

Rajiv Gandhi University of Health Sciences, Karnataka

Fifth Semester B. Pharm Degree Examination – 10-Nov-2021

Time: Three Hours

Max. Marks: 75 Marks

MEDICINAL CHEMISTRY - II

Q.P. CODE: 5018

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 antihistaminic agents with suitable examples and explain the synthesis of Diphenhydramine HCl.

OR

Define and classify diuretics with examples. Explain the mechanism of action of loop diuretics and write the synthesis of furosemide.

2. Define and classify local anaesthetics with suitable examples and write the SAR of benzoic acid derivatives.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Classify alkylating agents with examples and outline the synthesis of mechlorethamine.

OR

Write a note on antianginal agents and explain the synthesis of nitroglycerin.

4. What are antiarrhythmic drugs? Write the structure and uses of quinidine, procainamide HCl, phenytoin sodium and amiodarone.

OR

Write a note on antihyperlipidemic agents.

5. What are coagulants and anticoagulants? Write the synthesis of Warfarin.
6. Write the structure and uses of testosterone, diethyl stilbestrol, estrone, prednisolone and Dexamethasone.
7. Write a note on thyroid and antithyroid drugs.
8. Discuss the metabolism of steroids.
9. Define and classify oral hypoglycaemic agents with examples and write the synthesis of Tolbutamide.

SHORT ANSWERS

10 x 2 = 20 Marks

10. Define proton pump inhibitors? Give the structure of any one example.
11. Write the synthesis and uses of mercaptopurine.
12. Write the mechanism of action of alkylating agents.
13. Enumerate the synthesis of methyl dopa HCl.
14. Write the structure of any two calcium channel blocking agents.
15. Write the structure and uses of Minoxidil and Hydralazine HCl.
16. Outline the synthesis of Disopyramide phosphate.
17. Write the structure and uses of drugs used in congestive heart failure.
18. Write the structure and uses Sildenafil.
19. Outline the synthesis of procaine.
