

M.Sc. Semester - 4 (CBCS) Examination
August/September -2020 [OLD COURSE]
CHEMISTRY OF SYNTHETIC DRUGS (CORE)

Time: 2:00 Hours**Marks: 56****Instructions:**

1. Figures to the right indicate marks.
 2. There are five questions in the question paper.
 3. Answer any four of the following questions.
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- Q.1 Answer any seven of the following ten questions: (14)
- (1) What are broad spectrum antibiotics? Draw correct chemical structure of Ampicillin.
 - (2) What are vasodilators? Give the structure of Metoprolol.
 - (3) Differentiate Gram positive and gram negative bacteria.
 - (4) Define: 'Expectorants' and 'Antiasmatics'.
 - (5) Write the full form of "HIV" and draw the lifecycle of HIV.
 - (6) Classify the antitubercular agents with examples.
 - (7) Give the structure of Busulphan and Tetracycline.
 - (8) Draw correct chemical structure of any 2 sedative agents with names.
 - (9) Define & exemplify: Antiinfective drugs.
 - (10) What are tranquilizers? Give classification and write the structure of Fluphenazine.
- Q.2 Answer any two of the following: (14)
- (1) Define and classify anticancer agents. Give the synthesis of any 3 anticancer agents.
 - (2) Classify Antitubercular agents. Write synthesis of Pyrazinamide, Ofloxacin and Levofloxacin.
 - (3) Define the terms: Antibiotic agents & antifungal agents. Give synthesis of any 3 antifungal agents.
- Q.3 Answer any two of the following: (14)
- (1) What is diabetes? Give classification of antidiabetic agents. Discuss synthesis of any 3 antidiabetic agents.
 - (2) What are "Calcium channel blockers"? Give the synthesis of Nifedipine and Amlodipine.
 - (3) Give the synthesis of Clonidine and Prozincine.
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- Q.3 Answer any three of the followings: (14)
- (1) Explain mechanism of action for Antihistamine drugs. Write synthesis and application of any 2 anti-allergic agents.
 - (2) Write the synthesis and application of Risperidone and Sertraline.
 - (3) Write synthesis and application of Chloroquine and Pyrimethamine.
 - (4) Write synthesis & application of any two antidiarrheal drugs.
- Q.4 Answer any three of the followings: (14)
- (1) Write synthesis and application of Gabapentin and Lamotrigine.
 - (2) Write synthesis and application of Acyclovir and Lamivudine.
 - (3) Write synthesis and application of Dapsone and proguanil.
 - (4) Write synthesis and application of Valsartan and Enalapril.
- Q.5 Answer any two of the following: (14)
- (1) Explain the term: NSAID. Write synthesis of Ibuprofen, Acetaminophen and Naproxen.
 - (2) Write the synthesis of any three Sulpha drugs with their applications.
 - (3) Discuss synthesis & application of Gatifloxacin and Cefixime in detail.