[Time: 3 Hours] [Max. Marks: 100]

Medicinal Chemistry-II (Natural Products) (Revised Scheme 4)

Q.P. CODE: 9348

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Answer any TWO)

2 X 20 = 40 Marks

- 1. Elucidate the structure of reserpine.
- With suitable examples, describe the modifications carried out to obtain orally active penicillins and cephalosporins.
- Discuss the chemistry and biological importance of male and female sex hormones.

SHORT ESSAY (Answer any FIVE)

5 X 10 = 50 Marks

- Give the structure and function of any two vinca alkaloids and elucidate the structure of any one of them.
- What are cardiac glycosides? Explain their chemistry and SAR.
- Explain the chemical features and mechanism of purine and pyramidine antimetabolites as a Anti-neoplastic agents.
- Write the synthesis of an anti-fungal agent and an antipseudomonal penicillin.
- Write a note on microbial conversions as tool in the preparation of drugs.
- 9. Write a note on chemistry of fat soluble vitamins.

SHORT NOTES 2 X 5 = 10 Marks

- Write the synthesis of an antipseudomonal cephalosporin.
- 11. Write the structures of Nocardicins with their therapeutic uses.

