

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- VI • EXAMINATION – WINTER -2022

Subject Code: BP601TP**Date: 04/01/2023****Subject Name: Medicinal Chemistry III****Time: 02:30pm to 05:30pm****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) | Write down chemical degradation β -Lactam antibiotics. Discuss about β -lactamase inhibitors. | 06 |
| | (b) | Write down synthesis of Trimethoprim & Dapsone. | 05 |
| | (c) | Write down SAR of Quinolones in details. | 05 |
| Q.2 | (a) | Write about etiology of malaria. Discuss classification of anti-malarial agents. | 06 |
| | (b) | Discuss SAR of Tetracycline. | 05 |
| | (c) | Explain about Pharmacophore modeling. | 05 |
| Q.3 | (a) | Define Prodrug. Discuss basic concepts and application of Prodrugs. | 06 |
| | (b) | Write a note on antiviral agents in details. | 05 |
| | (c) | Explain MDR-TB. Write a note on first-line anti tubercular agents. | 05 |
| Q.4 | (a) | Write down classification and SAR of Sulfonamides. | 06 |
| | (b) | Write about mode of action, therapeutic uses and synthesis of Chloramphenicol. | 05 |
| | (c) | Write a note on anti-protozoal agents. | 05 |
| Q.5 | (a) | Write down classification, mode of action and therapeutic uses of Aminoglycosides. | 06 |
| | (b) | What is QSAR? Write about Hansch analysis in QSAR. | 05 |
| | (c) | Write down synthesis of Chloroquine & Pamaquine. | 05 |
| Q. 6 | (a) | Explain in brief about azoles as antifungal agents. Give the synthesis of Miconazole. | 06 |
| | (b) | Discuss various approaches used in drug design. | 05 |
| | (c) | Explain about XDR TB. Write down synthesis of Isoniazid. | 05 |
| Q.7 | (a) | Define combinatorial chemistry. Discuss concept and applications of combinatorial chemistry. | 06 |
| | (b) | Write down classification of Anthelmintic agents. Write down synthesis of Mebendazole. | 05 |
| | (c) | Write down SAR of Macrolide. | 05 |
