

Supply

Rajiv Gandhi University of Health Sciences, Karnataka
Sixth Semester B. Pharm Degree Examination – 29-Apr-2025

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

OR

Discuss about the etiology of malaria. Explain the SAR of 8-aminoquinolines with examples. Write the synthesis of Chloramphenicol.

2. Define and classify sulphonamides with examples. Write the SAR and chemistry of sulphonamides. Write the synthesis of Trimethoprim.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Comment on combination therapy of trimethoprim and sulphamethoxazole.

OR

Write a note on the drugs comes under penicillinase resistance penicillin's.

4. Write the synthesis of Pamaquine and Chloroquine.

OR

Explain the chemical degradation of cephalosporins.

5. Discuss the SAR of Tetracyclines.
6. Write the concept of application of combinatorial chemistry.
7. Add a note on synthetic antifungal agents. Give the synthesis of tolnaftate.
8. Discuss about the Microlide antibiotics.
9. Classify antiviral agents with examples. Write the synthesis of Acyclovir.

SHORT ANSWERS

10 x 2 = 20 Marks

10. Write the structure and uses of Ofloxacin.
11. Structure and uses of Proguanil.
12. Synthesis and uses of Mebendazole.
13. Name any two sulfonamides used in the treatment of burn therapy.
14. What the structure and uses of cycloguanil pamoate.
15. Write the structure and uses of Loviride.
16. Synthesis of Nitrofurantoin.
17. Write the structure and uses of Atovaquone.
18. Outline the synthesis of Isoniazid.
19. What is Hammett's electronic parameter? How is it useful in drug discovery?
