

# Rajiv Gandhi University of Health Sciences, Karnataka

Sixth Semester B. Pharm Degree Examination – 30-May-2023

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 antimalarials. Give the mechanism of action and SAR of quinolines and its analogues. Give the synthesis of Chloroquine.

**OR**

What are anthelmintics? Classify them with structural examples. Outline the synthesis and mechanism of action of Mebendazole.

2. What are beta lactam antibiotics? Give the degradation products of penicillins and cephalosporins. Write a note on Betalactamase inhibitors.

### SHORT ESSAYS

**7 x 5 = 35 Marks**

3. Write the SAR and MOA of Tetracyclines.

**OR**

Explain with examples Quinolones as urinary tract anti-infective agents.

4. Write a note on antifungal antibiotics.

**OR**

Classify antiviral agents. Give the synthesis of Acyclovir.

5. Write a note on prodrug concept and combinatorial chemistry in drug discovery.
6. What are sulphonamides? Give their SAR, MOA and uses.
7. Write a note on QSAR parameters.
8. Write the synthesis and MOA of Chloramphenicol.
9. Write a note on macrolide antibiotics.

### SHORT ANSWERS

**10 x 2 = 20 Marks**

10. What are Monolactam antibiotics? Give two examples.
11. Write the structures and uses of Ethambutol and Pyrazinamide.
12. Write the structure and uses of Zidovudine and Lamivudine.
13. Write the structure and uses of Clindamycin and Ciprofloxacin.
14. List out important antifungal agents. Give the structure and uses of any one antifungal drug.
15. Give the synthesis of Dapsone.
16. What are antiprotozoal agents? Give the structure of Iodoquinol.
17. What are Urinary tract anti-infective agents? Write the structure and uses of Sparfloxacin.
18. Write the synthesis of Isoniazid.
19. Define and classify prodrugs.

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