

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

M.PHARM- SEM-III-EXAMINATION – MAY 2012

Subject code: 930101

Date: 18/05/2012

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.

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|-------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Q.1 | (a) | What are the rational behind use of microorganism for drug synthesis? Explain in detail with suitable examples. | 06 |
| | (b) | Discuss in detail about Enzyme Immobilization Techniques. | 05 |
| | (c) | Discuss the use of microbes for the synthesis of antibiotics. | 05 |
| Q.2 | (a) | Classify the cephalosporins and discuss future developments in cephalosporin design. | 08 |
| | (b) | Discuss the current and emerging targets for the oral hypoglycemic activity. | 08 |
| Q.3 | (a) | What is combinatorial chemistry? Discuss about its importance in new drug discovery. What are its advantages over other drug discovery approaches? | 06 |
| | (b) | Write in detail about recent advances in antifungal agents. | 05 |
| | (c) | Write in detail about High Throughputs Screening (HTS). | 05 |
| Q.4 | (a) | Discuss about recent advances in agents used to treat alzheimer's disease. | 06 |
| | (b) | Give detail account on Interferon and Insulin. | 05 |
| | (c) | Write a short note on peptidomimetics. | 05 |
| Q.5 | (a) | What are NSAIDS? Discuss the emerging targets for anti inflammatory activity. | 06 |
| | (b) | Discuss the SAR of fluoroquinolones and recent advances in this class. | 05 |
| | (c) | What are neurodegenerative diseases? Discuss in detail about antiparkinson drugs. | 05 |
| Q. 6 | (a) | What is (MDR-TB)? Discuss the investigational compounds for tretment of (MDR-TB). | 06 |
| | (b) | What is Cancer? Discuss the recent and future advances in its treatment. | 05 |
| | (c) | Discuss the Chemistry and SAR of glucocorticoids and recently developed glucocorticoids. | 05 |
| Q.7 | (a) | Enlist the various targets for the treatment hypertension with suitable example from each class. | 06 |
| | (b) | What is atherosclerosis. Discuss the investigational targets for its treatment. | 05 |
| | (c) | Discuss about recent advances in agents used to treat malaria. | 05 |
