

QP CODE: 213328

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
November 2024**

M.Pharm (Pharmacology)

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

(Common for 2017 and 2019 Scheme)

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. Mention the various stages of drug discovery and development. Explain in detail any two stages
2. Explain the following parameters QSAR • Log P • π -substitution constant
 • Hammett σ constants • Taft's steric factor (E_s)
3. Explain the various methods used for the prediction of protein structure

Short Notes

(9x5=45)

4. Antisense technologies
5. Explain the principle of combinatorial chemistry
6. Explain the advantages of rational drug design
7. Explain the concept of pharmacophore mapping
8. Molecular docking
9. Explain the rationale of prodrug design
10. Explain the concept of de novo drug design
11. Regression analysis and partial least square analysis
12. DNA microarray
