

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

[M.PHARM 0524]

**MAY 2024
(APRIL 2024 EXAM SESSION)**

Sub. Code: 2947

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New Regulations 2016)
PHARMACEUTICAL CHEMISTRY - MPC
PAPER III – COMPUTER AIDED DRUG DESIGN**

Q.P. Code: 262947

Time: Three hours

Answer ALL Questions

Maximum: 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Applications of contour map and statistical techniques in quantitative designing of a new molecule as a probable drug candidate.
2. A) Types of docking methods their advantages and disadvantages.
B) Quantum mechanics and Global minimum of a conformer.

II. Write notes on:

(7 x 5 = 35)

1. Log P, Taft and Hammett equation.
2. Virtual Screening Techniques.
3. Free Wilson and Hansch analysis.
4. DeNovo design.
5. Topliss Decision Tree.
6. Homology modeling for finding 3D structure of a protein.
7. Types of Pharmacophore based screening.
