



R-144004

Seat No. _____

M. Sc. (Sem. IV) Examination

April - 2022

MSCOC404 : Medicinal Chemistry

Time : 3 Hours]

[Total Marks : 70

1 Answer the following :

- (a) Discuss various steps of drug design. **07**

OR

Write a note on structure activity relationship.

- (b) Explain rate and perturbation theories for QSAR. **07**

OR

(i) Lead molecules

(ii) Pro-drugs.

2 Answer the following :

- (a) (i) Write a note on phase -1 drug metabolism. **04**

- (ii) Explain enzyme stimulation in the metabolism of drugs by giving one appropriate example. **03**

OR

- (a) Write a note on drug absorption and distribution. **07**

- (b) Write a note on pharmacodynamics parameter of drug metabolism. **07**

OR

- (b) What is biotransformation ? Write a note on biotransformation of drug.

3 Answer the following :

- (a) (i) Give a brief note on oral dosage form. **04**

- (ii) What are 'Open Access' online journal in chemistry ? Give a brief overview for online Journals in chemistry. **03**

OR

- (a) (i) Write a note on importance of computer in chemistry.

- (ii) Write a note on modern methods of pharmaceutical analysis.

- (b) Give the background and development of Indian pharmacopoeious in brief. 07

OR

Write a note on QA and QC in pharmaceutical analysis.

4 Answer the following :

- (a) Write a note on protein and peptide drug delivery. 07

OR

Write a note on Nanotechnology in cancer treatment.

- (b) Give a brief note on importance of nanotechnology in surgery. 07

OR

Write a note on Nanonephrology.

5 Answer the following in short : 14

- (1) Define 3D - QSAR.
- (2) What is potency of drug ?
- (3) What is drug efficacy ?
- (4) Define drug elimination.
- (5) What is soft drug ?
- (6) What stands for ADME ?
- (7) What stands for ADME ?
- (8) What is Agonist ?
- (9) What is Antagoniat ?
- (10) What is trivial name of drug ?
- (11) What is HTS/STN ?
- (12) Define nanorobots.
- (13) Give two names of descriptors in QSAR.
- (14) Define monograph.