

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. PHARM. - SEMESTER – III • EXAMINATION – WINTER 2012

Subject code: 930101

Date: 23/11/2012

Subject Name: Advanced Medicinal Chemistry

Time: 10.30 am - 01.30 pm

Total Marks: 80

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1. a. Discuss in detail about methodology used to identify hit molecules fast. Give brief account on various methodologies for synthesis and methods for identifying actives from library. 10
b. Write a note on Solid phase synthesis of peptides. 06
- Q.2. a. What are the different neurodegenerative diseases? Give detail account on diseases you have studied with recent advances in its therapy. 08
b. Write a note on immuomodulators. 04
c. Outline synthetic route for atorvastatin. 04
- Q.3. a. How microorganisms are useful in drug synthesis? Discuss with suitable examples. What are its limitations? 08
b. What are the recent advances in the therapy of hypertension? Give synthetic route for Nifedipine and Losartan. 08
- Q.4. a. Give chemical as well as target base classification of antimalarial agents. What are the recent advances in the therapy of malaria ? Give synthesis of chloroquine and pyrimethamine. 10
b. Write a note on recent development in the therapy of fungal infection. 06
- Q.5. a. What problems resistance can cause in the therapy of tuberculosis ? What are the recent advances in the therapy of TB ? Give synthesis of Isoniazid and ethambutol. 12
b. Write a note on somatostatin. 04
- Q.6. a. Write a note on development and fate of COX-2 inhibitors. What are alternate targets for NSAIDs? 08
b. What are the requirements for ideal H1-receptor antihistaminic agent. Write in brief about the recent development in this area. Give synthesis on Cetirizine. 08
- Q.7. Write short note on following 4 x 4
a. HTS
b. Fluoroquinolones as antibacterial agents
c. Recent development in the treatment of hyperlipidemia
d. Oral hypoglycemic agents
