

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM – SEMESTER VIII • EXAMINATION – SUMMER -2020

Subject Code: 2280003**Date: 27-10-2020****Subject Name: PHARMACEUTICAL CHEMISTRY- X****Time: 10:30 AM TO 1:30 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 Positive Inotropic agents with examples & structures. Explain chemistry of Cardiac glycosides in detail. **06**
(b) Write a short note on (I) Organic nitrates (II) Calcium channel blockers **05**
(c) What is obesity? Write a note on anti obesity drugs. **05**
- Q.2** (a) Classify antianginal agents. Explain SAR activity of Cardiac glycosides. **06**
(b) Write a chemical name & synthesis of Lignocaine & Nifedipine. **05**
(c) Explain angiotensin I & angiotensin II blockers with examples & structures. **05**
- Q.3** (a) Classify anti hypertensive agents with examples & structures. **06**
(b) Write a short note on Plasma expanders. **05**
(c) Explain SAR activity of HMG – Co A reductase inhibitors. **05**
- Q.4** (a) What is re-entry phenomenon? Explain electrophysiological mechanism of anti arrhythmic agents. **06**
(b) Give the examples of Statins with structures & explain hydrolytic inhibition of HMG CoA reductase enzyme. **05**
(c) Write a chemical name & synthesis of Glyceryltrinitrate & Clofibrate. **05**
- Q.5** (a) Give the examples of first & second generation of Sulfonylureas with structures. Add a note on insulin. **06**
(b) Explain SAR activity of ACE inhibitors. **05**
(c) Write a chemical name & synthesis of Metformin & Warfarin. **05**
- Q. 6** (a) What is high-ceiling diuretics. Classify diuretics with examples & structures. **06**
(b) Write a short note on (I) Mineralocorticoid receptor antagonist **05**
(II) Sulfonamide derivatives
(c) Enlist different types of sex hormones with examples & structures & explain any one in detail. **05**
- Q.7** (a) Explain steroid nomenclature, stereochemistry & numbering system in detail. **06**
(b) Explain SAR activity of androgens & anabolic agents. **05**
(c) What are adrenocorticoids? Give biosynthesis of Aldosterone & Hydrocortisone. **05**
