

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[B.PHARM 0823]

AUGUST 2023  
(MARCH 2023 EXAM SESSION)

Sub. Code: 2059

B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)  
PCI Regulation 2017 – SEMESTER VI  
PAPER I – MEDICINAL CHEMISTRY III

*Q.P. Code: 562059*

**Time: Three hours**

**Maximum: 75 Marks**

**I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)**

1. Classify antibiotics. Explain in detail about the chemistry and SAR of cephalosporins.
2. Write down the Synthesis and Mechanism of Chloroquine. Add a note on SAR of 4-Amino quinolines.
3. Write the classification of Anti-viral drugs with suitable examples. Explain the synthesis and mechanism of Acyclovir.

**II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)**

1. Write a note on Combinatorial Chemistry.
2. Write the structure and uses of clotrimazole and Tolnaftate.
3. Give the structure and uses of:
  - a) Tetracycline
  - b) Erythromycin
4. Write short notes on anthelmintics.
5. Write a note on partition coefficient and Hammett's electronic parameter.
6. Synthesis of Metronidazole.
7. Anti tubercular antibiotics.
8. Write the structure, Mechanism of action and uses of sulphacetamide sodium and sulphasalazine.
9. Write the chemistry, Mechanism of action and uses of Amphotericin B.

**III. Short answers on: Answer ALL questions. (10 x 2 = 20)**

1. Structure and mode of action of Ethionamide.
2. Mechanism of action of Sulphonamides.
3. Mechanism of ciprofloxacin.
4. Write the name of any two folate reductase inhibitors.
5. Write about Pharmacophore modeling.
6. Write mechanism of  $\beta$  lactam antibiotics.
7. Write structure and uses of Griseofulvin and Fluconazole.
8. Artemesinin antimalarials.
9. Sulphapyridine.
10. MOA of Chloramphenicol.

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