



MBT-003-1104006

Seat No. _____

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

April / May- 2018

C(OP)-402 : Organopharmaceutical Chemistry
(Chemistry of Synthetic Drugs)
(New Course)

Faculty Code : 003

Subject Code : 1104006

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

[Total Marks : 70

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

1 Answer any seven of the following ten questions : **14**

- (a) Define: 'Antitussive' and 'Mucolytics'.
- (b) What you think about broad spectrum antibiotics? Write the structure of any one broad spectrum antibiotics.
- (c) Write the full form of "HIV" and draw the lifecycle of HIV.
- (d) Classify the antitubercular agents and write the structure of any two first line antitubercular drug.
- (e) What are antiarrhythmics? Write the structure of Procainamide and Metoprolol.
- (f) Give the structure of Busulphan and Tetracycline.
- (g) Define the terms: "Gram +ve bacteria" and "Gram -ve bacteria".
- (h) Define the term sedative and write the structure of Chlordiazepoxide and Midazolam.
- (i) Define the term Diuretics and classify it.
- (j) What are tranquilizers? Classify it and write the structure of Fluphenazine.

- 2** Answer any three of the following : **14**
- (a) What is diabetes and types of diabetics? Give the synthesis of Glipizide and Tolbutamide.
 - (b) Write the classification of Antitubercular agents and give the synthesis of Pyrazinamide and Ofloxacin.
 - (c) What are antifungal agents? Write the synthesis of Clotrimazole and Miconazole.
 - (d) Write the synthesis and application of Pyrimethamine and Proguanil.
- 3** Answer any two of the followings : **14**
- (a) Define and classify anticancer agents. Give the synthesis of any two anticancer agent.
 - (b) What are " Calcium channel blockers"? Give the synthesis of Nifedipine and Amlodipine.
 - (c) Give the synthesis of Clonidine and Proxosin.
 - (d) Write the synthesis of any three Sulpha drugs and their use.
- 4** Give the synthesis and application of the followings : **14**
(any **three**)
- (a) Gabapentin and Lamotrigine.
 - (b) Acyclovir and Lamivudine
 - (c) Risperidone and Sertraline
 - (d) Valsartan and Enalapril
- 5** Answer the followings : (any **two**) **14**
- (a) Write the synthesis of Gatifloxacin and Cefixime.
 - (b) Give the synthesis of Ibuprofen and Naproxen.
 - (c) Discuss the synthesis of Salbutamol and Nimesulide.