



BBD-003-010412 Seat No. _____

M. Sc. (Sem. IV) (CBCS) Examination

June / July – 2021

C(OP) - 404 : Advanced Medicinal Chemistry

(Organo-Pharmaceutical Chemistry)

(Elective)

Faculty Code : 003

Subject Code : 010412

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) All Questions are compulsory & carries equal 14 marks
(2) Draw suitable diagram / Scheme wherever necessary.

- 1** Answer any **seven** of the following ten questions : **14**
- (a) Water and Octanol are standard for determining partition coefficient, why?
 - (b) Discuss Chiral drugs with suitable example.
 - (c) Define, Pharmaco-kinetics, Pharmacodynamics and Adsorption of drug.
 - (d) Write the structure of any two resins used for solid phase synthesis.
 - (e) Enlist the parameter studied in QSAR.
 - (f) Explain bio-transformation in which normal, occasional and rarely changes for a drug.
 - (g) Give structures of Schkimic acid and quininic acid.
 - (h) Define Agonist, Antagonist and MEC
 - (i) Explain the term distribution of drugs and disposition of drugs.
 - (j) What is considered date and term of patent in Indian patent system?

- 2** Answer any **two** out of the following : **14**
- (a) Enlist titles of Phase-II reaction.
 - (b) Explain Phase-I reaction and Phase to reactions in details.
 - (c) Give the synthesis of Clopidogrel and Ticlodipine.

- 3** Answer the followings : **14**
- (a) Enlist condition for patentability. What are types of invention which are not patentable in India.
 - (b) Discuss in details, Hansch analysis technique in QSAR

OR

- 3** Answer the followings : **14**
- (a) What is the distinction between patented invention and innovation with examples? classification.
 - (b) Describe general structure of granted patents.

- 4** Answer the followings : **14**
- (a) Write Crilead's synthesis of Oseltamavir.
 - (b) Discuss the Coreys asymmetric synthesis of S-cettrizinedihydrochloride.

- 5** Answer the followings : (Any **Two**) **14**
- (a) Explain "Prodrug", Classify and explain its merits with suitable example.
 - (b) Give Roche or Sanofi synthesis of Oseltamavir.
 - (c) Explain dose response curve with suitable example and its significance.