

Rajiv Gandhi University of Health Sciences, Karnataka

Fourth year B.Pharm Degree Examination – August 2010

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 diuretics with suitable examples. Give their clinical significance. Outline the synthesis of acetazolamide and ethacrynic acid.
2. Classify sulphonamides with suitable examples. Give the synthesis of sulphamethoxazole and Trimethoprim.
3. Classify antineoplastic agents. Explain in detail the alkylating agents and antimetabolites with suitable examples. Add a note on immunotherapy.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. What are antipseudomonal cephalosporins? Add a note on oral and parenteral cephalosporins.
5. Discuss the mechanism of action and SAR of amino glycosides.
6. What are antiprotozoal agents? Give the structure and synthesis of any two antiprotozoal agents.
7. Outline the synthesis of clonidine and hydralazine.
8. Write a note on present therapy of tuberculosis. Outline the synthesis of isoniazid.
9. What are hypocholesteramic agents? Write a note on HMG CoA reductase inhibitors and their MAO.
10. Explain with suitable examples (a) Halogen containing anti-infectives and (b) Antifungal antibiotics.
11. Add a note on (a) Stereochemistry of Beta lactum antibiotics and (b) Beta lactamase inhibitors.
12. Name any four hypoglycemic agents and give the synthesis of tolbutamide.
13. Discuss the mechanism of action of nitrovasodilators. Write the structure of any two such agents.

SHORT ANSWERS

10 x 2 = 20 Marks

14. Name any two folate reductase inhibitors and give their uses.
15. Name any two antithyroid drugs and give their structures.
16. What are anticoagulants? Give two examples with structure.
17. Write briefly on preservatives.
18. Write the structure and use of acyclovir.
19. Give the synthesis of Ciprofloxacin
20. Give the mechanism of action and uses of minoxidil
21. Write the structure and use of Zidovudine.
22. Explain the synergistic action of sulphamethoxazole and trimethoprim.
23. Write short notes on Lincomycins.
