

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Pharm. - SEMESTER-VIII • EXAMINATION – SUMMER-2016

Subject Code: 2280003

Date: 02/05/2016

Subject Name: Pharmaceutical Chemistry-X (Medicinal Chemistry-III)

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.**

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|-------------|-----|---|-----------|
| Q.1 | (a) | What are cardiotonics ? Classify cardiotonics with examples. Give SAR of Cardiac glycosides. | 06 |
| | (b) | Write short notes on Thrombolytic agents. | 05 |
| | (c) | Give SAR of ACE inhibitors. | 05 |
| Q.2 | (a) | What is cardiac arrhythmia ? Give mechanism of action of anti-arrhythmic drugs. | 06 |
| | (b) | Write IUPAC name and synthesis of any two drugs :
(i) Nifedipine (ii) Metoprolol (iii) Hydralazine | 05 |
| | (c) | Write short note on Plasma expanders. | 05 |
| Q.3 | (a) | What are the causes of hypertension ? Write a note on β -blockers. | 06 |
| | (b) | Write SAR of estrogens. | 05 |
| | (c) | Write short note on immunomodulators. | 05 |
| Q.4 | (a) | Why diuretics are used ? Classify diuretics with examples. Give synthesis of Acetazolamide. | 06 |
| | (b) | Write short notes on coagulants and anticoagulants. | 05 |
| | (c) | Give IUPAC name and synthesis of Dobutamine and Flecainide. | 05 |
| Q.5 | (a) | What is Diabetes ? Classify antidiabetics with examples and give their mechanism of action. | 06 |
| | (b) | What are adrenocorticoids ? Give their physiological role. | 05 |
| | (c) | Write short notes on stereochemistry of steroids. | 05 |
| Q. 6 | (a) | What are androgens ? Give their SAR and brief idea about anabolic agents. | 06 |
| | (b) | Write a note on antithyroid drugs. | 05 |
| | (c) | Give synthesis of any two of the following drugs :
(i) Metformin (ii) Glipizide (iii) Carbimazole | 05 |
| Q.7 | (a) | What are antihyperlipidemic agents ? Write SAR of HMG CoA reductase inhibitors. | 06 |
| | (b) | Write a note on potassium sparing diuretics. | 05 |
| | (c) | What is obesity ? write a note on antiobesity drugs. | 05 |
