Rajiv Gandhi University of Health Sciences, Karnataka III Year Pharm-D Degree Examination - NOVEMBER 2015

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)

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

- 1. Discuss the SAR and mode of action of Urinary Tract anti-infective Quinolones. Outline the synthesis of Ciprofloxacin.
- 2. What are Antihypertensive agents? Classify them with examples. Outline the synthesis of Propranolol.
- Define the term 'antibiotic'. Discuss the chemical degradation of Penicillin. Outline the synthesis of Chloramphenicol.

SHORT ESSAYS (Answer any Six)

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

- 4. Outline the synthesis and mode of action of any one β -blocker.
- 5. What are antifungal antibiotics? Write the structure of any two compounds.
- 6. Write a note on 'CADD'.
- 7. What are Carbonic Anhydrase Inhibitors? Discuss their mode of action.
- 8. Discuss the SAR of Sulphonamides. Add a note on their mode of action.
- 9. What are anti- Arrhythmic agents? Outline the synthesis of Procainamide.
- 10. Outline the synthesis and uses of Pamaquine and Pyrimethamine.
- 11. Discuss mode of action of anti hyperlipidemic agents with examples.

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

- 12. Write the structures of Diethyl Carbamazine and Mebendazole.
- 13. What are Macrolides? Write the structure of any one compound.
- 14. Write the structure and chemical name of Lomustine.
- 15. Outline the synthesis of PAS.
- 16. Write the structures and chemical names of any 4-Aminoquinoline anti-malarials.
- 17. Outline the synthesis of Warfarin.
- 18. Write the structure and uses of Zidovudine.
- 19. Discuss the concept 'Combinatorial Chemistry'.
- 20. Name any two Aminoglycoside antibiotics. Write the structure of any one.
- 21. What are anti-anginal agents? Write the structure of any one compound.
