## 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  $6 \times 5 = 30 \text{ Marks}$ 

- 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  $10 \times 2 = 20 \text{ Marks}$ 

- 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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