

R07

Code No: R7604

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B. Pharmacy IV Year I Semester Examinations, May-2012

MEDICINAL CHEMISTRY-II

Time: 3 hours

Max. Marks: 80

**Answer any five questions
All questions carry equal marks**

- 1.a) What are antibiotics? Write their classification based on chemistry and mechanism of action with chemical structures. [10]
- b) Explain enzymatic hydrolysis of Penicillin's. [6]
- 2.a) Write the chemistry and SAR of Cephalosporin's. [10]
- b) Write the general method of synthesis of Penicillin's from 6-APA. [6]
- 3.a) Explain the mechanism of action, resistance, spectrum of activity and toxicity of Tetracyclines. [10]
- b) Explain the chemistry and three acidic constants of Tetracycline. [6]
- 4.a) Write a note on Chloramphenicol and Rifampicin. [10]
- b) Write a short note on different amino glycosides contain streptamine and deoxystreptamine rings. [6]
- 5.a) Write the structure, Physiological functions of Vitamin A and write a note on ISOTRETINOIN. [10]
- b) Explain the stereochemistry of Vitamin A. [6]
- 6.a) Write the catabolic reactions and physiological roles of Vitamin D. [10]
- b) Explain the chemistry and uses of Tocopherols. [6]
- 7.a) Explain the structure and physiological functions of Vitamin B₁ & B₁₂ [10]
- b) Explain the Epimerization and chelation of Tetracyclines. [6]
8. Write a note on the following.
 - a) Functions of Vitamin K
 - b) β -lactamase inhibitors
 - c) Macrolide antibiotics
 - d) Degradation of Riboflavin. [16]

---oo0oo---