

INDIRA UNIVERSITY, PUNE

SCHOOL OF PHARMACY- M. PHARM (Pharmacology)

Term End Examination (2025 Pattern) December – 2025 - Semester – I

Subject Name: Pharmacological and Toxicological

Max. Marks: 75

Screening Methods - I

Subject Code: MPL103T

Time: 3 Hours

Instructions

- All questions are compulsory.
 - Write two sections on separate answersheets.
 - Neat diagram must be drawn wherever necessary.
 - Figures to the right indicate full marks.
-

Section : I

Q.1 Solve any ONE from the following **15 Marks**

- a Discuss the various screening methods for anxiolytic activity.
- b Explain various techniques used for production of transgenic animals.

Q.2 Solve any FOUR from the following **20 Marks**

- a Explain CCSEA Guidelines for maintenance of animal house facility.
- b Discuss the various methods employed in the screening of Anti-asthmatic activity.
- c Write the screening methods for antipsychotic activity.
- d Discuss alternatives to animal experiments.
- e Describe screening methods for drugs used in Parkinson's disease
- f Enlist common laboratory animals. Demonstrate how appropriate maintenance and breeding practices can be applied in maintaining laboratory animals.

Section : II

Q.3 Solve any ONE from the following **15 Marks**

- a Explain types, advantages and disadvantages of immunoassays
- b Discuss various screening methods for anti-inflammatory activity.

Q.4 Solve any TWO from the following **15 Marks**

- a Describe the screening methods for antihypertensive activity.
- b What is principle of immunoassay: Explain immunoassay for digoxin and insulin.
- c Describe in vivo screening methods for anti-atherosclerotic activity.
- d Enlist Preclinical screening methods for antiulcer activity. Explain at least two in vivo screening methods for antiulcer activity.

Q.5 Solve any TWO from the following

10 Marks

- a** Describe in vivo Screening methods for antidiabetic activity
- b** Describe in vivo screening methods for immunomodulatory activity.
- c** Discuss the various methods employed in the screening of analgesic activity.
- d** Discuss the various methods employed in the screening of hepatoprotective agents
