

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

[M.PHARM 0922]

SEPTEMBER 2022
(APRIL 2022 EXAM SESSION)

Sub. Code: 2987

M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New regulations 2016)
PHARMACOLOGY - MPL
PAPER III – PRINCIPLES OF DRUG DISCOVERY

Q.P. Code : 262987

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. What is meant by lead? Explain lead seeking methods with suitable example, How the identified lead is optimized?
2. What is rational drug design? Explain the structure based drug design with example.

II. Write notes on:

(7 x 5 = 35)

1. How siRNA can be used as targets?
2. How transgenic mice can be used for target validation?
3. Explain the following molecular property description and its significance in drug development
 - a) Topology
 - b) Polarizability.
4. State the Fee Willson equation. Give its limitations and assumption.
5. Differentiate SAR and QSAR.
6. Explain Q^2 and R^2 in QSAR analysis.
7. Differentiate COMFA and COMSIA.
