

Roll No.

Total No. of Pages : 02

Total No. of Questions : 10

M.Sc.(Clinical Research) (Sem.-1)

**PHARMACOLOGY**

Subject Code : MSCR-103-18

M.Code : 75607

Date of Examination : 19-01-23

Time : 3 Hrs.

Max. Marks : 70

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains FOUR questions carrying TEN marks each and students have to attempt any THREE questions.

**SECTION-A**

**1. Answer briefly :**

- a) Receptors.
- b) Difference between additive effect and potentiation.
- c) Neurotransmitters
- d) Two differences between Type I and Type II adverse effects.
- e) Clinical uses of beta blockers.
- f) Second messengers
- g) ED50 and LD50
- h) The problems in extrapolating data from animals to humans.
- i) Anticholinesterase
- j) Biotransformation of toxicants

## SECTION-B

2. Classify anti cholinergics. Write any there clinical uses.
3. Write a note on therapeutic drug monitoring.
4. Define mutagenicity. Discuss Ames test.
5. Discuss briefly pharmacokinetic drug interactions.
6. Differentiate between sympathetic and parasympathetic nervous system.

## SECTION-C

7. Define bioassay. Describe different types of bioassays with suitable examples.
8. Discuss in general neurohumoral transmission with the help of example.
9. Answer the following :
  - a) Carcinogenicity studies
  - b) Acute toxicity
10. Write notes on following :
  - a) STZ induced diabetes
  - b) Forced swim test

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**