



BBB-003-010404 Seat No. _____

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

June / July – 2021

C(OP) - 402 : Synthetic Medicinal Chemistry

(Organo-Pharmaceutical Chemistry)

(Old Course)

Faculty Code : 003

Subject Code : 010404

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**
- (a) Give the classification of antitubercular agents with suitable example of each.
 - (b) Explain broad spectrum antibiotics.
 - (c) Enlist all generation of Cephalosporins and write at least one structure of each generation.
 - (d) What are diabetics and types of diabetics?
 - (e) Give the structure of Chlormphenicol and Doxocyclin.
 - (f) Explain the terms: Expectorants and Decongestants.
 - (g) What are H₂ receptor antagonists?
 - (h) Define chemotherapy. Enlist disease in which chemotherapeutic agent are employed.
 - (i) Define the terms "Bacteriostatic" and "Bactericidal" drugs.
 - (j) Discuss the synthesis of Rosiglitazone.

- 2 Answer the following : 14
- (a) Write the classification of anticancer agents and give the synthesis of Cyclo-phosphamide and 5-fluorouracil.
 - (b) Define the term Hypnotics and sedative. Write the synthesis of Alprazolam and Hydroxyzine write the classification of hypoglycemic agents. Give the synthesis of Chlorpropamide and Phenformin.
 - (c) What are proton pump inhibitors? Give the synthesis of Omeprazole and Ranitidine.
- 3 Answer the followings : 14
- (a) Give the general synthesis of sulphonamide and write the structure of Sulfadiazine and Sulfadoxin.
 - (b) Write the full form of HIV and discuss lifecycle of HIV.
- OR**
- (a) Draw a malarial cycle and explain it briefly.
 - (b) Discuss the synthesis of Metronidazole and Ornidazole.
- 4 Give the synthesis and application of the followings : 14
(Any Two)
- (a) Nalidixic acid and Ampicillin
 - (b) Indinavir and zidovudine
 - (c) Diclofenac sodium and Ketoprofen
- 5 Answer the followings : (Any Two) 14
- (a) Write the synthesis of Cetrizine and Celecoxib
 - (b) Define general and local anesthetic. Give the synthesis of Verapamil and Lignocaine.
 - (c) Give the synthesis of Mefloquine and atovaquone.
 - (d) Define the term analgesic and write the synthesis of Naproxen and Nimesulide.