

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

Examination, 2022-23

MPL103

Course Name: PHARMA

Year: First Year

Branch: M Pharm

Subject: Pharmacological and Toxicological Screening Methods

Time – 3 hours

Maximum marks- 75

SECTION A

10X02=20

Attempt all questions

1. Pyloric ligation method is used to study Activity in animal.
2. Enlist any two *in vivo* methods used for diarrhoea evaluation in rat.
3. Simplest and most economic model used for cancer is
4. Term Aphrodisiac means
5. Plus- maze model is used to detect activity in animals.
6.are called smart drugs because
7. Hazelnut extract given by transdermal route causein animals.
8. Give the reason for selection of streptozotoc in over alloxan for induction of diabetes in rats.
9. Allergic contact dermatitis is-
 - a) A non-immune response caused by a direct action of an agent on the skin
 - b) An immediate type I hypersensitivity reaction
 - c) A delayed type IV hypersensitivity reaction
 - d) Characterized by the intensity of reaction being proportional to the elicitation dose.
10. Which of the following concerning the use of the "benchmark dose" in risk assessment is NOT correct?
 - a) Can use the full range of doses and responses studied.
 - b) Allows use of data obtained from experiments where a clear "no observed adverse effect level" (NOAEL) has been attained.
 - c) May be defined as the lower confidence limit on the 10% effective dose.
 - d) Is primarily used for analyses of carcinogenicity data and has limited utility for analyses of developmental and reproduction studies that generate quantal data.

SECTION B

2X10=20

Attempt any two

11. Elaborate immune assay, interpret methods for evaluation of immune assay in relation to insulin or digoxin.
12. Analyse the applications of transgenic animals in modern pharmacological experimentation along with their methods of production and maintenance.
13. Interpret different animal models used for neurodegenerative diseases.

SECTION C

Attempt any five questions-

(5X7=35)

14. Illustrate the limitations of experimentation in animal models, describe some alternate for animal experimentation.
15. Quote the principle of bioassay and analyse different methods used in animal experimentation.
16. Demonstrate *in vivo* animal models for anti-depressants.
17. Distinguish the methods of extrapolation of *in vitro* data to preclinical and preclinical data to humans.
18. Summarize CPCSEA guidelines for maintenance, breeding and conducting experiments on animals.
19. Extend any two *in vitro* methods for detection of anti-inflammatory activity.
20. Write a note on general principles of preclinical screening and enlist techniques of euthanasia used for experimental animals.
21. Enlist and explain any two models for anti-epileptic study.
22. Describe types of animals used in laboratory also mention application of different species and strains.