

Rajiv Gandhi University of Health Sciences, Karnataka

III Year Pharma-D Degree Examination – DEC-2014

Time: Three Hours

Max. Marks: 70 Marks

MEDICINAL CHEMISTRY

Q.P. CODE: 2865

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS

2 x 10 = 20 Marks

1. What are anticancer drugs? Classify with examples and write the mode of action and synthesis of Cyclophosphamide.
2. Write a note on development of antibiotics. Classify cephalosporins with example and give the synthesis of Chloramphenicol.
3. Define and classify hypoglycemic agents with examples. Outline the chemistry of Insulin and mode of action of Sulfonylureas.

SHORT ESSAYS

6 x 5 = 30 Marks

4. Classify urinary tract anti-infectives and give the synthesis of Norfloxacin.
5. Explain the parameters employed in the study of quantitative structure activity relationships.
6. Explain the SAR and mechanism of action of sulfonamides.
7. What are calcium channel blockers? Give examples and outline the synthesis of Nifedepine.
8. Define and give any four diagnostic agents with their structures and uses.
9. What are ideal preservatives? Outline the synthesis and uses of Chlorobutanol.
10. Write a note on computer aided drug design.
11. Classify antihyperlipidemic agents. Give the synthesis of Clofibrate.

SHORT ANSWERS

10 x 2 = 20 Marks

12. Name any two β - blockers and their uses.
13. Give the name and structures of any two plant products used in the treatment of cancer.
14. Give the name and structures of any two antithyroid drugs.
15. Define and give one example for prodrug.
16. Give the structure of an antifungal having Imidazole nucleus.
17. Give the synthesis and uses of Hexylresorcinol.
18. Write the structures of Doxycycline and Minocycline with their specific uses.
19. Define and give one example of anticoagulant.
20. Write the structure and chemical name of Procainamide and Phenytoin.
21. Give the structures of any two dyes used as anti-infective agents.
