

Total No. of Questions : 6]

SEAT No. :

**P2013**

**[5145]-804**

[Total No. of Pages : 2

**Final Year B.Pharm.**

**4.8.4 : MEDICINAL CHEMISTRY - IV  
(2013 Pattern) (Semester - VIII)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

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

**SECTION - I**

**Q1)** What are Antimycobacterial agents? Discuss chemistry SAR, MOA and adverse effects of first line Antitubercular agents. **[10]**

OR

Classify antimalarials. Discuss SAR of 4-aminoquinolines, 8-aminoquinolines and 2, 4-diaminopyrimidines. **[10]**

**Q2)** Answer the following: (Any 5) **[15]**

- a) Give the scheme of synthesis of Proguanil.
- b) Explain giving examples, minimum structural requirements of sulphonamides to show antibacterial activity.
- c) Explain chemistry and mode of action of amantadine.
- d) Give the scheme of synthesis of Clotrimazole.
- e) Classify antiamoebic agents and explain of any one class.
- f) Discuss Chemistry, SAR, MOA of fluoroquinolone antibacterial agents, giving examples.
- g) Give the scheme of synthesis of Saquinavir.

*P.T.O.*

**Q3) Write short note on (Any 2):** **[10]**

- a) Reverse transcriptase inhibitors.
- b) Alkylating agents.
- c) Anthelmintic agents.
- d) Antiviral agents acting on influenza.

**SECTION - II**

**Q4) Classify  $\beta$ -lactam antibiotics on the basis of chemical nature. Discuss the development, mechanism of action and structure activity relationship of Penicillins with examples.** **[10]**

OR

Classify antibiotics on basis of chemical nature. Discuss mechanism of action and structure activity relationship of Tetracycline antibiotics with examples. **[10]**

**Q5) Answer the following (Any 5):** **[15]**

- a) Give the scheme of synthesis of Chlorambucil.
- b) Add a note on Androgens.
- c) What is GnRH antagonist?
- d) Give the scheme of synthesis of PAS.
- e) Explain selective estrogen receptor modulators.
- f) Comment on combination Oral Contraceptives.
- g) Give the scheme of synthesis of Amoxicillin Trihydrate.

**Q6) Write short note on (Any 2):** **[10]**

- a) Thyroid hormones and Antithyroid agents.
- b) Lincomycin Antibiotics.
- c) Monobactams and beta lactamase inhibitors.
- d) SAR and MOA of Chloramphenicol.

