Time: 3 Hours [Max. marks: 70]

## **Medicinal Chemistry II**

(Revised Scheme – 3) QP Code: 2619

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

## LONG ESSAY (Answer any two)

2 X 10 = 20 Marks

- Classify antifungal agents with suitable examples. Give the structure of any one antifungal antibiotic and outline the synthesis of tolnaftate.
- 2. What are beta lactam antibiotics? Give the degradation products of penicillin. Write a note on betalactamase inhibitors.
- 3. Classify antihypertensive agents. Explain the following with suitable examples.
  - a) Calcium channels and their blockers b) Beta blockers

## SHORT ESSAY (Answer any six)

6 X 5 = 30 Marks

- 4. What is crystalluria? Enumerate the methods to overcome it.
- 5. Add a note on folate reductase inhibitors. Explain the synergistic action of sulphamethoxazole and trimethoprim.
- 6. Explain with suitable examples a) Halogen containing antiinfectives b) Dyes used as local antiinfective agents
- 7. Write a note on combinatorial chemistry and prodrug concept in drug discovery.
- 8. Write a note on antitubercular antibiotics.
- 9. Define and classify antimalarial agents. Outline the synthesis of Pamaquine and Pyrimethamine.
- 10. Discuss the stability and SAR of tetracyclines.
- 11. Describe the chemistry and the synthesis of Chloramphenicol.

SHORT ANSWERS 10 X 2 = 20 Marks

- 12. Give the synthesis of diethyl carbamazine.
- 13. Give the synthesis of furosemide.
- 14. Write a note on plant products used in the treatment of cancer.
- 15. Write briefly on potassium sparing diuretics.
- 16. What are antiprotozoal agents? Give the structure and use of carbarzone.
- 17. Write the structure and use of erythromycin.
- 18. What are anticoagulants? Give the synthesis of warfarin.
- 19. Name any two anthithyroid drugs and give their structures.
- 20. Write the structure of any two quinolone antibacterials and give their uses.
- 21. List out important antiviral agent's. Give the structure and use of any one antiviral drug.

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