:00 PM - 5:00 PM

Medicinal Plant Biotechnology [PCO-MPG201T]

Marks: 50

Duration: 180 mins.

a

Answer all the questions.

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

- 1) Explain various techniques of Protoplast fusion. (5)
- 2) Write a note on Temperature, pH of medium, Light and Oxygen affecting production of secondary metabolites. (5)
- 3) Explain the following (5)
  - a) Vectors and its properties
  - b) Restriction enzymes
- 4) What is Organogenesis? Write a note on direct and indirect Organogenesis. (5)
- 5) Write a note on various classes of compounds involved in Biotransformation. (5)
- 6) Give an account on synthetic seed. (5)
- 7) Discuss briefly various types of bioreactors. (5)
- 8) Explain direct methods of gene transfer. (5)

b

Answer all the questions.

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

- 9) Define explant. How do you sterilize explant in PTC? (2)

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- A)
- B) Differentiate between bioreactor and fermenter.
- C) What are the factors affecting somaclonal variation?
- D) Give the source and uses of Urokinase.
- E) What is immobilization. Give its advantages and disadvantages.

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Date & Time: 05-May-2018 (02:00 PM - 05:00 PM)



# MANIPAL ACADEMY OF HIGHER EDUCATION

MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES  
 END SEMESTER THEORY EXAMINATIONS- MAY 2018  
 PROGRAM: MPHARM SEMESTER 2 (PHARMACOGNOSY)

DATE: 05/05/2018

TIME: 2:00 PM - 5:00 PM

Advanced Pharmacognosy II [PCO-MPG202T]

Marks: 50

Duration: 180 mins.

**a**

Answer all the questions.

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

- 1) What does validation of herbal therapy mean? Explain with suitable examples (5)
- 2) Write an essay on determination of microbial contamination in herbal raw materials and give limits for certain common organisms (5)
- 3) Give an account of impact of ethnobotany on modern medicine. (5)
- 4) Discuss the analytical profile of Coleus (5)
- 5) Write a note on bio-prospecting tools for drug discovery. (5)
- 6) Define and classify diabetes? Give any two models for screening of antidiabetic agents (5)
- 7) Give an account of causes and measures of adulteration. (5)
- 8) Give the in vitro tests for the evaluation of anticancer drugs (5)

**b**

Answer all the questions.

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

- 9) Define pharmacodynamics and pharmacokinetics (2)

A)

- B) Define and explain foreign matter
- C) Define drug discovery and drug development
- D) Give botanical source, chemical constituents and uses of Shallaki
- E) Define acute and sub-acute toxicity as per OECD guidelines

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Date & Time: 07-May-2018 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES  
END SEMESTER THEORY EXAMINATIONS- MAY 2018  
PROGRAM: MPHARM SEMESTER 2 (PHARMACOGNOSY)

DATE: 07/05/2018

TIME: 2:00 PM - 5:00 PM

Indian Systems of Medicine [PCO-MPG203T]

Marks: 50

Duration: 180 mins.

**a**

Answer all the questions.

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

- 1) Describe the standardization methodology of Ayurvedic preparations with a suitable example. (5)
- 2) Give the protocol for stability studies of ISM formulations. (5)
- 3) Elaborate on CCRH with its objectives and areas of research. (5)
- 4) Discuss on Geographical indication bill with suitable examples in India. (5)
- 5) Enlist different essential constituents of the body. Explain the theory of humours and faculty of powers according to Unani system of medicine. (5)
- 6) What is Schedule T? Elaborate on its requirements. (5)
- 7) Define Naturopathy and list out its basic principles. Discuss briefly any three principles (5)
- 8) Give an account of various Asanas. (5)

**b**

Answer all the questions.

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

- 9) Preparation of churna (2)

A)

- B) Storage conditions for accelerated stability studies of ISM formulations
- C) Homoeopathic Pathogenetic Trials
- D) Complaints and their handling in GMP
- E) GAPS foster

(2)

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m Date & Time: 09-May-2018 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

MANIPAL COLLEGE OF PHARMACEUTICAL SCIENCES  
 END SEMESTER THEORY EXAMINATIONS- MAY 2018  
 PROGRAM: MPHARM SEMESTER 2 (PHARMACOGNOSY)

DATE: 09/05/2018

TIME: 2:00 PM - 5:00 PM

Herbal Cosmetics [PCO-MPG204T]

Marks: 50

Duration: 180 mins.

a

Answer all the questions.

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

- 1) With help of a neat labelled diagram, briefly describe the physiology of skin. (5)
- 2) Classify different types of hair growth formulations. Elaborate on hair conditioners and hair colorants. (5)
- 3) Describe the following quality control studies for cosmetic preparations a) skin hydration studies b) Eye Irritation test for shampoo (5)
- 4) Briefly describe the skin tonics with an example. (5)
- 5) Discuss Good Manufacturing Practices in Cosmetic preparations (5)
- 6) Define and classify herbal cosmetics. Add a note on its advantages over synthetics (5)
- 7) What is the source of fixed and mineral oils? Give their role in cosmetics. (5)
- 8) Give a detailed account of preservatives and surfactants used in cosmetics. (5)

b

Answer all the questions.

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

- 9) Define hair oils. Mention their ingredients (2)
- A)

- B) Why Patch test is very significant for bleaches?
- C) Source and uses of Henna and Saffron
- D) Economic status of Herbal Cosmetics in India
- E) Carcinogenicity test for Cosmetics

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