

Exam Date & Time: 13-Sep-2021 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal Academy of Higher Education, Manipal MPharm Theory End-Semester Examinations.

Biological Evaluation of Drug Therapy [PBT-MPB204T]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

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

- 1) Outline the microbiological assays of antibiotics and explain turbidimetric assay of antibiotics in detail. (10)
- 2) What are the goals of biosafety levels and personal controls? Why is biosafety important? Describe the layout of a biosafety level-3 laboratory. Describe the automation and applications of a class II type A2 biosafety cabinet. (10)
- 3) Discuss the methods used for Bioassay of biological drugs. (10)
- 4) Describe the physico-chemical and pharmacological factors affecting bioavailability of biologicals. (10)
- 5) Outline the features of a new drug application. Discuss the goals, summary requirements and guidance documents of NDA. (10)

SECTION - B

Answer all the questions.

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

- 6) Penicillin is an antibiotic. Then how is the sterility test performed? (5)
- 7) Briefly outline the source, and the mechanism of action and applications of interferons. (5)
- 8) Explain the Kendrick test used for standardization of pertussis vaccine. (5)
- 9) Illustrate and explain the mamillary model used to describe pharmacokinetics of drugs. (5)
- 10) Explain the composition and function of EMA. (5)

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