

[Total No. of Questions - 18] [Total No. of Printed Pages - 2]
(2124)

1700

B. Pharmacy 5th Semester Examination

Medicinal Chemistry-I (NS)

BP-352

Time : 3 Hours

Max. Marks : 70

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

SECTION - A

Note: Attempt any two questions.

1. What is the fate of xenobiotics? Discuss in detail about the role of CYP-450 family proteins in bio transformations of drugs.
2. Discuss various methods of lead discovery with a comprehensive note on rational approaches of drug design.
3. Classify cholinergic drugs with suitable examples. Describe mechanism of action and SAR (structure activity-relationships) of anticholinesterases. (10×2=20)

SECTION - B

Note: Attempt any eight questions.

4. Write detailed note on bioisosterism.
5. Comment on bioprecursor and carrier linked prodrugs with suitable examples.
6. Discuss the role of lipophilicity in relation to biological action and briefly comment upon substituent's partition coefficient (π).
7. Classify selectives and hypnotics with suitable examples.

[P.T.O.]

8. Write synthesis of salbutamol or phenytoin.
9. What are psychopharmacological agents? Briefly discuss neuroleptics.
10. How quantum mechanical concepts are useful in drug design? Explain.
11. Write a short note on molecular docking.
12. Describe thermodynamic and extrathermodynamic approaches in QSAR.
13. Give the classification and mechanism of action of local anesthetics. (5×8=40)

SECTION - C

Note: Attempt all parts.

14. Write the name of any two tricyclic antidepressants.
 15. Draw structure of any two adrenergic drugs.
 16. What is the mechanism of action of curare alkaloids?
 17. Give the example of any two prodrugs & their active forms.
 18. Mention different types of opioid receptors. (2×5=10)
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