

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.PHARM - SEMESTER- 6 EXAMINATION – SUMMER -2020**

**Subject Code: BP601TP**

**Date:26-10-2020**

**Subject Name: Medicinal Chemistry III**

**Time: 10:30 AM TO 1:30 PM**

**Total Marks: 80**

**Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. All question carry marks.

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|------------|-----|--|----------|
| <b>Q.1</b> | (a) | Discuss various approaches used in drug design.  | <b>6</b> |
|            | (b) | Write brief note on Combinatorial Chemistry.   | <b>5</b> |
|            | (c) | What is QSAR? Give detailed note on Hansch model.  | <b>5</b> |
| <b>Q.2</b> | (a) | Classify Antimalarial Agents with examples and structures.   | <b>6</b> |
|            | (b) | Discuss SAR of Quinolines.   | <b>5</b> |
|            | (c) | Write note on concept and applications of Prodrugs.  | <b>5</b> |
| <b>Q.3</b> | (a) | Differentiate terms with examples: Bacteriostatics & Bactericidals. Write SAR of Cephalosporins.   | <b>6</b> |
|            | (b) | Write short note on Chemistry of Aminoglycosides.  | <b>5</b> |
|            | (c) | Discuss Chemistry and advantages of Semisynthetic Penicilins.                                      | <b>5</b> |
| <b>Q.4</b> | (a) | Comment on: "Tetracyclines should not be taken with milk". Write SAR of Tetracyclines.             | <b>6</b> |
|            | (b) | Give synthesis of Chloramphenicol and Chloroquine  | <b>5</b> |
|            | (c) | Write short note on Macrolides.  | <b>5</b> |
| <b>Q.5</b> | (a) | What is MDR TB & XDR TB? Write a note on first-line Anti TB drugs.                                 | <b>6</b> |
|            | (b) | Give synthesis of Isoniazid and Ciprofloxacin.   | <b>5</b> |
|            | (c) | Write short note on Quinolones.  | <b>5</b> |
| <b>Q.6</b> | (a) | Explain in brief about Azoles as Antifungal Agents. Write synthesis of Tolnaftate.                 | <b>6</b> |
|            | (b) | Explain SAR of Sulphonamides. Write synthesis of Sulphamethoxazole.                                | <b>5</b> |
|            | (c) | Give the IUPAC name, synthesis and mechanism of Albendazole OR Mebendazole, an anthelmintic agent. | <b>5</b> |
| <b>Q.7</b> | (a) | Write brief account on Antiamoebic Agents. Give synthesis of Metronidazole.                        | <b>6</b> |
|            | (b) | Give synthesis of Trimethoprim and Nitrofurantoin  | <b>5</b> |
|            | (c) | Write detailed note on Antiviral Agents.   | <b>5</b> |

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