

# Rajiv Gandhi University of Health Sciences, Karnataka

## III Year Pharma-D Degree Examination – Feb / Mar 2012

**Time: Three Hours****Max. Marks: 70 Marks**

### MEDICINAL CHEMSITRY

### 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. Classify diuretics and give one example with structure under each class. Give the structure activity relationships of thiazides. Outline the synthesis of acetazolamide
2. Explain the chemistry of  $\beta$  - lactam antibiotics. Write the chemical modification of their structure that have been useful better antibiotics
3. Classify anti-TB drugs. Discuss the problems that encounter in the clinical treatment of tuberculosis. Add a note on drugs used in the initial treatment of tuberculosis

**SHORT ESSAYS****6 x 5 = 30 Marks**

4. Classify anti-protozoal agents. Giving one example with structure under each class. Write the mechanism of action of any one
5. Write the structure and therapeutic uses of any four anti-viral agents
6. Explain the synergetic activity of co-trimoxazole
7. Discuss in brief on SAR of Tetracyclines
8. Write the chemistry and therapeutic uses of sex hormones
9. Define combinatorial chemistry and mention their applications
10. Classify anti - arrhythmic agents with examples. Write the mechanism of action and the rapeutic uses of verapamil
11. Write the chemistry and mechanism of action of Azole antifungal agents

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

12. Give the chemical structure and uses of Chloramphenicol
13. Give two examples and therapeutic uses of polypeptide antibiotics
14. Differentiate disinfectants and antiseptics
15. Give the mechanism of action of Alkylating agent
16. Write the synthesis of isoniazid
17. Write the chemical structure and use of any one sulfone drug
18. Give example and specific uses of adrenocorticoids
19. Write the chemical structure and use of nitrofurantion
20. Give the chemical structure and uses of ciprofloxacin
21. ACE inhibitors with examples

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