

Total No. of Questions : 6]

SEAT No. :

P3185

[Total No. of Pages : 3

[5245]- 804

**Final Year B. Pharmacy (Semester - VIII)**

**MEDICINAL CHEMISTRY - IV**

**(2013 Pattern)**

*Time : 3 Hours]*

*[Max. Marks :70*

*Instructions to the candidates:*

- 1) *All question are compulsory.*
- 2) *Answers to the two sections should be written in separate books.*
- 3) *Figures to the right indicate full marks.*

**SECTION - I**

**Q1)** What are Antiviral Agents ? Give chemical classification of Antiviral Agents with example. Discuss in brief about Purine Nucleotides and Nucleosides. **[10]**

OR

Classify antimalarials with suitable example. Write chemistry and SAR of amino quinolines.

**Q2)** Answer the following (Any Five) : **[15]**

- a) Give the scheme of synthesis of Ciprofloxacin
- b) Discuss Chemistry, MOA and SAR of Imidazole antifungal agents.
- c) Discuss Chemistry. SAR and MOA of benzimidazole anthelmintics, giving examples.
- d) Give the scheme of synthesis of 5-Fluorocytosine.
- e) Explain DHFR inhibitors as Chemotherapeutic agents.
- f) Discuss NNRTIs as anti-HIV agents.
- g) Give the scheme of synthesis of Albendazole.

**P.T.O**

**Q3) Write short Note on (Any Two) :** **[10]**

- a) Antitubercular agents
- b) Antiameobic agents
- c) HIV protease inhibitors.
- d) Neuramidase inhibitors.

**SECTION - II**

**Q4) What are Antibiotics? Give chemical classification of Antibiotics. Discuss in brief about Macrolide Antibiotics.** **[10]**

OR

Explain the chemistry of  $\beta$ -lactam antibiotics; add a note on the development of acid and enzyme resistant penicillins.

**Q5) Answer the following (Any five) :** **[15]**

- a) Give the scheme of synthesis of Methotrexate.
- b) Give a brief account on Polyene antibiotics.
- c) What are Antifertility agents?
- d) Give the scheme of synthesis of Cephadroxil
- e) Write a note on Oral Contraceptives.
- f) Give Structure, IUPAC and Mode of action of Chloramphenicol.
- g) Give the scheme of synthesis of Amoxycillin Trihydrate.

**Q6)** Write short note on (Any two) :

**[10]**

- a) SAR and MOA of Tetracyclines.
- b) Antiestrogens.
- c) Write chemistry, SAR and mode of action of aminoglycoside antibiotics.
- d) Androgens.

