

# Rajiv Gandhi University of Health Sciences, Karnataka

## III Year Pharm-D Degree Examination – NOV 2016

**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 (Answer any Two)****2 x 10 = 20 Marks**

1. What are Sulfonamides? Classify sulfonamides and give one example of drug with structure under each class. Give the mechanism of action of Sulphonamides.
2. Give the synthesis, mechanism of action and uses of (a) Chloroquine (b) Propranolol.
3. Discuss prodrugs in detail with examples. Add a brief note on computer aided drug design.

**SHORT ESSAYS (Answer any Six)****6 x 5 = 30 Marks**

4. Classify anti-arrhythmic agents with examples. Write the mechanism of action and therapeutic uses of Procainamide.
5. Add a note on SAR of 4-Amino quinolines.
6. Give three chemical structures and uses of drugs belonging to antihyperlipidemic agents.
7. Explain how anti-metabolites act as anti-neoplastic agents with suitable examples.
8. Classify diuretics with examples. Outline the synthesis of Acetazolamide.
9. Write the chemistry, mode of action and therapeutic uses of  $\beta$ -lactamase inhibitors.
10. Classify local anti-infective agents with examples. Outline the synthesis of Hexylresorcinol.
11. Write the chemistry and mechanism of action of Azole anti-fungal agents.

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

12. Give two examples and uses of Anthelmintics.
13. Write the synthesis of Isoniazid.
14. Define anticoagulants with examples.
15. Give two examples and uses of anti-protozoal drugs.
16. Give the chemical structure and uses of Ethambutol.
17. Applications of QSAR.
18. What are urinary tract anti-infectives and give examples.
19. What are anti-anginal drugs and give examples.
20. Write the structure and uses of any one cephalosporin's.
21. Name the heterocyclic nucleus present in Nifedipine and Pamaquine.

\*\*\*\*\*