



GAP-144004

Seat No. _____

M. Sc. (Sem. IV) Examination

March / April – 2019

MSCOC - 404 : Selected Topics In Medicinal Chemistry

Time : 3 Hours]

[Total Marks : 70

1 Answer the following :

- (a) Write a note on Phase wise Drug Discovery. **7**

OR

- (i) Write a note on lead molecules soft drugs.
(ii) Write a note on soft drugs.

- (b) Write a note on importance of Physico-chemical **7**
parameters like lipophilicity and partition coefficient
used for QSAR studies.

OR

Discuss structure activity relationship in detail.

2 Answer the following :

- (a) Write a note on Phase-I and Phase-II metabolism. **7**

OR

Write a note on Bio-availability of Drug .

- (b) Explain Enzyme stimulation and inhibition **7**
metabolism of drug by given one appropriate example.

OR

Write a note on "aid of pharmaceuticals in drug
development process."

3 Answer the following :

- (a) Write a note on Modern methods of Pharmaceutical **7**
analysis.

OR

- (i) Write note on importance of Computer in
Chemistry.
(ii) Give a brief overview for online journals in
chemistry.

- (b) Give brief note on Dosage forms and types of dosages. 7

OR

- (i) Give the background and development of Indian pharmacopoeias.
(ii) Give note on Quality- control of any drug based on pharmacopoeias.

4 Answer the following :

- (a) Give a brief note on "Medical applications of molecular Nanotechnology." 7

OR

- (i) Write a note on Nanotechnology.
(ii) Write a note on Nanomaterial's in drug discovery.

- (b) Write a brief note on importance of Nanoparticles in treatment of Cancer. 7

OR

- (i) Write a note on Neuro-electronic interfaces.
(ii) Write a note on Nano-nephrology.

5 Answer the following : (Short Question) 14

- (1) What stands for FDA ?
 - (2) What is efficacy ?
 - (3) What is serendipity in drug discovery ?
 - (4) Give one example of Ionized drug.
 - (5) What is EC_{50} ?
 - (6) What is therapeutic index ?
 - (7) What is potency ?
 - (8) What is high through put screening ?
 - (9) What is biotransformation ?
 - (10) What is Rate theory ?
 - (11) What is 'Induce fit' ?
 - (12) Give principle of Bio-assay.
 - (13) What are Quantum dots ?
 - (14) What is nano – robot ?
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