

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

[BPHARM 0522]

MAY 2022  
(FEBRUARY 2022 EXAM SESSION)

Sub. Code: 4271

**B. PHARMACY DEGREE EXAMINATION**  
**FOURTH (FINAL) YEAR**  
**PAPER V – MEDICINAL CHEMISTRY - II**  
*Q.P. Code : 564271*

**Time: Three hours**

**Answer ALL questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. a) Write notes on Topliss decision tree.  
b) Degradation products of Penicillin.
2. Write the synthesis and Medicinal uses of following.
  - a. Hexachlorophene.
  - b. Ketoconazole.
  - c. Thiabendazole.
  - d. Nalidixic acid.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Mechanism of action of sulphonamides.
2. Mechanism of action of anti metabolites.
3. Discuss about Anti Hypertensive agents.
4. Define combinatorial synthesis and explain about solid phase synthesis.
5. Mechanism of action of ACE inhibitors.
6. Write short note on Quantum mechanics and Molecular mechanics
7. Define and classify antifungals with suitable examples.
8. Write note on solution phase synthesis.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Write the synthesis and uses of Piperazine.
2. Write the synthesis and uses of Crotamiton.
3. Write the synthesis and uses of Nitroglycerine.
4. Write the synthesis and uses of Fluorescein sodium.
5. Mechanism of action of Acyclovir.
6. Vasodilators.
7. Define partition co-efficient.
8.  $\beta$ -lactum antibiotics.
9. Write the mechanism of action of macrolides.
10. HMG CoA reductase inhibitors.

\*\*\*\*\*