

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. - SEMESTER-8 • EXAMINATION – SUMMER-2023

Subject Code: 2280003**Date: 07/07/2023****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.

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| Q.1 | (a) What are cardiac glycosides? Explain its chemistry and SAR in detail. | 06 |
| | (b) Classify antiarrhythmic drugs. Write structure of atleast one drug from each class. | 05 |
| | (c) Outline synthetic route for dobutamine and lidocaine | 05 |
| Q.2 | (a) What are antihypertensive agents? Give its chemical classification. | 06 |
| | (b) Explain SAR of ACE inhibitors. | 05 |
| | (c) Write a short note on antianginal agent. | 05 |
| Q.3 | (a) Explain SAR of HMG Co A reductase inhibitors. | 06 |
| | (b) Write a note on antiplatelet agents. | 05 |
| | (c) Explain in brief about thrombolytic agents. | 05 |
| Q.4 | (a) What are diuretics? Classify it with suitable examples. | 06 |
| | (b) Explain SAR of 5-Sulfamoyl benzoic acid derivatives. | 05 |
| | (c) Outline synthetic route for furosemide and acetazolamide. | 05 |
| Q.5 | (a) What are type I and II diabetes? Give classification of antidiabetic drugs. | 06 |
| | (b) Give synthesis of metformin and glipizide. | 05 |
| | (c) Write a note on anticoagulants. | 05 |
| Q. 6 | (a) Explain nomenclature and stereochemistry of steroids. | 06 |
| | (b) Give in detail about SAR of adrenocorticoids. | 05 |
| | (c) Write a note on plasma expanders. | 05 |
| Q.7 | (a) Explain about antiobesity drugs in brief. | 06 |
| | (b) Write a brief note on immunomodulators. | 05 |
| | (c) Describe briefly antithyroid drugs. | 05 |
