PAPER ID-310108

Subject Code: MPL103T

Roll No:

MPHARM
(SEM I) THEORY EXAMINATION 2025-26
PHARMACOLOGICAL AND TOXICOLOGICAL SCREENING METHODS-I

TIME: 3 HRS **M.MARKS: 75**

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a.	Mention two differences between in vivo and in vitro screening methods.
b.	What is the purpose of using transgenic animals in drug research?
c.	Define Good Laboratory Practices (GLP).
d.	What is meant by behavioral pharmacology?
e.	Name any two methods used for muscle coordination studies.
f.	Define CNS stimulants with one example.
g.	What are anti-asthmatic drugs?
h.	State the principle of immunoassay.
i.	What is meant by hepatoprotective activity?
j.	What is extrapolation of preclinical data?

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a.	Describe the production, maintenance and applications of transgenic animals in pharmacological research.
b.	Explain the general principles involved in preclinical screening of new chemical entities using animal models.
c.	Discuss CNS pharmacology with respect to anxiolytics, antipsychotics and antiepileptic drugs, including screening methods.

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a.	Explain CPCSEA guidelines and their importance in animal experimentation.
b.	Describe methods used for screening of CNS stimulants and CNS depressants.
c.	Write a short note on screening of anti-inflammatory and antipyretic drugs.
d.	Explain pharmacological screening methods for antihypertensive drugs.
e.	Discuss screening models used for anti-diabetic drugs.
f.	Explain the theoretical basis of immunoassay and classify immunoassay systems.
g.	Write a note on limitations of animal experimentation and alternative methods.