

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

[LQ 0121]

JANUARY 2021

Sub. Code: 2987

(APRIL 2020 EXAM SESSION)

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. a) Explain the structure and pharmacophore based drug designing approaches with suitable example.
b) Add a note on pharmacophore mapping.
2. a) What is 3D QSAR? How it improves the drug development process? Explain 3D QSAR approach with suitable example.
b) Add a note on Fee Wilson Analysis.

II. Write notes on:

(7 x 5 = 35)

1. Write the role of bioinformatics in target identification.
2. What is SiRNA? State its role in drug discovery.
3. How transgenic mice model can elucidate a target validation process? Explain with one example.
4. Write a note on X-ray crystallographic technique in protein structure prediction.
5. Define the term in relation to protein.
a) Helix b) Motif c) Domain d) Codon e) Ribbon
6. Write a note on high through put screening.
7. Why solubility of the drug is an important parameter in drug discovery process?
