

## Rajiv Gandhi University of Health Sciences, Karnataka III Year Pharma-D Degree Examination - Jan 2014

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

- What are antihypertensive agents? Classify them giving examples. Give the synthetic route of propranolol.
- 2. Discuss SAR of tetracyclines. Give their mechanism of action.
- 3 Classify local anti-infective agents with examples. Write the SAR and mechanism of action of alcohols.

SHORT ESSAYS  $6 \times 5 = 30 \text{ Marks}$ 

- 4. Explain the chemical degradation reactions of penicillins.
- 5. Write about the lipophilic parameters used in QSAR.
- 6. Discuss the chemistry and mechanism of action of antifungal antibiotics.
- 7. Write briefly about the chemistry and mechanism of action of anticoagulants.
- 8. Give the synthesis and uses of: (i) Furosemide (ii) Chloroquine.
- 9. Write an account on folate reductase inhibitors.
- 10. Discuss the chemistry and therapeutic uses of glucocorticoids.
- 11. Classify antiviral agents. Give the mechanism of action of zidovudine.

SHORT ANSWERS  $10 \times 2 = 20 \text{ Marks}$ 

- 12. Write any two structures and uses of vasodilators.
- 13. Define prodrug with an example.
- 14. What is synergism? Give example.
- 15. Beta lactamase inhibitors
- 16. Drug drug interaction of quinolone antibacterials
- 17. Give the synthesis and uses of metronidazole.
- 18. What is crystalluria? How to overcome it?
- 19. Sulfonamides used in burn therapy.
- 20. Give the structure and mechanism of action of enalapril.
- 21. Outline the synthetic route for ethacrynic acid.

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