



**MBT-003-010404** Seat No. \_\_\_\_\_

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

**April / May - 2018**

**Organo-Pharmaceutical Chemistry**

**C(OP) - 402 : Synthetic Medicinal Chemistry**

*(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 diabetics and types of diabetics ?
- b. Give the structure of Erythromycin and Roxitromycin.
- c. What is HIV and what are the target of HIV drugs ?
- d. Classify the antibiotics on the bases of their mode of action and availability.
- e. Define : Antitassive and Mucolytics.
- f. What are proton pump inhibitors ?
- g. Define chemotherapy. Enlist disease in which chemotherapeutic agent are employed.
- h. Define the terms "Bacteriostatic" and "Bactericidal" drugs.
- i. Explain broad spectrum antibiotics.
- j. Discuss the synthesis of Rosiglitazone.

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

- a. Write a note on antispasmodics ? Give the synthesis of Propantheline bromide and Dicyclomine.
- b. Write the synthesis of 6-APA and 7-ADCA.
- c. Give the synthesis of Tolbutamide and Glibenclamide.

- d. Write the classification of hypoglycemic agents. Give the synthesis of Chlorpropamide and Phenformin.
- 3** Answer any **two** of the followings : **14**
- a. Write the classification of Antitubercular agents and give the synthesis of Ethambutol and Isoniazide.
  - b. Classify anticancer agents. Give the synthesis of Cyclophosphamide and 5-Fluorouracil.
  - c. Draw a malarial cycle and explain it briefly. Give the synthesis of Mefloquine and atovaquone.
- 4** Answer the followings : **14**
- a. Define general and local anesthetic. Give the synthesis of Verapamil and Lignocaine.
  - b. Give the general synthesis of Sulphonamide and write the structure of Silversulfadiazine and Sulfmethazole.
- 5** Give the synthesis and application of the followings : (Any **three**) **14**
- a. Indinavir and Zidovudine
  - b. Diclofenac sodium and Ketoprofen
  - c. Cetrizine and Celecoxib
  - d. Ampiciline and Efavirenz.
-