

QP CODE: 213328

Reg. No:.....

**Second Semester M. Pharm Degree Supplementary Examinations
December 2023**

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. Explain the various approaches used in target identification and mention their merits and demerits
2. Explain the prodrug design approaches to improve drug solubility, absorption and distribution
3. Explain the physicochemical parameters used in QSAR studies. Explain the relationship between Hansch analysis and Free Wilson analysis

Short Notes

(9x5=45)

4. Explain the various levels of protein structure
5. Explain the role of transgenic animals in target validation
6. Compare and contrast rational drug design and traditional drug design
7. Explain the various factors to be considered for assay development for hit identification
8. COMFA and COMSIA
9. Explain the various methods used for drug likeness screening
10. Explain the concept of de novo drug design
11. Antisense oligonucleotides
12. Protein microarray
