

# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Pharm Degree Examination – DEC-2018

**Time: Three Hours**

**Max. Marks: 70 Marks**

## **MEDICINAL CHEMISTRY - I** **(RS - 4)** **Q.P. CODE: 2635**

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. Write a note on Cytochrome P-450 and monoaminoxxygenase with specific emphasis on its constitution and their role in biotransformation.
2. Define sedative and hypnotics. Explain the SAR of barbiturates. Write the synthesis of barbital.
3. a) Write a note on drug receptor interactions.  
b) Write a note on skeletal muscle relaxants.

### **SHORT ESSAYS (Answer any Six)**

**6 x 5 = 30 Marks**

4. Outline the synthesis and uses of propranolol and clonidine
5. Give the structure and therapeutic significance of any two irreversible cholinesterase inhibitors.
6. Define and classify local anaesthetic agents with examples. Outline the synthesis of procaine
7. Explain in detail about histamine receptors.
8. What are narcotic analgesics? Write the structure and uses of any four drugs.
9. Enumerate the structural elucidation of ephedrine.
10. Outline the synthesis of Diazepam and Glutethimide
11. Explain the importance of partition co-efficient in the biological activity.

### **SHORT ANSWERS**

**10 x 2 = 20 Marks**

12. Define the terms "hit" and "lead" in drug design
13. What are inhalation anaesthetics? Give examples
14. Define spasticity. Mention two antispastic drugs.
15. Outline the synthesis of isoproterenol
16. Write the structure and uses of any two cholinergic blocking agents
17. Write the structure and uses of trimethopran and mecamlamine
18. Write the synthesis of cetirizine
19. What are narcotic antagonists?
20. Write the structure of aspirin. Give its various medicinal uses.
21. What are prostaglandins? Give examples.

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