Rajiv Gandhi University of Health Sciences

Second Semester M. Pharm Degree Examination - MAY-2018

[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. Explain the prediction of protein structure by threading and homology modeling methods.
2. Explain the Fee Wilson method with a suitable example.
3. Explain the factors to be considered in prodrug design with examples.
4. Discuss any two types of rational drug design methods.

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

5. Discuss the merits and demerits of Hansch and Fee Wilson analysis.
6. Explain about the role of high throughput screening in rational drug design.
7. Explain about flexible docking.
8. Explain In-silico drug design.
9. What are the applications of NMR and X-ray crystallography in protein structure prediction?
10. Write a note on 3D-QSAR.
11. Explain about role of bioinformatics in target identification and validation.
12. Explain the role of transgenic animals in target validation.
13. Explain about role of siRNA's target identification and validation.
14. Describe the rationale of prodrug design.

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