

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[BPHARM0422]

**APRIL 2022
(SEPTEMBER 2021 SESSION)**

Sub. Code: 2086

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)

PCI Regulation 2017 SEMESTER VIII

PAPER X - PHARMACOLOGICAL SCREEING METHODS

Q.P. Code: 562086

Time : Three hours

Maximum : 75 Marks

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. Discuss the guidelines of OECD for the maintenance of Laboratory animals.
2. List out various methods to evaluate anti-inflammatory agents and write briefly on Paw oedema model in rats.
3. Write elaborately on Maximal Electroshock (MES) induced convulsion in rat.

II. Write notes on: Answer any SEVEN questions

(7 x 5 = 35)

1. List out various Chemical Carcinogens used to induce cancer in animals. Add a note on DMBA (Dimethyl benzanthracene).
2. Explain any one method for screening the Diuretics agents.
3. Discuss briefly on various vehicles used for the preparation of drug solutions.
4. What is Limulus Amebocyte Lysate (LAL) test. Discuss the methodology of LAL test.
5. With suitable example, explain the chronic anti-inflammatory screening method.
6. Mention various methods for screening Local Anesthetic agents and discuss a suitable method in the evaluation of infiltration anesthesia.
7. Discuss the applications of biostatistics in experimental pharmacology.
8. List out various in-vitro and in-vivo screening methods for anti-arrhythmic agents and briefly discuss any one method.
9. What is Euthanasia? Add a note on inhalational anesthetics as euthanizing agents.

III. Short Answers on: Answer ALL questions

(10 x 2 = 20)

1. Mention the two uses of Zebra Fish (*Danio rerio*) in experimental pharmacology.
2. What is Sham Negative group in preclinical study?
3. Mention the uses of mutant animals in drug screening.
4. Mention the uses of Elevated plus maze in experimental pharmacology.
5. Write the application of Langendorff's heart preparation.
6. Name two Nootropic agents.
7. Name two methods in the screening of anti-hypertensive agents.
8. List out the methods in the breeding of laboratory animals.
9. What is Lipschitz test?
10. What is *in-vitro* screening method?
