

Rajiv Gandhi University of Health Sciences, Karnataka

III Year Pharm-D Degree Examination – MAY-2018

Time: Three Hours

Max. Marks: 70 Marks

MEDICINAL CHEMISTRY (RS & RS2)

Q.P. CODE: 2865

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. a) What are antibiotics? Classify them with examples and discuss the MOA and therapeutic uses of penicillins
b) Discuss the chemistry of streptomycin
2. Write the structure and specific uses of
i) Isosorbide dinitrate ii) Verapamil iii) Propranolol iv) Captopril
v) Clofibrate
3. a) Classify sulfonamides based on the duration of action. Give the synthesis of Dapsone.
b) Write a note on plant products and hormones as anticancer agents.

SHORT ESSAYS (answer any six)

6 x 5 = 30 Marks

4. Give examples, MOA and clinical uses of reverse transcriptase inhibitors
5. Write concept of multi drug therapy for mycobacterial infections
6. Discuss the role of pKa in the designing of newer sulfonamides with examples.
7. Give the MOA and synthesis of Chloroquine phosphate
8. Write the synthesis of Chlorambucil and Methotrexate
9. Classify antihypertensive agents with examples. Write the synthesis of Diltiazem
10. Add a note on synthetic antifungal agents. Give the synthesis of Tolnaftate.
11. Name any four antiamoebic agents. Give the synthesis of Metronidazole.

SHORT ANSWERS

10 x 2 = 20 Marks

12. Give the structures of two carrier linked prodrugs
13. Mention the electronic parameters used in QSAR studies
14. Write the structure and uses of alpha-1 antagonist
15. Give the MOA of Meglitinide
16. Mention the uses of Insulin and its derivatives
17. Write the structure of any two antithyroid drugs
18. What are high ceiling diuretics? Give examples
19. Structure and uses of Furosemide
20. Name any two drugs used for examination of lymphatic system
21. Write the structure and uses of estrogen and progesterone
