

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.

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|-------------|---|-----------|
| 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)
(i) Methimazole (ii) Dobutamine (iii) Atenolol | 05 |
| 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 |
