

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

[LO 352]

MAY 2019

Sub. Code: 2913

**M.PHARM. DEGREE EXAMINATION  
FIRST YEAR  
BRANCH IV – PHARMACOLOGY  
PAPER IV – DRUG DESIGN AND MOLECULAR PHARMACOLOGY**

*Q.P. Code : 262913*

**Time : Three hours**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Describe in detail about the role of selected physicochemical properties in relation to drug action and drug design.
2. Explain the principle, procedure and methods used in Recombinant DNA technology. Add a note on its application.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Hydrogen bonding and surface actions.
2. What are the disease targets for gene therapy?
3. Explain receptor polymorphism and its importance.
4. Discuss about the ionization.
5. Explain the combinatorial chemistry.
6. Explain lead seeking methods in drug design. Give its significance.
7. What are QSAR models?
8. Describe briefly about High throughput screening.
9. Explain Hansch equation.
10. What are the advantages and disadvantages of natural products and lead compounds?

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