

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Pharm Degree Examination – May 2017

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. What are adrenergic drugs? Write the biosynthesis and metabolism of adrenergic neurotransmitters. Outline the synthesis of Naphazoline.
2. Classify barbiturates with examples. Discuss its structural activity relationship of barbiturates. Outline the synthesis of Pentobarbitone.
3. Discuss how solubility and ionization influences the biological activity. Add a note on protein binding.

SHORT ESSAYS (Answer any Six)**6 x 5 = 30 Marks**

4. Give the mechanism of action of anti-inflammatory agents and synthesis of ibuprofen.
5. What are anticonvulsants, classify with examples. Outline the synthesis of carbamazepine.
6. Explain the structural activity relationship of the H₁ receptor blockers.
7. What are general anesthetics? Classify them and outline the synthesis of halothane.
8. Explain the role of cytochrome p-450 in drug metabolism.
9. Outline the synthesis and uses of propranolol and physostigmine.
10. Explain the SAR of benzodiazepines.
11. Define and classify local anaesthetics with example. Outline the synthesis of benzocaine.

SHORT ANSWERS**10 x 2 = 20 Marks**

12. Factors affecting drug metabolism
13. Write on irreversible cholinesterase inhibitors.
14. Drugs used in spasticity.
15. Write the structure and uses of morphine and nalorphine
16. Conjugation reactions
17. Ganglionic blocking agents
18. Structure and uses of chloral hydrate and glutethimide
19. Structure and uses of any two prostaglandins
20. Write a note on anti tussive agents.
21. Gastric proton pump inhibitors
