

QP CODE: 213328

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
February 2021**

M.Pharm (Pharmacology)

Paper III: Principles of Drug Discovery (MPL 203T)

Time: 3 Hours

Total Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essays

(3x10=30)

1. Describe various lead seeking methods in drug design. Elaborate on the importance and application of combinatorial chemistry in drug development.
2. Discuss briefly the fundamentals of QSAR. Write a note on QSAR parameters related to chemical structure and biological activity.
3. What is pharmacophore. Explain the essential parameters of 3D pharmacophore

Short Notes

(9x5=45)

4. What is de novo drug design
5. Discuss about pro drug concepts.
6. How docking studies are performed in silico
7. Structural factors in drug design.
8. Bioinformatics: applications in drug development
9. Application of NMR in protein structure prediction
10. Explain Hansch equation.
11. Explain in detail about gene mapping.
12. Zinc finger proteins
