DCJ-003-1104006 Seat No. _____

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

July - 2022

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**

Instructions : (1) All questions carry equal marks.
(2) Draw suitable diagram / Scheme wherever necessary.
(3) All questions are compulsory.

1 Answer the following : **14**

(a) Write the classification of oral antidiabetic agents.

(b) What are Proton pump inhibitors?

(c) Give the synthesis of Nalidixic acid.

(d) Discuss the life-cycle of HIV.

(e) What are antibiotics? What you think about broad and narrow spectrum antibiotics?

(f) What are hypnotics and sedative? Give structure of phenobarbitone.

(g) What are anti arrhythmic? Give structure of anyone.

(h) What are anti-histamine? 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 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.

(c) Write any three synthesis of H_2-receptorantagonist.

3 Answer the following : **14**

(a) Give the classification of Diuretic agents and discuss synthesis of any two diuretic agents.

(b) Draw the Life-cycle of malarial-plasmodium and write the synthesis of any two antimalarial agents.

OR

3 Answer the following : **14**

(a) Classify the antitubercular agents and write the synthesis of any two second line drugs.

(b) Write the synthesis of any three antidiabetic agents.

4 Answer the following : **14**

(a) Classify anti-HIV agents and write the synthesis of any three anti-HIV agents.

(b) Write the classification of anticancer agents and give the synthesis of any three anticancer agents.

5 Answer the followings : (any **three**) **14**

(a) Give synthesis of Thiopentone, Ketoprofen, Naproxen.

(b) What are barbiturates? Explain their uses in short and explain antipyretics and give structure of Phenylbutazone.

(c) Write the synthesis of Propranolol, Lignocaine and Verapamil.

(d) Give the synthesis of Ibuprofen and Ketorolac.
