

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph SEMESTER VIII- • EXAMINATION – SUMMER -2025

Subject Code: 2280003**Date: 14/05/2025****Subject Name: Pharmaceutical Chemistry – X (Medicinal Chemistry- III)****Time: 10:30am to 01:30pm****Total Marks: 80****Instructions:**

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

- Q.1** (a) Give classification of cardiotonics. Explain SAR of Cardiac Glycosides. **06**
(b) Give Synthesis (any two): i) Dobutamine ii) Nifedipine iii) Lignocaine **05**
(c) Classify Anti-hypertensive agents with examples and Structure. **05**
- Q.2** (a) Define diuretics. Explain SAR of Thiazide diuretics. **06**
(b) Write a detailed note on Plasma expanders. **05**
(c) Give synthesis of (any two): i) Furosemide ii) Ethacrinic acid iii) Hydrochlorothiazide **05**
- Q.3** (a) Write a detailed note on antiarrhythmic agents. **06**
(b) Explain thrombolytic agents with its examples. **05**
(c) Explain SAR of HMG Co A reductase inhibitors. **05**
- Q.4** (a) What is Diabetes? Classify antidiabetics with examples. **06**
(b) Give Synthesis (any two): i) Metformin ii) Glipizide iii) Methimazole **05**
(c) Explain Antihyperlipidemic drugs in detail. **05**
- Q.5** (a) Explain nomenclature and stereochemistry of Steroids. **06**
(b) Give SAR of adrenocorticoids. **05**
(c) Give Synthesis (any two): i) Metoprolol ii) Amlodipine iii) Captopril **05**
- Q. 6** (a) Explain SAR of Dihydropyridines. **06**
(b) Write a note on Anti anginal agents. **05**
(c) Write a short note Anti-coagulants along with synthesis of Warfarin. **05**
- Q.7** (a) Explain Antiobesity agents. **06**
(b) Write a detailed note on immunomodulators. **05**
(c) Explain Antiplatelet agents in detail. **05**