

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. – SEMESTER-IV • EXAMINATION – WINTER -2022

Subject Code:BP402TP**Date:26/12/2022****Subject Name: Medicinal Chemistry-I****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.

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|-------------|---|-----------|
| Q.1 | (a) Explain Introduction, History and Development of Medicinal Chemistry. | 06 |
| | (b) Write a note on bioisosterism. | 05 |
| | (c) Explain factors affecting drug metabolism including stereo chemical aspects. | 05 |
| Q.2 | (a) Explain biosynthesis and catabolism of catecholamine. | 06 |
| | (b) Give structure activity relationship of sympathomimetic agents. | 05 |
| | (c) Write a note on Phase-I reactions in drug metabolism | 05 |
| Q.3 | (a) Explain classification of Sympathomimetic agents . | 06 |
| | (b) Explain structure activity relationship studies of Morphine and related drugs. | 05 |
| | (c) Give synthesis of Epinephrine and Salbutamol | 05 |
| Q.4 | (a) Define adrenergic blockers. Explain SAR of beta (β)-blockers. | 06 |
| | (b) Write a note on narcotic antagonist | 05 |
| | (c) Write a note on solanaceous alkaloids and analogues. | 05 |
| Q.5 | (a) Explain classification of Parasympathomimetic agents. | 06 |
| | (b) Explain structure activity relationship of cholinolytic agents. | 05 |
| | (c) Give Synthesis of Neostigmine and Carbachol. | 05 |
| Q. 6 | (a) Classify Antipsychotics giving suitable examples. | 06 |
| | (b) Explain classification of Anticonvulsant drugs. | 05 |
| | (c) Write a note on non-steroidal anti-inflammatory drugs (NSAIDS). | 05 |
| Q.7 | (a) Difference between sedative and hypnotics drugs. Explain SAR of benzodiazepine. | 06 |
| | (b) Give a synthesis of barbital and Diazepam. | 05 |
| | (c) Explain SAR of Phenothiazines with drug examples. | 05 |
