

# Rajiv Gandhi University of Health Sciences, Karnataka

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

**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 antihistaminics. Classify with examples. Explain the structural activity relationships of  $H_1$  receptor blockers
2. Briefly discuss on various physicochemical parameters in relation to biological activity
3. What are anticonvulsants, classify with examples. Explain the structural activity relationships of benzodiazepines

### SHORT ESSAYS (Answer any Six)

**6 x 5 = 30 Marks**

4. What are general anesthetics? Give its classification and outline the synthesis of halothane
5. Explain phase I and phase II biotransformation
6. Outline the synthesis and uses of Phenobarbital and diazepam
7. Give an account of chemistry and biological activity of adrenergic blocking agents
8. Add a note on irreversible cholinesterase inhibitors
9. Explain the nuclear modification of morphine with example
10. Outline the synthesis and uses of acetaminophen and ibuprofen
11. Give the classification of NSAIDs with examples. Outline the synthesis of mefenamic acid

### SHORT ANSWERS

**10 x 2 = 20 Marks**

12. Structure and biological activity of cholinergic neurotransmitter
13. Drugs used in spasticity
14. Antitussive agents
15.  $H_2$  receptor antagonist
16. Local anesthetics
17. Structure and uses of thiopental sodium and methohexital sodium
18. Ganglionic blocking agents
19. Aryl acetic acid derivatives
20. Structure and uses of any two prostaglandins
21. Salicylic acid derivatives