

& Time: 05-Dec-2018 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

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

Specialization: Pharmacology

Date: 05-12-2018

Pharmacological and Toxicological Screening Methods I [PHA-MPL103T]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

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

- 1) Describe the regulatory requirements for animal care facility as per CPCSEA. (10)
- 2) Discuss one acute and chronic animal model each to screen anti-inflammatory drugs. (10)
- 3) Explain the in vitro and in vivo methods for screening drugs for respiratory disorders. (10)
- 4) Describe the electrical and chemical methods to induce convulsions in animals. Explain the relevance of these models to clinical forms of epilepsy (10)
- 5) List the various mice used in xenograft models and explain the advantages and disadvantages of these models. What is the significance of these models in translation research? (10)

SECTION - B

Answer all the questions.

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

- 6) Write a short note on principle and indications bioassay. (5)
- 7) Explain the method of non-competitive ELISA for antigen measuring system. (5)
- 8) Explain the significance of 1) Reduced total protein and albumin content with chronic alcohol administration; 2) conditioned avoidance response; 3) despair behaviour. (5)
- 9) Explain the mechanism of induction of chemical-induced animal models of Parkinson's disease. (5)
- 10) With a neat diagram, explain the principle of Langendorff preparation for the screening of drugs. (5)