

Rajiv Gandhi University of Health Sciences, Karnataka

Sixth Semester B. Pharm Degree Examination – 23-Oct-2024

Time: Three Hours

Max. Marks: 75 Marks

MEDICINAL CHEMISTRY-III

Q.P. CODE: 5023

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 antimalarial agents with examples. Write the mechanism and synthesis of chloroquine.

OR

Define antibiotics? Classify them with examples? Discuss the chemistry and mechanism of action of amino glycoside antibiotics.

2. What are chemotherapeutic agents? Classify sulphonamides with structural examples. Outline the synthesis of Trimethoprim and Sulphamethoxazole.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Write the synthesis and MOA of Chloramphenicol.

OR

Discuss the chemistry and SAR of cephalosporins.

4. Write a note on macrolide antibiotics.

OR

Write the SAR of Tetracyclines.

5. Define and classify antiviral agents with suitable examples.
6. Write a note on prodrug designing.
7. Classify anthelmintics. Write the synthesis of Diethyl carbamazine citrate and Mebendazole.
8. Define and classify urinary tract anti-infectives and give the synthesis of Ciprofloxacin.
9. Write a note on folate reductase inhibitors.

SHORT ANSWERS

10 x 2 = 20 Marks

10. Applications of drug design.
11. Give the synthesis of Nitrofurantoin.
12. Write the structure and uses of Sparfloxacin.
13. Name any two antibiotics used as anti-tubercular drugs.
14. Write the synthesis of Acyclovir.
15. Write the structure and uses of Nalidixic acid.
16. Give the synthesis of para amino salicylic acid.
17. List out important antiviral agents. Give the structure and uses of any one antiviral drug.
18. Define Taft's steric parameter.
19. Classify synthesis antifungal agents. Add a note on their mechanism of action.