Time: 3 Hours Max. Marks: 70 Marks

## MEDICINAL CHEMISTRY - II (RS - 4) OP Code: 2644

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary.

## LONG ESSAYS (Answer any Two)

2 X 10 = 20 Marks

- 1. Define antibiotics? Write a note on  $\beta$  lactamase inhibitors. Explain the SAR & Mechanism of action of tetracyclines
- 2. Classify antihypertensive agents? Write a note on Antianginal agents? Give the structure and uses of any two nitro vasodilators.
- 3. What are anti arrhythmic drugs? Classify them with examples. Write structure and uses of verapamil, phenytoin and propranolol.

## **SHORT ESSAYS (Answer any Six)**

6 X 5 = 30 Marks

- 4. What are antitubercular agents? Write short notes on combination therapy for tuberculosis.
- 5. Give the examples of substituted Imidazoles as antifugal agents? Give the synthesis of Miconazole.
- 6. Classify sulfonamides based on site of action? Give the synthesis of Trimethoprim.
- 7. Give the mechanism and synthesis of chloroquine phosphate.
- 8. What are anticancer drug? Give the mechanism of action of alkylating agents.
- 9. Write any two structure and uses of the following. i)Calcium channel blocker ii) Antihyperlipidemic agents
- 10. Discuss the chemistry of quinolines. Write the synthesis of Nitrofurantoin.
- 11. Write synthesis of chlorambucil and methotrexate.

SHORT ANSWERS 10 X 2 = 20 Marks

- 12. Mention the steric paramaters used in OSAR.
- 13. Give the structures of two carrier linked prodrugs.
- 14. Write are anthelmintics? Give examples.
- 15. What are antiprotozoal agents? Give the structure of carbasone.
- 16. Give source, structure and uses of quinine.
- 17. Write the structure and uses of alpha1 antagonist.
- 18. Define hypoglycemia. Name any two sulfonyl urea derivatives.
- 19. Give the structure of any two antithyroid drugs.
- 20. Structure and uses of Acetazolamide
- 21. Mechanism of action of thiazide diuretics

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