

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM – SEMESTER VII • EXAMINATION – SUMMER -2021

Subject Code: 2270003**Date: 05/08/2021****Subject Name: PHARMACEUTICAL CHEMISTRY- IX****Time:10:30AM TO 01:30PM****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) | Classify Sulfonamides in detail with examples & structures. | 06 |
| | (b) | Explain SAR activity of sulfonamides. | 05 |
| | (c) | Write chemical name & synthesis of Sulfamethoxazole & Ofloxacin. | 05 |
| Q.2 | (a) | Classify fluoroquinolone & explain SAR activity of Fluoroquinolone. | 06 |
| | (b) | Enlist different types of beta- lactam antibiotics with examples & structures & explain any one type in detail. | 05 |
| | (c) | Classify Penicillin & explain mode of action of Penicillin. | 05 |
| Q.3 | (a) | Give any three structure of Macrolide antibiotics & explain why Arithromycin is unstable in acid media? | 06 |
| | (b) | Explain SAR activity of Tetracyclines. | 05 |
| | (c) | Explain chemical instability of penicillin in detail. | 05 |
| Q.4 | (a) | Classify anti malarial agents with examples & structures. | 06 |
| | (b) | Explain SAR activity of aminoglycoside antibiotics. | 05 |
| | (c) | Write chemical name & synthesis of Chloroquine & Metronidazole. | 05 |
| Q.5 | (a) | Explain XDR-TB. Write a note on second line anti TB agents. | 06 |
| | (b) | Enlist with structure various azole anti fungal agents & explain mode of action of azole anti fungal agents. | 05 |
| | (c) | Write chemical name & synthesis of Isoniazide & Ketoconazole. | 05 |
| Q. 6 | (a) | Classify anti neoplastic agents with examples & structures. | 06 |
| | (b) | Write a note on anti metabolites used as anti cancer agents. | 05 |
| | (c) | Write a note on anti viral agents. | 05 |
| Q.7 | (a) | Explain in detail molecular modeling. | 06 |
| | (b) | Write a note on methods of lead discovery. | 05 |
| | (c) | Write a note on QSAR. | 05 |
