Rajiv Gandhi University of Health Sciences

Second Semester M. Pharm Degree Examination - JAN-2019

[Time: 3 Hours] [Max. Marks: 75]

Principles of Drug Discovery -II

Q.P. CODE: 5179

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Answer any Three) **3 X 10 = 30 Marks**

1. With the help of a flowchart explain an overview of modern drug discovery process.
2. Write a note on various In silico lead discovery techniques.
3. Explain various In silico techniques for drug likeness prediction.
4. Discuss the physicochemical parameters used to quantify structure in QSAR.

SHORT ESSAY (Answer any Nine) **9 X 5 = 45 Marks**

5. Explain the concept of prodrug in drug discovery.
6. Explain the role of proteomics and bioinformatics in drug discovery and validation.
7. Write a note on high throughput screening for lead identification in a drug discovery process.
8. Explain the use of NMR in prediction of protein structure.
9. Write a note on ligand-based pharmacophore modeling for drug discovery.
10. Write a note on de novo drug design.
11. Explain the role of siRNA in target identification and validation.
12. Write a note on applications of prodrug to improve site-selective drug delivery.
13. Explain the major steps in molecular docking.
14. Write a note on traditional drug design.

* * * * *