

**M.Sc. Semester - 4 (CBCS) Examination**  
**March/April- 2018**  
**CHEMISTRY OF SYNTHETIC DRUGS**  
**(CORE)**

**Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
  2. Figures to the right indicate marks.
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**Q.1** Answer any **seven** of the following ten questions. (14)

1. Define the terms: Anaesthetic, Antipyretic and Anticonvulsants.
2. What are barbiturates? Give general structure and synthesis of any one.
3. Define the term topical fungal. Discuss synthesis of any one.
4. Give classification of anticancer drug with structure.
5. What are broad and narrow spectrum antibiotics?
6. Explain the terms; Expectorants and Decongestants.
7. Give classification of CNS drugs.
8. What are prostaglandins? Give structure of any one.
9. Draw a malarial life cycle and discuss it.
10. What are NSAIDs? Give one example.

**Q.2** Answer any **two** of the following three questions. (14)

1. Define the term antitubercular drugs. Describe the synthesis of Pyrazinamide, Isoniazide and Ethambutol.
2. Give synthesis of Ibuprofen, and Paracetamol.
3. Briefly explain contraceptive and antifertility drugs. Give structure of important drug.

**Q.3** Answer the following questions. (14)

1. Define and Classify Antiulcer drugs. Discuss the synthesis of Ranitidine and Cimetidine.
2. Write the full form of HIV and discuss life cycle of HIV.

**OR**

**Q.3** Answer the following questions. (14)

1. Give the synthesis and applications of Diclofenac sodium, and Salbutamol.
2. What are antimalarial drugs? Discuss the synthesis of Pyrimethamine and Mefloquine.

**Q.4** Answer any **two** of the following three questions. (14)

1. Write the synthesis of Lamotrigine and Carbamazepine.
2. What are antidiabetic drugs? Classify them and write the synthesis of any two oral diabetic agents.
3. Explain Antidiarrhoeal drugs and discuss synthesis of any two.

**Q.5** Answer any **two** of the following four questions. (14)

1. Give the general synthesis of sulphonamide and write the structure of Silver sulfadiazine and Sulfadoxin.
2. Give the synthesis of Acyclovir and Lamivudine.
3. What are tranquilizers? Write at least one synthesis of minor and major tranquilizer.
4. Write the classification of hypoglycemic agents. Give the synthesis of Sitagliptin and Phenformin.

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