



PU-003-1104015

Seat No. _____

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

August - 2020

C(OP) - 404 : Advanced Medicinal Chemistry

(Organo-Pharmaceutical Chemistry)

(Elective - II)

Faculty Code : 003

Subject Code : 1104015

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

- Explain bio-transformation in which normal, occasional and rarely changes for a drug.
- Give structures of Schkimic acid and quininic acid.
- Explain Protein binding of drug.
- Define, Pharmaco-kinetics, Pharmacodynamics and Adsorption of drug.
- Write the structure of any two resins used for solid phase synthesis.
- Give a brief account on Topless decision tree.
- Explain lead and lead discovery.
- Define Agonist, Antagonist and MEC
- Define the term, Patent and IPR.
- Enlist the parameter studied in QSAR.

2 Answer any two out of the following : 14

- Enlist titles of Phase-I reaction.
- Explain the mix and split library method for amino-acid synthesis.
- Give the synthesis of Clopidogrel and Ticlodipine.

- 3** Answer the following : **14**
- (a) Explain "Prodrug", classify and explain its merits with suitable example.
 - (b) Write Gilead's synthesis of Oseltamavir.

OR

- 3** Answer the following : **14**
- (a) Write a detailed note on Patent as an IPR Tool
 - (b) Describe general structure of granted patents.

- 4** Answer the following : **14**
- (a) Give an account on tagging method with suitable example.
 - (b) Discuss in detail, Hansch analysis technique in QSAR

- 5** Answer the following : **14**
- (a) Explain Phase-I reaction and Phase to reactions in details.

OR

- (a) What is the distinction between patented invention and innovation? Classify it with example.
- (b) Give Roche or Sanofi synthesis of Oseltamavir.
