



# Rajiv Gandhi University of Health Sciences, Karnataka

III Year Pharm-D Degree Examination – NOV 2017

**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) Write short notes on penicillinase resistant oral penicillins.  
b) Give an account of chemistry and stability of penicillin molecule
2. Classify cardiovascular agents with examples. Write an account on calcium channel blockers. Give the synthesis of Diltiazem
3. a) Add a note on folate reductase inhibitors. Explain the synergistic action of sulphamethoxazole and trimethoprim.  
b) Discuss the MOA of Mercaptopurine and Busulfan.

**SHORT ESSAYS (answer any six)****6 x 5 = 30 Marks**

4. Classify anthelmintics with examples. Give the synthesis of Albendazole
5. Classify antiameobic agents with examples. Give the synthesis of Metronidazole
6. Explain the SAR of sulfonamides? Give the synthesis of Dapsone
7. Describe in detail the status of natural products useful in the treatment of human malarial infections
8. Discuss the MOA of alkylating agents. Write the synthesis of Cyclophosphamide
9. Give three chemical structures and uses of drugs belonging to antihyperlipidemic agents
10. Name any four antiviral agents. Give the structure and uses of Amantadine.
11. Classify antitubercular agents. Write the structure of any two antitubercular drugs.

**SHORT ANSWERS****10 x 2 = 20 Marks**

12. What are lead molecules? How are they useful in drug discovery?
13. Define combinatorial chemistry. Enlist its applications
14. Write the structure and uses of alpha-2 agonist
15. Name any four drugs used in the treatment of type-2 diabetes
16. Give the MOA of Anagliptin
17. Write any two structures of Imidazole derivatives used as antithyroids
18. Give the MOA of mercurials
19. Structure and uses of Acetazolamide
20. Name any two drugs used for examination of angiography and urography
21. What are steroids? Name any one drug containing pregnane nuclei

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