

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Pharm Degree Examination – DEC-2014

Time: Three Hours

Max. Marks: 70 Marks

MEDICINAL CHEMISTRY - I (Revised Scheme 3)

Q.P. CODE: 2611

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

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Define sedative, hypnotic and anxiolytic agents. Explain the structure activity relationship of barbiturates. Give the synthesis of glutethimide and meprobamate.
2. Define antihistamines. Classify them with examples. Discuss the structure activity relationship of H₁-receptor antagonists and give the synthesis of promethazine and meclizine.
3. What are narcotic analgesics? Discuss peripheral and nuclear modifications of morphine.

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. Describe how drug action is influenced by chelation and partition coefficient.
5. Classify anticonvulsants with examples giving one structure of each class and outline the synthesis of Carbamazepine.
6. What are parasympatholytic agents and how are they classified? Give the synthesis of Dicyclomine.
7. Define and classify non-steroidal anti inflammatory drugs with examples. Give the synthesis of oxyphenbutazone.
8. Classify local anesthetics with examples giving one structure to each class. Outline the synthesis of Lidocaine.
9. Discuss the SAR of Benzodiazepines.
10. Discuss the biosynthesis of adrenergic neurotransmitters.
11. Write a brief note on indirectly acting cholinergic agonists.

SHORT ANSWERS

10 x 2 = 20 Marks

12. What is Dissociative anesthetic? Give one example with structure.
13. Give the synthesis of chlorpheniramine.
14. Factors affecting Drug metabolism.
15. Write the structure and uses of Naphazoline and Propranolol.
16. Bring out the similarities in structures of various categories of anticonvulsants.
17. What are ganglionic blocking agents? Give structure and uses of any one drug.
18. Give a brief account on muscarinic and nicotinic receptors.
19. Give the structure and uses of any two prostaglandins.
20. What are the differences between phase-I and phase-II reactions in drug metabolism.
21. Write a note on drugs used in spasticity.
