

Rajiv Gandhi University of Health Sciences, Karnataka
III Year Pharm-D Degree Examination – 07-Jun-2024

Time: Three Hours

Max. Marks: 70 Marks

MEDICINAL CHEMISTRY (RS & RS2)

Q.P. CODE: 2865

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (answer any two)

2 x 10 = 20 Marks

1. Write four structures of cephalosporins. Write a note on β -lactamase inhibitors and SAR of tetracyclines.
2. What are anti-neoplastic agents? Discuss the mechanism of action of alkylating agents and anti metabolites. Outline the synthesis of Cyclophosphamide.
3. What are anti arrhythmic drugs? Classify them with examples. Write the structure and uses of Verapamil, Phenytoin and Propranolol.

SHORT ESSAYS (answer any six)

6 x 5 = 30 Marks

4. Discuss the chemistry and MOA of Sulphonamides.
5. What are anti-malarial drugs? Explain the life cycle of malaria.
6. Add a note on synthetic anti-fungal agents? Give the synthesis of Miconazole.
7. Give examples, MOA and clinical uses of Revers transcriptase inhibitors.
8. Name any four antiamebic drugs? Give the synthesis of Metronidazole.
9. Classify anthelmintics with examples. Give the synthesis of Albendazole.
10. Classify diuretics with examples.
11. Discuss the SAR of any two anti TB drugs.

SHORT ANSWERS

10 x 2 = 20 Marks

12. Write the structure of one prodrug and its active metabolites.
13. Give the synthesis of Chlorobutanol.
14. Write the synthesis of Warfarin.
15. Give the structure and uses of Isosorbide dinitrate.
16. Write the structure and uses any two antihyperlipidemic agents.
17. Name any two drugs used for examination of liver function tests.
18. What are artificial hormones? Give examples.
19. Name plant products used as anti-cancer drugs.
20. Give the structure and uses of two sulphonyl urea derivatives as oral hypoglycemic agents.
21. Write the structures of any two anti-coagulants.
