



**PAG-003-010404**

Seat No. \_\_\_\_\_

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

**August - 2020**

**C(OP)-402 : Organo-Pharmaceutical Chemistry**

*(Chemistry of Synthetic Drugs) (Old Course)*

**Faculty Code : 003**

**Subject Code : 010404**

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

[Total Marks : 70

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

- 1 Answer any **seven** of the following ten questions : 14
- (a) What are topical antifungal agents? Give synthesis of any one topical antifungal compounds.
  - (b) What do you think about broad spectrum antibiotics? Write the structure of any one broad spectrum antibiotics.
  - (c) What is HIV and what are the targets of anti-HIV drug?
  - (d) Classify the anti-tubercular agents and write the structure of any two second line Drug.
  - (e) Write the synthesis of Dicyclomine.
  - (f) Define the term Hypnotics and sedative and draw the structure of Thiopentone.
  - (g) Write the classification of Diuretics and enlist the inorganic compound used as diuretic agent.
  - (h) What are proton-pump inhibitors? Give synthesis of any two important compounds.
  - (i) Give the classification of gastrointestinal track drug.
  - (j) Write the synthesis of Chlorpromazine.

- 2** Answer any **two** of the following : **14**
- (a) Define, classify and give the synthesis of any two Antihypertensive drugs.
  - (b) Write the classification of Cephalosporin drug and give at least one synthesis of first and second generation drugs.
  - (c) Classify the anti -diarrheal drug and write the synthesis of any two of them.

- 3** Answer any **two** of the following : **14**
- (a) Define, classify and give the synthesis of any two anti diabetic agents.
  - (b) Define the term anti-asthmatic and write the synthesis of Salbutamol and Theophylline.

**OR**

- 3** Answer any **two** of the following : **14**
- (a) Write the general synthesis of Sulpha drugs.
  - (b) Write an account on quinoline and flouro quinoline drugs.

- 4** Answer the following : **14**
- (a) Write the synthesis of Indinavir and Zidovudine.
  - (b) Define, classify and give the synthesis of any two anti-cancer agents.

- 5** Answer the following : (any **two**) **14**
- (a) Write the synthesis of Amlodipine and Propranolol.
  - (b) Give the synthesis of Ibuprofen and Flubiprofen.
  - (c) Discuss the synthesis of Valdecoxiband and Promethazine.
  - (d) Enlist anti-malarial drug and give the synthesis of Mefloquine and Pyrimethamine.