

# UKA TARSADIA UNIVERSITY

M. Pharm. (Pharmacology) (2nd Semester)

**Subject:** 040050202 - Pharmacometrics Screening Methods in Pharmacology

**Duration:** 3 Hours

**Max. Marks:** 70.

## **Instructions:**

1. Attempt all questions.
2. Write each section in a separate answer book.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.
5. Draw diagrams/figures whenever necessary.

## **Section-1**

**Q-1 (a)** Describe ELISA. [5]

Or

(a) Describe patch-clamp techniques.

(b) Explain principle behind following animal models: [6]

- a. Cook's pole climbing apparatus
- b. Chemical and electrical induced convulsion

**Q-2 (a)** Write about evaluation of teratogenicity of drug. [6]

Or

(a) Describe OECD guideline for toxicity study.

(b) Discuss principle involve in evaluation of anti-inflammatory agents using different animal models. [6]

**Q-3 Answer the following in detail. (Any two)** [12]

- (a) Pyrogen test
- (b) Principles of bioassay by isolated tissue experiments
- (c) Different models for testing anticataract drugs

## **Section 2**

**Q-4 (a)** Describe any two animal models for evaluation of hypolipidemic drugs. [5]

Or

(a) Describe any two screening methods of inducing arrhythmias.

(b) Describe principle and application of radio ligand binding assay. [6]

**Q-5** (a) Describe any two models for screening of drugs used in IBD. [6]

Or

(a) Explain application and importance of transgenic animals in screening of drugs.

(b) Describe various methods for evaluation of antiulcer drugs. [6]

**Q-6 Answer the following in detail. (Any two)** [12]

(a) Describe models for testing antihypertensive drugs.

(b) Discuss the principle involved in evaluation of anti-asthmatic drugs using different animal models.

(c) Describe advantages and disadvantages of immunoassay for screening of drugs.