

Time: Three Hours

Max. Marks: 75 Marks

Advanced Medicinal Chemistry

Q.P. CODE: 5119

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 principles of Enzyme inhibitors. Explain any method used of the design of enzyme inhibition.
2. Explain Stereochemistry of drug action with example.
3. Explain the concept of prodrug in detail. Write a note on carrier linked prodrug with example.
4. Explain and classify anticonvulsant agents with example. Write the synthesis and mechanism of action of Diazepam.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

5. Explain various theories of drug-receptor interaction with example.
6. Write a brief note on designing of peptidomimetics.
7. Explain various strategies followed to combat drug resistance in anticancer therapy.
8. Write a note on COX-2 inhibitors. Write the synthesis of any one COX-2 inhibitor.
9. Write a note on rigid analog strategies and alteration of chain branching in designing an analog.
10. Write a note on the chemistry of prostaglandins.
11. Classify antiviral agents with examples. Write the synthesis of Zidovudine.
12. Classify anticancer agents with example. Explain the synthesis of any one anticancer agent.
13. Write a note on artificial enzyme.
14. Write the synthesis and use of Diphenhydramine and Cimetidine.

* * * * *