

# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Pharm Degree Examination – 04-Jan-2020

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 analgesics? Classify analgesics with examples. Outline the synthesis of piroxicam and Oxyphenbutazone.
2. Illustrate with examples adrenergic blocking agents. Write the synthesis of Phentolamine & Propranolol.
3. Discuss how the following physicochemical properties influence the biological activity  
a) Solubility b) Protein binding c) Redox potential d) Surface activity.

### SHORT ESSAYS (Answer any Six)

**6 x 5 = 30 Marks**

4. Outline the synthesis and uses of Glutethimide and Chloralhydrate.
5. Outline the synthesis and uses of Clonazepam and Phenobarbitone.
6. Write the structure and uses of the following compounds?  
a) Ranitidine b) Omeprazole c) Practolol.
7. Write the structure and uses of any five cholinergic blocking agents.
8. What are general anaesthetics? Give its classification. Write a note on dissociative anaesthetics
9. Write the SAR of Barbiturates as Sedatives & Hypnotics.
10. What are Eicosanoids? Give some examples.
11. Write a note on reversible cholinesterase inhibitors.

### SHORT ANSWERS

**10 x 2 = 20 Marks**

12. Outline the synthesis of Diphenhydramine HCl.
13. What is Glycine conjugation reaction in drug metabolism & give one example?
14. Write the structure and use of Carbamazepine and Methohexital Sodium.
15. Outline the synthesis of Chlorpheniramine.
16. Drugs used in spasticity.
17. Outline the synthesis of Naphazoline.
18. Write in brief about cholinergic receptors.
19. Structure and uses of Cyclopentamine and Meprobamate.
20. Write the structure of any two Narcotic Antagonists.
21. Synthesis of Procaine.

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