

Question Paper

Exam Date & Time: 02-May-2019 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal Academy of Higher Education, Manipal MPharm Theory End-Semester Examinations.
MPharm - PHARMACOGNOSY Specialization
MPharm Semester II- End-Semester Examination May 2019
Date : 02/05/2019

Medicinal Plant Biotechnology [PCO-MPG201T]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

Answer the following (10 marks x 5 = 50 marks)

- 1) Write a note on Historical perspective and development of plant biotechnology. Add a note on steps involved in protein synthesis. (10)
- 2) What is Immobilization? Discuss various techniques of Immobilization with their applications (10)
- 3) Explain various techniques of Protoplast fusion. Add a note on its practical applications (10)
- 4) Explain callus and suspension culture with its advantages and disadvantages. (10)
- 5) Give a detailed account of pilot and large scale bioreactors used in culture of plant cells. (10)

SECTION - B

Answer all the questions.

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

- 6) What is Biotransformation? Explain the procedure for carrying out Biotransformation (5)
- 7) What is Synthetic seed? Give its advantages and disadvantages. (5)
- 8) Give the source, method of preparation and uses of Urokinase and Diastase. (5)
- 9) Write a note on selection of explant and surface sterilization in PTC (5)
- 10) Explain various factors affecting yield and viability of Protoplast. (5)

-----End-----