

Rajiv Gandhi University of Health Sciences, Karnataka

IV Year B.Pharm Degree Examination – NOV 2017

Time: Three Hours

Max. Marks: 80 Marks

MEDICINAL CHEMISTRY - II

(Revised Scheme - 2)

Q.P. CODE: 1969

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. Classify Sulphonamides with suitable examples. Explain the SAR among antibacterial sulphonamides. Give the synthesis of sulfisoxazole and sulfamethoxazole.
2. Give the therapeutic classification of antimalarials. Explain how synthetic antimalarials were developed from quinine as a lead. Write the synthesis of pamaquine.
3. Classify antihypertensive agents. Explain the following with suitable examples (a) Calcium Channels and their blockers. (b) Beta blockers.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. What are prodrugs? Explain the factors to be considered in designing a prodrug with suitable examples.
5. Write the examples of sulfonylureas and mention their specific uses. Give the synthesis of chlorpropamide.
6. Discuss the SAR of tetracyclines.
7. Outline the synthesis of pyrimethamine and chlorguanide.
8. Write a note on present therapy of tuberculosis. Outline the synthesis of Clofazimine.
9. What are hypocholesteremic agents? Write a note on HMG CoA reductase inhibitors and their MAO.
10. Explain with suitable examples (a) Dyes used as local anti-infective agents and (b) Halogen containing anti-infectives.
11. Add a note on (a) Stereochemistry of Beta lactam antibiotics and (b) Beta lactamase inhibitors.
12. Name any two synthetic antifungal agents and outline the synthesis of tolnaftate.
13. Give the structure of any two carbonic anhydrase inhibitors and give their MAO.

SHORT ANSWERS

10 x 2 = 20 Marks

14. What are ACE inhibitors? Give two examples with structure.
15. Write briefly on potassium sparing diuretics.
16. List out important antiviral agents. Give the structure and use of any one antiviral drug.
17. Give the synthesis of sulphapyridine.
18. Give the synthesis of clotrimazole.
19. Classify anthelmintics and Give the synthesis of Mebendazole.
20. Explain the synergistic action of sulphamethoxazole and trimethoprim.
21. Write short notes on Lincomycins.
22. Give the mechanism of action of alkylating agents.
23. Give the synthesis of Ciprofloxacin.
