Rajiv Gandhi University of Health Sciences, Karnataka Sixth Semester B. Pharm Degree Examination - 02-Dec-2020

Time: Three Hours Max. Marks: 75 Marks

MEDICINAL CHEMISTRY-III Q.P. CODE: 5023

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. Write the structure and uses of three drugs each from cephalosporins and tetracyclines. Discuss in detail SAR of tetracyclines.
- 2. What are antimalarial agents? Classify them with examples. Give the mechanism of action of quinolones and outline the synthesis of Pamaquine.
- 3. What are therapeutic agents? Classify sulphonamides with examples. Outline the synthesis of Trimethoprim and Sulphamethaoxazole.

SHORT ESSAYS (Answer any Seven)

 $7 \times 5 = 35 Marks$

- 4. Write a note on beta lactamase inhibitors.
- 5. What are aminoglycosides? Write the mechanism of action and chemistry of aminoglycosides antibiotics.
- 6. Write the SAR of 7-chloro 4-amino guinolines.
- 7. Write the chemistry and of Erythromycin.
- 8. What are first line anti-tubercular drugs? Write the structure of any two anti- tubercular drugs. Give the synthesis of para amino salicylic acid.
- 9. What are antiviral agents? Classify them with suitable examples.
- 10. Add a note on synthetic antifungal agents. Give the synthesis of Tolnaftate.
- 11. Define and classify anthelmintics. Write the synthesis of Diethyl carbamazine citrate.
- 12. Explain the modern concept of rational drug design.

SHORT ANSWERS (Answer All)

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

- 13. Write the structure and uses of Ampicillin.
- 14. Write the structure and uses of Chloramphenicol.
- 15. Give the synthesis of Isoniazid.
- 16. Outline the synthesis of Nitrofurantoin.
- 17. Give the structure and uses of any one antiviral drug.
- 18. Define anti-tubercular agents? Name the causative organism for tuberculosis.
- 19. List out antifungal agents having imidazole nucleus.
- 20. What are antiprotozoal agents? Give the structure and uses of Ornidazole.
- 21. Give the synthesis of Mebendazole.
- 22. Mention the electronic parameters used in QSAR.
