

QP CODE: 114328

Reg. No:.....

First Semester M.Pharm Degree Supplementary Examinations July 2023

M.Pharm (Pharmacology)

**Paper IV – Cellular and Molecular Pharmacology (MPL 104T)
(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. Classify receptors and discuss molecular structure of ligand gated Ion channels.
2. Write down the types of immunotherapeutics and explain the humanization antibody therapy.
3. Explain in detail about principles and applications of genomics and any two proteomic tools.

Short Notes

(9x5=45)

4. Write in detail about the cell cycles and its regulation.
5. Write notes on Janus – Kinase signal transducer and activator of transcription signaling pathway.
6. Cells signaling.
7. Briefly explain nutrigenomics.
8. Write briefly on ELISA and Western blotting.
9. Enumerate the recent advances in gene therapy.
10. Gene mapping.
11. Write briefly on the structure and functions of a typical eukaryotic cell.
12. Explain in brief Necrosis and Autophagy.
