

Rajiv Gandhi University of Health Sciences, Karnataka

III Year Pharm-D Degree Examination – 29-Nov-2022

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. What are beta lactam antibiotics? Classify the cephalosporins according to their generation. Write a note on betalactamase inhibitors.
2. What are antimalarial drugs? Write the malarial life cycle and different drugs acting on the different stages. Write the SAR of quinolines.
3. Classify Anti-arrhythmic and antihypertensive agents. Write a note on Angiotensin Receptor Blockers.

SHORT ESSAYS (answer any six)

6 x 5 = 30 Marks

4. a) What are hypoglycemic agents classify them with examples. b) What are thiazide and thiazide like diuretics? Write the synthesis of benzthiazide.
5. Write the chemical classification of sulfonamides. Explain their mechanism of action.
6. Classify anthelmintics with structures. Write the synthesis of Diethyl carbamazone and Mebendazole.
7. Write the mechanism and SAR of tetracyclines.
8. Write a note on urinary tract anti-infective drugs. Outline the synthesis of ciprofloxacin.
9. Explain modern concept of rational drug design.
10. What are antineoplastic agents? Discuss the mechanism of action of alkylating agents.
11. Write the structure and specific uses of
 - i) Nifedipine ii) Atorvastatin iii) Dicoumarol iv) Phenindione iv) Clofibrate.

SHORT ANSWERS

10 x 2 = 20 Marks

12. Give the structure and uses of estrogen and Progesterone.
13. Write the synthesis of chlorpropamide.
14. Write the structure and uses of Sparfloxacin.
15. Write the structure and uses of Carbasone.
16. Mention the steric parameters used in QSAR.
17. Define prodrug with one example.
18. Give the synthesis of sulphamethoxazole.
19. Write the structure of Propyl iodide and Indigotin disulfonate.
20. Write the structure and uses of glipizide.
21. Synthesis of ethacrynic acid.
