

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.PHARM - SEMESTER- 7 EXAMINATION – SUMMER -2020**

**Subject Code: 2270003****Date: 28-10-2020****Subject Name: Pharmaceutical Chemistry – IX (Medicinal Chemistry - III)****Time: 2:30 PM TO 5:30 PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- |             |  |           |
|-------------|--|-----------|
| <b>Q.1</b>  | (a) What are sulfonamides ? Give their uses and adverse effects.                                   | <b>06</b> |
|             | (b) Write short notes on $\beta$ -lactam antibiotics.  | <b>05</b> |
|             | (c) Give SAR of Penicillins.   | <b>05</b> |
| <b>Q.2</b>  | (a) Classify cephalosporins with examples.   | <b>06</b> |
|             | (b) What are fluoroquinolones. Write their SAR.  | <b>05</b> |
|             | (c) What are aminoglycosides ? Give their uses and mechanism of action.                            | <b>05</b> |
| <b>Q.3</b>  | (a) Classify Anti-TB drugs with examples. Give their mechanism of action.                          | <b>06</b> |
|             | (b) Give synthesis and SAR of Chloramphenicol.   | <b>05</b> |
|             | (c) Write short notes on Antiamoebic drugs.  | <b>05</b> |
| <b>Q.4</b>  | (a) Give life cycle of malarial parasite. Write SAR of Quinoline derivatives.                      | <b>06</b> |
|             | (b) Classify antifungal agents and give their mechanism of action.                                 | <b>05</b> |
|             | (c) Write short notes on anti-HIV agents.  | <b>05</b> |
| <b>Q.5</b>  | (a) Give IUPAC name and synthesis of ;<br>(i) Pyrimethamine (ii) Metronidazole (iii) Pyrazinamide. | <b>06</b> |
|             | (b) Write short notes on combinatorial chemistry.  | <b>05</b> |
|             | (c) Explain in brief about Anti viral agents.  | <b>05</b> |
| <b>Q. 6</b> | (a) What are Antineoplastic drugs ? Classify them with examples.                                   | <b>06</b> |
|             | (b) Write short notes on adverse effects of Anticancer drugs.                                      | <b>05</b> |
|             | (c) Give synthesis of Cyclophosphamide and Fluorouracil.   | <b>05</b> |
| <b>Q.7</b>  | (a) Explain Hansch linear free energy relationship model of QSAR.                                  | <b>06</b> |
|             | (b) Write short notes on Molecular modeling.   | <b>05</b> |
|             | (c) How lead optimization is done ?  | <b>05</b> |

\*\*\*\*\*