Rajiv Gandhi University of Health Sciences

First Year M. Pharm Degree Examination - MAY-2018

[Time: 3 Hours]   [Max. Marks: 100]

Medicinal Chemistry – I (Drug Design)
(Revised Scheme 4)

Q.P. CODE: 9347

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

LONG ESSAY (Answer any TEN)   **10 X 10 = 100 Marks**

1. What are the different biological targets for drug discovery? Explain with examples.

2. a) What is a pharmacophore? Explain a method for identification of a pharmacophore.
    b) Write a note on Ligand-Gated Ion channels and Orphan receptors.

3. Discuss the various mathematical methods used for the analysis in QSAR.

4. Explain the application of Hansch analysis with a suitable example.

5. Explain the concepts of (a) Virtual screening (b) Drug likeness.

6. Discuss (a) In Silico De Novo design (b) Topological drug classification.

7. Discuss the drugs used as immuno suppressants and immuno stimulants with examples.

8. Describe the development of gastric proton pump enzyme inhibitors and cycloxygenase inhibitors.

9. Explain the significance of prodrugs in drug design with specific examples.

10. What is epitope mapping? Give the importance of epitope mapping in drug design.

11. Relate quantitative structure activity relationship with biological activity of a drug molecule.

12. Discuss (a) Analog approach in drug discovery (b) Applications of QSAR.

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