



DN-003-1104006

Seat No. _____

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

March - 2022

C(OP)-402 : Organo-Pharmaceutical Chemistry

(Chemistry of Synthetic Drugs)

Faculty Code : 003

Subject Code : 1104006

Time : **2.30** Hours]

[Total Marks : **70**

- Instructions :** (1) All questions carry equal marks
(2) All questions are compulsory.

1 Answer the followings. **14**

- (a) What are hypnotics and sedative ? Give structure of phenobarbitone.
- (b) What are anti arrhythmic ? Give structure of anyone.
- (c) Write the classification of oral antidiabetic agents.
- (d) What are Proton pump inhibitors ?
- (e) Give the synthesis of Nalidixic acid.
- (f) Discuss the lifecycle of HIV.
- (g) What are antibiotics ? What you think about broad and narrow spectrum antibiotics ?
- (h) What are anti-histamines ? Write the structure of any two-histamine drug.
- (i) Define the terms, Antifungal agents and write the structure of any two antifungal agents.
- (j) Write the general method for the synthesis of sulpha drugs.

- 2** Answer the following (any two) : **14**
- (a) Write any three synthesis of H₂-receptorant agonist.
 - (b) Give the classification of Diuretic agents and discuss synthesis of any two diuretic agents.
 - (c) Draw the Lifecycle of malarial-plasmodium and write the synthesis of any two antimalarial agents.

- 3** Answer the following. **14**
- (a) Write the classification of GI track drugs and write the synthesis of any one antispasmodic agents.
 - (b) Give the synthesis of any two anti-asthmatics drugs.

OR

- 3** Answer the following. **14**
- (a) Write the synthesis of any three antidiabetic agents.
 - (b) Write the classification of anticancer agents and given the synthesis of any three anticancer agents.

- 4** Answer the following. **14**
- (a) Classify the antitubercular agents and write the synthesis of any two second line drugs.
 - (b) Classify anti-HIV agents and write the synthesis of any three anti-HIV agents.

- 5** Answer the followings (any three) **14**
- (a) Write the synthesis of Propranolol, Lignocaine and Verapamil.
 - (b) Give the synthesis of Ibuprofen and Ketorolac.
 - (c) Give synthesis of Thiopentone, Ketoprofen, Naproxen.
 - (d) What are barbiturates ? Explain their uses in short and explain antipyretics and give structure of Phenylbutazone.