

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 7 EXAMINATION – SUMMER -2019

Subject Code: 2270003**Date: 13-05-2019****Subject Name: Pharmaceutical Chemistry – IX (Medicinal Chemistry - III)****Time: 02:30 PM TO 05:30 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 is combinatorial chemistry? Discuss in detail about different methodologies used for synthesis? | 06 |
| | (b) Explain Hansch Linear Free Energy Relationship model in drug design? | 05 |
| | (c) Explain the Molecular modeling strategies and its applications? | 05 |
| Q.2 | (a) Give the SAR of quinolone antibacterial? Draw the scheme of synthesis of ciprofloxacin? | 06 |
| | (b) Write a note on Computer Aided Drug Design? | 05 |
| | (c) Give the synthesis of – | 05 |
| | i) Chloramphenicol ii) Sulphacetamide | |
| Q.3 | (a) Explain the SAR of sulfonamides? Comments on sulphonamides are not use in presence of pus? | 06 |
| | (b) Discuss in detail alkylating agents? | 05 |
| | (c) Write a short note on aminoglycoside antibiotics? | 05 |
| Q.4 | (a) Give the method of synthesis & uses of - | 06 |
| | i) Trimethoprim ii) Norfloxacin | |
| | (b) Classify anti-HIV agents with examples and write a note on protease inhibitors? | 05 |
| | (c) Explain the SAR of Tetracyclines? | 05 |
| Q.5 | (a) Define and classify anti-neoplastic agents with examples? Give the synthesis of Tamoxifen? | 06 |
| | (b) Discuss on the natural products used as anti-neoplastic agents? | 05 |
| | (c) Write a short note on antifungal agents? | 05 |
| Q. 6 | (a) Define and Classify antimalarial with suitable examples of each class? Give synthesis and mode of action of chloroquine? | 06 |
| | (b) Write a short notes on Antiamoebic agents? | 05 |
| | (c) Give the synthesis of – | 05 |
| | i) Amandatine ii) Fluorouracil | |
| Q.7 | (a) Classify antitubercular agents with examples? Explain the MOA of first line antitubercular agents? Give the scheme of synthesis of ethambutol? | 06 |
| | (b) Write the degradation of penicillin with structures? | 05 |
| | (c) Write a note on anthelmintics? | 05 |
