

Rajiv Gandhi University of Health Sciences, Karnataka
Fourth Semester B. Pharm Degree Examination – 18-Mar-2021

Time: Three Hours

Max. Marks: 75 Marks

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. Define and classify Antipsychotics with examples. Give the structure of one drug from each class. Write the synthesis and uses of Diazepam and Chlorpromazine.

OR

Define and classify adrenergic agents. Discuss the SAR of adrenergic agonistic agents and write the synthesis of phenylephrine.

2. Distinguish between narcotic and non-narcotic analgesics. Classify non-narcotic analgesics with examples and structures. Write the synthesis of Ibuprofen and Mephenemic acid.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Define biotransformation. What is its importance? Write the sites of biotransformation.

OR

Define and classify cholinergic agents. Give the synthesis of Carbachol.

4. Discuss the SAR of Barbiturates

OR

Write note on alpha and beta adrenergic blockers. Give examples with structures. Write the synthesis of Tolazoline.

5. Write about cholinergic receptors, their types and functions. Write the biosynthesis of acetyl choline.
6. Discuss the role of ionization and solubility in drug action.
7. What are cholinergic agonists? Discuss their SAR.
8. Discuss the role of glucuronic acid and glycine in biotransformation.
9. What are General anaesthetics? Give examples. Outline the synthesis of Halothane and Ketamine.

SHORT ANSWERS

10 x 2 = 20 Marks

10. What do mean by bioisosterism? Give examples.
11. Enlist the factors affecting drug metabolism.
12. Give the name and structure of any two drugs used for nasal decongestion.
13. What is catecholamine? Mention any two important neurotransmitter catecholamines with structure.
14. Write a note on adrenergic beta receptors.
15. Give the structure, uses of Scopolamine and Edrophonium chloride.
16. Write the synthesis and uses of Neostigmine.
17. Write in brief about Cholinesterase Inhibitors.
18. Write the structure and uses of Haloperidol and Trimethadione.
19. Give the structure and uses of codeine and Naloxone.