

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM – SEMESTER – 4 EXAMINATION – SUMMER-2025

Subject Code: BP404TP

Date: 04 - 06 - 2025

Subject Name: Pharmacology I

Time: 10.30 AM TO 01.30 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) Explain the factors affecting drug absorption. | 06 |
| | (b) Explain microsomal enzyme induction and inhibition with suitable examples. | 05 |
| | (c) Write a note on Plasma protein binding. | 05 |
| Q.2 | (a) Enlist different types of receptors and discuss G protein coupled receptors in detail. | 06 |
| | (b) Classify routes of drug administration. Differentiate between Oral route and Parenteral route. | 05 |
| | (c) Explain the signal transduction mechanism of tyrosine kinase receptors. | 05 |
| Q.3 | (a) Write a note on Adverse drug reactions. | 06 |
| | (b) Describe the combined effects of drugs. | 05 |
| | (c) Describe Pharmacokinetic type of drug-drug interactions with example. | 05 |
| Q.4 | (a) Classify neurotransmitters. Explain the steps of Neurohumoral transmission. | 06 |
| | (b) Write pharmacological action, uses and adverse drug reaction of adrenaline. | 05 |
| | (c) Classify Local anesthetics and write a detailed pharmacology of procaine. | 05 |
| Q.5 | (a) Classify Antimuscarinic agents. Explain pharmacological actions and clinical uses of Atropine. | 06 |
| | (b) Write a note on drugs used for glaucoma. | 05 |
| | (c) Differentiate between sympathetic and parasympathetic nervous system. | 05 |
| Q. 6 | (a) Differentiate between Benzodiazepines and Barbiturates. | 06 |
| | (b) Discuss pharmacologic actions of Alcohols. Discuss treatment of Alcohol addiction. | 05 |
| | (c) Classify general anesthetics. Discuss various stages of general anesthesia. | 05 |
| Q.7 | (a) Classify antipsychotic drugs. Justify: Atypical antipsychotic agents are superior as compared to typical. | 06 |
| | (b) Classify drugs used in Parkinsonism. Explain why Carbidopa is used in combination with Levodopa. | 05 |
| | (c) Describe pharmacology of opioid analgesics. | 05 |
