

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

[MPHARM 0122]

**JANUARY 2022
(APRIL 2021 EXAM SESSION)**

Sub. Code: 2913

**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. Describe in detail about the basic considerations of drug design. Add a note on denovo drug design.
2. Enumerate the various cell signaling methods? Describe the various secondary messengers involved in signal transduction pathway.

II. Write notes on:

(10 x 6 = 60)

1. Write a note on gene mapping.
2. Explain about the isolation of RNA from yeast.
3. Write a note on computer aided drug design.
4. Discuss about the oxidation reduction potential.
5. Explain the term:
a) Steric behavior b) Hydrogen bonding c) Polarity.
6. How microarray chips are developed? Give its significance.
7. Explain the factors to be considered in lead optimization.
8. Describe the structure of G- Protein coupled receptors.
9. Explain the importance of chelates in medicine.
10. Write a note on partition coefficient.
