

R07

Code No: R7604

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

IV Year B. Pharmacy I Semester Examinations, December 2011

MEDICINAL CHEMISTRY-II

Time: 3 hours

Max. Marks: 80

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

1. a) What are basic structural requirements of antibiotics? Classify them based on mechanism of action with chemical structures. [10 M]
b) Explain the degradation of penicillin's in acidic and alkaline media. [6 M]
2. a) Explain the chemistry and SAR of Cephalosporin's. [8 M]
b) Write a detailed note on β -Lactamase inhibitors. [8 M]
3. a) Write the basic structural features of Tetracycline's and add note on acidic constants of Tetracycline's. [8 M]
b) Explain the mechanism of action, spectrum of activity and toxicity of Tetracycline's. [8M]
4. a) Write a short note on different amino glycosides contain streptomine and deoxystreptomine rings. [8 M]
b) Write a note on polypeptide antibiotics [8M]
5. a) Explain the structure, physiological functions of Vitamin A. Write a note on TRETINOIN. [10 M]
b) Explain the stereochemistry of Vitamin A. [6 M]
6. a) Write the catabolic reactions and physiological roles of Vitamin D. [8 M]
b) Discuss the chemistry and biological significance of different tocopherols. [8 M]
7. a) Explain the structure, Physiological functions of Vitamin B₁ & B₁₂. [10 M]
b) Epimerization and chelation of Tetracyclins [6 M]
8. Write a note on the following.
a) β -lactamase inhibitors
b) Write the degradation of Riboflavin
c) Chloramphenicol
d) Synthesis of Penicillin. [16]
