

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.

Industrial Pharmacognostical Technology [PCO-MPG104T]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

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

- 1) Elaborate on GMP with its objectives and discuss its various elements. (10)
- 2) Compare and contrast the clinical trial phases with their applicability to ASU medicines as per AYUSH guidelines. (10)
- 3) Give the design and layout for the manufacturing of herbal medicines of the following;
A] Tablets and Capsules (10)
B] Liquid orals
- 4) Give the criteria for granting a patent and explain various steps involved in filing a patent in India. (10)
- 5) Define and discuss steps involved in the determination of bitterness value as per the WHO guidelines and its applicability. (10)

SECTION - B

Answer all the questions.

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

- 6) Trade secrets (5)
- 7) Determination of Ash values (5)

- 8) Scale-up technique with its objectives and its industrial examples (5)
- 9) Stability testing of natural products with respect to Storage conditions and Testing frequency (5)
- 10) Criteria for selection of the herbal industrial project (5)

-----End-----