

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

[LQ 0121]

**JANUARY 2021**

**Sub. Code: 2906**

**(APRIL 2020 EXAM SESSION)**

**M.PHARMACY DEGREE EXAMINATION**

**FIRST YEAR**

**BRANCH II – PHARMACEUTICAL CHEMISTRY**

**PAPER III – ADVANCED MEDICINAL CHEMISTRY**

***Q.P. Code: 262906***

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. a) Define enzyme inhibitors and classify them.  
b) Explain in detail the design of rapid reversible enzyme inhibitors and transition state analogues.
2. Discuss the concept and strategies involved in analogue design from lead molecule.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Explain the forces involved in drug receptor interactions.
2. Classify anti-neoplastic agents with example and give the mechanism of alkylating agents.
3. Explain the manufacturing methods of diphenhydramine.
4. Write a note on pharmacophore modelling.
5. Discuss the chemistry and biosynthesis of prostaglandins.
6. Brief note on physico chemical parameters involved in QSAR study.
7. Write the structure and synthesis of anyone proton pump inhibitors.
8. Add a note on Immunosuppressant.
9. Write a note on Enantioselectivity in metabolism.
10. Describe the approach of gastrointestinal absorption by prodrug design.

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