



PS-003-1104006

Seat No. _____

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

August - 2020

C(OP)-402 : Organo-Pharmaceutical Chemistry

(Chemistry of Synthetic Drugs)

Faculty Code : 003

Subject Code : 1104006

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

[Total Marks : 70

- Instruction :** (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**

- Classify the anti-tubercular agents and write the structure of any two second line Drug.
- Write the synthesis of Dicyclomine.
- Define the term Hypnotics and sedative and draw the structure of Thiopentone.
- Define : 'Decongestant' and 'Mucolytic'.
- What you think about broad spectrum antibiotics ? Write the structure of any one broad spectrum antibiotics.
- Enlist the Proton-pump inhibitor drug and give structure of Omeprazole.
- Give the classification of Gastrointestinal track drug.
- Write the synthesis of Chlorpronazine.
- What are anti-HIV target ?
- Write the classification of Diuretics and enlist the inorganic compound used as diuretic agents.

2 Answer any **two** of the following : **14**

- Define and classify anti-cancer agents. Give the synthesis of any one nitrogen-mustered drug.
- Define the term anti-asthmatic and write the synthesis of Salbutamol and Theophylline.
- Write the classification of Cephalosporin drug and give at least one synthesis of first and second generation drugs.

- 3** Answer any **two** of the following : **14**
- (a) Write the general synthesis of Fluoro-quinolone drug and discuss its SAR.
 - (b) Classify the anti-diarrheal drug and write the synthesis of any two to them.

OR

- 3** Answer any **two** of the following : **14**
- (a) Write the synthesis of Indinavir and Zidovudine.
 - (b) Write the synthesis of any two antiprotozoal drugs.
- 4** Give the synthesis and application of the following : **14**
- (a) Write the general synthesis of Sulpha drugs.
 - (b) Give the classification of anti-fungal drug and write the synthesis of Miconazole and Tolnaftate.
- 5** Answer the following : (any **two**) **14**
- (1) Give the synthesis of Ibuprofen and Flubiprofen.
 - (2) Discuss the synthesis of Valdecoxib and Promethazine.
 - (3) Write the synthesis of Amlodiphine and Propranolol.
 - (4) Enlist anti-malarial drug and give the synthesis of Mefloquine and Pyrimethamine.
