Roll No. | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 10

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

GENERAL PHARMACOLOGY

Subject Code : UC-MSCR-103-19

M.Code : 77292

Date of Examination : 23-01-23

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. Basic drugs attain higher concentration intracellularly (pH 7.0). Why?

b. What is apparent volume of distribution?

c. Explain the phenomenon of first pass metabolism.

d. What is therapeutic index?

e. What is quantal dose response curve?

f. What are phototoxic and photoallergic reactions?

g. What are second messengers?

h. What is supra-additive effect of drugs?

i. What are side effects of a drug?

j. What is difference between passive diffusion and filtration of drug across membranes?

SECTION-B

2. Describe drug-drug interactions affecting drug transport proteins. Give suitable examples.

3. What is therapeutic drug monitoring? What are the main reasons for measuring drug concentration?

4. Describe the concept of TD_{50} and how it is determined?

5. What do you understand by competitive antagonist and non-competitive antagonist?

6. Describe the phase biotransformation reactions.

SECTION-C

7. Describe the different systemic routes of drug administration.

8. What are the steps involved in signal transduction through nuclear receptors?

9. Explain the various steps involved in neurotransmission in cholinergic neurons.

10. What are the physiological actions of epinephrine?

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.