

Rajiv Gandhi University of Health Sciences, Karnataka
Fourth Semester B. Pharm Degree Examination – 25-Oct-2024

Time: Three Hours

Max. Marks: 75

Medicinal Chemistry - I

Q.P. CODE: 5014

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary
All the Questions are compulsory

LONG ESSAYS

2 x 10 = 20 Marks

1. Discuss the SAR of beta adrenergic blockers. Give the synthesis of propranolol
OR
Write the SAR of Morphine analogues, Discuss their mechanism of action
2. Classify anticonvulsants with structures. Write the synthesis of phenytoin and carbamazepine

SHORT ESSAYS

7 x 5 = 35 Marks

3. Explain the role of Cyt-450 in oxidative metabolic reactions of xenobiotics
OR
Write the SAR of direct acting sympathomimetics
4. Discuss the SAR of alpha blockers with examples
OR
How aspirin is metabolized? Show different routes
5. Classify barbiturates with suitable examples
6. Write a note on partition coefficient and bioisosterism in relation to drug action
7. Classify NSAIDs with examples
8. Write the role of bioisosterism in drug action
9. Write the synthesis of ibuprofen

SHORT ANSWERS

10 x 2 = 20 Marks

10. Write the factors affecting drug metabolism
11. Mention the receptors and neurotransmitters in adrenergic and cholinergic systems
12. Explain the biosynthesis of acetylcholine
13. Sketch the synthetic route for tolazoline
14. Classify adrenomimetics with examples
15. Write the structure and uses of sulpeiride
16. Write the structure and uses of phenobarbitone and mephobarbitone
17. Write the structure and mechanism of action of alprazolam
18. What are the pathways of drug metabolism?
19. Write the structure and uses of propoxyphene HCl
