Second Semester M.Pharm Degree Examinations August 2018

M.Pharm (Pharmacology)

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

(2017 Scheme)

Time: 3 Hours   **Total Marks: 75**

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essays   **(3x10=30)**

1. Discuss the importance of combinatorial chemistry and high throughput screening in drug development

2. Explain the different types of docking methods. Explain the mechanism of docking and applications of molecular docking in modern drug development process.

3. Add a note on ligand-based and structure-based drug design

Short Notes   **(9x5=45)**

4. Applications of NMR in protein structure prediction.

5. Discuss target identification and its application in drug discovery.

6. De-novo drug design

7. Pharmacophore-based virtual screening and add its applications.

8. siRNAs and its applications in functional genomics

9. Explain about 3D-QSAR and COMSIA.

10. Protein microarrays.

11. The objectives of pro drug and add a note on any one pro drug incorporated delivery system.

12. Describe the various regression analysis methods and explain principal component regression

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