

**B. PHARM**  
**(SEM VII) THEORY EXAMINATION 2019-20**  
**PHARMACEUTICAL CHEMISTRY – VII (MEDICINAL CHEMISTRY – III)**

**Time: 3 Hours****Total Marks: 100****Note:** Attempt all Sections.**SECTION A**

- 1. Attempt all questions in brief. 2 x 10 = 20**
- a. Differentiate Antiseptics and Disinfectants.
  - b. Draw the structure of Testosterone.
  - c. Name the natural agents used in the treatment of Cancer.
  - d. What is PAS? Draw its structure.
  - e. Introduce Sulphonamides with two examples.
  - f. Write the source and structure of Penicillin.
  - g. What are mineralocorticoids?
  - h. What is HIV? Name any two drugs used for the treatment of HIV.
  - i. Define Semi-synthetic Penicillins.
  - j. What are Antifungal drugs? Give any two examples.

**SECTION B**

- 2. Attempt any three of the following: 10x3=30**
- a. Discuss the Structure Activity Relationship (SAR) of Tetracycline.
  - b. Draw the structure of following drugs and give their I.U.P.A.C. Name-
    - I. Dapsone
    - II. Carmustine
    - III. 5-Fluorouracil
    - IV. Sulphacetamide
    - V. Estradiol
  - c. Write the Synthesis of Chloroquine and Methotrexate.
  - d. Write the mode of action and Structure Activity Relationship of Chloramphenicol.
  - e. Explain Quinolones. Discuss the development of fluoroquinolones.

**SECTION C**

- 3. Attempt any one part of the following: 10x1=10**
- a. Write the nomenclature and stereochemistry of Steroids.
  - b. Write the Chemical Structure, Synthesis and Uses of Zydovudine.
- 4. Attempt any one part of the following: 10x1=10**
- a. What are Alkylating agents? Write the Structure Activity Relationship (SAR) of alkylating agents.
  - b. Write the synthesis and mode of action of Clotrimazole.
- 5. Attempt any one part of the following: 10x1=10**
- a. Classify Anti-HIV agents. Write about its Structure Activity Relationship.
  - b. What are Cephalosporins? Write the history of Cephalosporins.
- 6. Attempt any one part of the following: 10x1=10**
- a. What are Anticancer antibiotics? Write the synthesis of Doxorubicin.
  - b. Write the synthesis and uses of Diloxanide and Acyclovir.
- 7. Attempt any one part of the following: 10x1=10**
- a. Define Antimalarial drugs. Classify them. Write the synthesis of Pyrimethamine.
  - b. Write the synthesis and mode of action of Albendazole.