

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Pharm Degree Examination – Aug / Sep 2011

Time: Three Hours

Max. Marks: 80 Marks

MEDICINAL CHEMISTRY - I (Revised Scheme - 2)

Q.P. CODE: 1961

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Classify anticonvulsants with examples and give their mechanism of action. Write briefly on Hydantoins and Oxazolidine diones giving their therapeutic applications
2. Define and classify antihistamines with examples in each class. Discuss the mode of action and SAR of H₁-antagonists
3. How can you differentiate alpha and beta blockers? Give the structures and uses of any four beta blocking agents. Give the synthesis of propranolol

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. Describe the factors that affect drug metabolism
5. Discuss benzodiazepine derivatives as useful anxiolytics
6. What are Eicosanoids? Write briefly on Eicosanoid drugs
7. Define local anaesthetics. Outline the method of synthesis of Benzocaine and Lidocaine
8. Give an account of pyrazoline and pyrazolidine dione derivatives of medicinal importance
9. Write briefly on Ergot alkaloids
10. Explain the stereochemistry and synthesis of ephedrine
11. Write the structures of any three Cholinesterase inhibitors. Give the uses and synthesis of any one of them
12. Explain the relationship between biological action and hydrogen bonding
13. Write the structures of any four narcotic antagonists and mention their applications

SHORT ANSWERS

10 x 2 = 20 Marks

14. Write the structures of any two antitussive agents
15. Give the synthesis and uses of chloralhydrate
16. Write the structures of any two skeletal muscle relaxants
17. Write on biological significance of prostaglandins
18. Give the structure and uses of Diphenhydramine
19. Give the synthesis of phenacetin
20. Give the structure and uses of any two short acting barbiturates
21. Write a note on Solanaceous alkaloids
22. Write the structure and uses of ibuprofen and piroxicam
23. Write briefly on ganglionic blocking agents