

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm- SEMESTER-VII • EXAMINATION – WINTER -2020

Subject Code:2270003**Date: 06/01/2021****Subject Name: Pharmaceutical Chemistry-IX (Medicinal Chemistry-III)****Time: 10:30AM To 12:30PM****Total Marks: 54****Instructions:**

1. Attempt any **THREE** questions from Q-1 to Q-6.
2. **Q.7** is compulsory to attempt.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

- | | | |
|------------|--|-----------|
| Q.1 | (a) Classify Antibiotics. Explain the SAR of β -Lactam antibiotic. | 06 |
| | (b) Explain in detail life cycle of malaria. Give synthesis of Metronidazole. | 05 |
| | (c) Give a detailed account of antiamoebic agents. | 05 |
| Q.2 | (a) Describe in brief antineoplastic agent. Give synthesis of Tamoxifen & Thiotepa | 06 |
| | (b) Give the detail account of QSAR physicochemical parameters. | 05 |
| | (c) Write in brief Free Wilson model with its application. | 05 |
| Q.3 | (a) Write in brief mechanism of action of Macrolide with SAR of Aminoglycosides | 06 |
| | (b) Give synthesis, therapeutic uses & mechanism action of chloramphenicol. | 05 |
| | (c) Short Note on Computer Aided Drug Design. | 05 |
| Q.4 | (a) Classify sulphonamide. Give synthesis of sulphamethoxazole | 06 |
| | (b) Explain molecular modeling with its significance | 05 |
| | (c) Describe in brief β -Lactamase inhibitors. | 05 |
| Q.5 | (a) Explain in detail SAR of 4-Aminoquinoline & 8-aminoquinoline. | 06 |
| | (b) Give a detail account of antifungal agents | 05 |
| | (c) Write synthesis of a) Albendazole b) Clotrimazole | 05 |
| Q.6 | (a) Discuss in brief Antiviral agents. Give its mechanism of action with example. | 06 |
| | (b) Write a note on SAR of Tetracycline & Cephalosporine | 05 |
| | (c) Short note on Hansch linear Free Energy Relationship. | 05 |
| Q.7 | (a) Classify Sulphonamide. Give a SAR of Fluroquinolones. | 06 |
| | OR | |
| | (a) What is combinatorial synthesis in peptide & solid phase? | 06 |
| | OR | |
| | (a) Discuss in brief lead optimization. | 06 |
