

[Total No. of Questions - 15] [Total No. of Printed Pages - 2]
(2063)

915

B. Pharmacy 2nd Semester Examination

Drug Design

MP-223

Time : 3 Hours

Max. Marks : 90

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary continuation sheet will be issued.

- Note :** (i) Any one question of 25 marks is to be answered from Section I.
- (ii) Any three questions of 10 marks each are to be answered from Section II
- (iii) Any seven questions of 5 marks each are to be answered from Section III.

SECTION - I

Attempt any one of the following questions. (25×1=25)

1. Enlist the various approaches used in drug design. Discuss in detail different strategies used in analog based drug design.
2. Discuss in detail the basis of design and recent advances in the development of Anti-AIDS agents.

SECTION - II

Attempt any three of the following questions. (10×3=30)

1. Define bio-isosterism and discuss its application in drug design.

915/

[P.T.O.]

2. Discuss various methods of finding a lead compound.
3. Write down the recent advances in the development of antipsychotic agents.
4. Discuss the discovery & recent advances in design of peptidomimetics.

SECTION - III

Attempt any seven of the following questions. (5×7=35)

1. Discuss the theory of drug action.
2. Define pharmacophore. Explain various methods of 3D pharmacophore identification.
3. Discuss the utility of method of variation in drug design.
4. Write down a note on various quantum mechanical methods used in molecular modeling.
5. Discuss covalent and non-covalent enzyme inhibitors.
6. Write a note on transition state analogs.
7. Discuss the various biochemical informations used in evolving a new drug.
8. Discuss different approaches for the design of antagonist.
9. Enlist the various objectives of lead optimization.