

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 8 EXAMINATION – WINTER -2024

Subject Code: 2280003**Date: 26-11-2024****Subject Name: Pharmaceutical Chemistry – X (Medicinal Chemistry - III)****Time: 02.30 PM TO 05.30 PM****Total Marks: 80****Instructions:**

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

- Q.1** (a) What are cardiotonics? Write the mechanism of action and SAR of Cardiac glycosides. **06**
- (b) Give SAR of ACE Inhibitors. **05**
- (c) Write a note on Antiarrhythmic Agents. Give synthesis of Lignocaine. **05**
- Q.2** (a) Classify antihyperlipidemic agents with suitable examples and structure in each category **06**
- (b) Write a note on antianginal agents. **05**
- (c) Write down notes on Coagulants and Anticoagulants. **05**
- Q.3** (a) What are plasma expanders? Explain Plasma expanders with examples and Provide their chemistry **06**
- (b) Write informative note on Anti platelet Agents. **05**
- (c) Discuss in brief thrombolytic agents. **05**
- Q.4** (a) Write any three synthesis of: (i) Furosemide (ii) Metformin (iii) captopril. (iv) Nifedipine **06**
- (b) Discuss the SAR among of Thiazide Diuretics and Explain the synthesis of Hydrochlorthiazide. **05**
- (c) What are diuretics? Give details of 5-Sulfamoyl benzoic acid derivatives **05**
- Q.5** (a) What are anti-diabetic drugs? Classify them with recent advances in it. **06**
- (b) Discuss the SAR among HMG CoA Reductase inhibitors. **05**
- (c) Write a brief note on sex hormones **05**
- Q.6** (a) Discuss adrenocorticoides. **06**
- (b) Describe the mechanism of action and chemistry of insulin **05**
- (c) Define immunomodulators. Write two examples with structure each of immunostimulants and immunosuppressants. **05**
- Q.7** (a) Explain nomenclature and stereochemistry of steroids **06**
- (b) What are antithyroid agents? Classify with examples **05**
- (c) What is obesity? Write a note on antiobesity drugs. **05**
