

GUJARAT TECHNOLOGICAL UNIVERSITY
PHARM.D YEAR-2 EXAMINATION – WINTER - 2025

Subject Code: 828804**Date: 20-11-2025****Subject Name: Pharmacology-I****Time: 02 : 30 PM TO 05 : 30 PM****Total Marks: 70****Instructions:**

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

- | | | | |
|-------------|-----|---|-----------|
| Q.1 | (a) | Classify anti-hypertensive agents and explain the mechanism of action, therapeutic uses, and adverse effects of ACE inhibitors. | 06 |
| | (b) | Explain the mechanism of action, therapeutic uses, and adverse effects of quinidine. | 04 |
| | (c) | Write a note on drugs used in the treatment of myasthenia gravis. | 04 |
| Q.2 | (a) | Classify various routes of administration. Write the merits and demerits of the oral route. | 06 |
| | (b) | Define the following terms: Inverse agonist, risk-benefit ratio, Therapeutic index, Partial Agonist | 04 |
| | (c) | Explain the factors affecting drug absorption and distribution. | 04 |
| Q.3 | (a) | Classify the sympatholytic agents. Explain the pharmacology of Adrenaline. | 06 |
| | (b) | Explain the following terms: Cheese reaction, Triple response | 04 |
| | (c) | Give a comment on the following statement: Thiazolidinediones class of drugs are contraindicated in cardiac patients. | 04 |
| Q.4 | (a) | Enlist the types of receptors and explain in detail G-Protein coupled receptors. | 06 |
| | (b) | Give the difference between succinylcholine and D-tubocurarine. | 04 |
| | (c) | Define Local Anesthetic agents. Explain the pharmacology of Thiopental. | 04 |
| Q.5 | (a) | Classify anti-inflammatory agents and explain the mechanism of action and therapeutic uses of aspirin. | 06 |
| | (b) | Explain the following terms: Lactic acidosis, Rhabdomyolysis, Dissociative anesthesia | 04 |
| | (c) | Write a note on Nasal Decongestants. | 04 |
| Q. 6 | (a) | Classify anti-diabetic agents and explain the mechanism of action, therapeutic uses, and adverse effects of SGLT2 inhibitors. | 06 |
| | (b) | Write a note on oral contraceptive agents. | 04 |
| | (c) | Classify anti-hyperlipidemic agents and explain the mechanism of action of fenofibrate. | 04 |
| Q.7 | (a) | Classify anti-asthmatic agents and explain the mechanism of action and therapeutic uses of salbutamol. | 06 |
| | (b) | Classify anti-convulsant agents and explain the pharmacology of phenytoin. | 04 |
| | (c) | Write a note on platelet-activating factors. | 04 |
