

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

[LQ 0121]

**JANUARY 2021**

**Sub. Code: 2913**

**(APRIL 2020 EXAM SESSION)**

**M.PHARMACY DEGREE EXAMINATION**

**FIRST YEAR**

**BRANCH IV – PHARMACOLOGY**

**PAPER IV – DRUG DESIGN AND MOLECULAR PHARMACOLOGY**

***Q.P. Code : 262913***

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. a) Discuss the concept, theories and forces involved in drug receptor interaction.  
b) Explain the combinatorial chemistry and its importance.
2. a) Discuss isosterism and biological activity.  
b) Describe lead seeking methods used in drug design.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Describe the gene mapping and its importance.
2. Discuss about Rational drug design.
3. How you determine the solubility property of the chemical compound as per monograph?
4. Discuss docking process in drug discovery program.
5. Briefly write on peptides as drug molecule.
6. Discuss about biosensors.
7. Clarify the applications of Molecular pharmacology.
8. What are receptor theories? Explain the Drug-Receptor occupation theory.
9. What is Pharmacogenomics? Explain their importance.
10. Hydrogen bonding and surface actions.

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