

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 8 EXAMINATION – SUMMER -2019

Subject Code: 2280003**Date: 10-05-2019****Subject Name: Pharmaceutical Chemistry – X (Medicinal Chemistry - III)****Time: 10:30 AM TO 01:30 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 Antihyperlipidemic agents. Give the structural formula of any three drugs belonging to different class. **06**
(b) Discuss the SAR of HMG CoA Reductase inhibitors. **05**
(c) Write short notes on heparin as anticoagulant. **05**
- Q.2** (a) Classify Antiarrhythmic agents with one structure in each class. Write synthesis of Lignocaine. **06**
(b) Discuss Plasma expanders in detail. **05**
(c) Write short notes on sodium channel blockers as antiarrhythmic agents. **05**
- Q.3** (a) Classify diuretics with one structure in each class. Write mechanism of action, uses and side effect of spironolactone. **06**
(b) Give SAR of thiazide diuretics. **05**
(c) Write a note on Antiobesity Drugs. **05**
- Q.4** (a) Define and classify antidiabetic agents. Give the synthesis of Metformin. **06**
(b) Write a short note on Adrenocorticoids. **05**
(c) Explain in detail the nomenclature and stereochemistry of steroidal compounds. **05**
- Q.5** (a) Define and classify cardiotonics with examples. Give SAR of Cardiac glycosides. **06**
(b) Discuss SAR of ACE inhibitors. **05**
(c) Give the synthesis and uses of the following: (Any two) **05**
(i) Methimazole (ii) Dobutamine (iii) Atenolol
- Q.6** (a) Write informative note on Antiplatelet agents. **06**
(b) Discuss SAR of estrogens. **05**
(c) Write a detailed note on Immunomodulators. **05**
- Q.7** (a) What are androgens? Give their SAR and brief idea about anabolic agents. **06**
(b) Give synthesis of hydrochlorthiazide and Furosemide. **05**
(c) Give synthesis of glyceryltrinitrate and Nifedipine. **05**
