

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm. - SEMESTER- VIII • EXAMINATION – WINTER -2022

Subject Code: 2280003**Date: 26/12/2022****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) Define and classify Diuretic Agents. Discuss the SAR among Progestins and Androgens **06**
(b) Write short note on Thrombolytic agents **05**
(c) Explain any two synthesis of: (i) Furosemide (ii) Hydrochlorthiazide **05**
(iii) Ethacrynic acid
- Q.2** (a) What are anti-diabetic drugs? Classify them with recent advances in it. **06**
(b) Discuss a brief note on antithyroid drugs. **05**
(c) Write any two synthesis of: (i) Tolbutamide (ii) Metformin (iii) Glipizide **05**
- Q.3** (a) Define and classify Antihypertensive Agents with suitable examples. **06**
(b) Discuss SAR of ACE Inhibitors. **05**
(c) Write any two Synthesis of: (i) Amlodipine (ii) Metoprolol (iii) Hydralazine **05**
- Q.4** (a) What are cardiotonics? Classify cardiotonics with examples. Give SAR of Cardiac glycosides. **06**
(b) Explain SAR of Dihydropyridines. **05**
(c) Write any two synthesis of: (i) Dobutamine (ii) Isosorbidedinitrate **05**
(iii) Lignocaine
- Q.5** (a) Explain the nomenclature and stereochemistry of Steroidal Compounds in detail. **06**
(b) Write a short note on coagulants and anticoagulants. **05**
(c) Outline any two Synthesis of: (i) Warfarin (ii) Clofibrate (iii) Carbimazole **05**
- Q. 6** (a) Define cardiac arrhythmia? Give MOA of any two anti-arrhythmic drugs. **06**
(b) Classify antihyperlipidemic agents with suitable examples and structure in each category. **05**
(c) Write a note on antianginal agents. **05**
- Q.7** (a) Discuss in details about Immunomodulators. **06**
(b) Write a note on Anti-obesity drugs. **05**
(c) Explain Plasma expanders with examples in detail. **05**
