

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm-Semester-VIII Summer-2012 Examination

Subject code: 280003

Subject Name: Pharmaceutical Chemistry- X(Medicinal Chemistry)

Time: 10:30am to 1:30pm

Date: 21-05-2012

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) Classify antihypertensive agent and write a note on β -blockers **06**
(b) Outline SAR activity of Cardiac Glycoside **05**
(c) Write a note on QSAR? Describe Physico-Chemical Parameters in details **05**
- Q.2** (a) Define Antiarrhythmic drugs. Give a comprehensive account of 'antiarrhythmic agents' used as CVS drugs with one example in each category. **06**
(b) Outline SAR activity of HMG COA Reductase inhibitors. **05**
(c) Outline synthesis of following **05**
(a) Furosemide (b) Captopril
- Q.3** (a) Define Atherosclerosis and classify Antihyperlipidemic agents and give normal values for LDL, HDL, Triglycerides and Total Cholesterol levels. **06**
(b) Write a note on Hansch Linear Free energy Relationship (LFER) model. **05**
(c) Outline SAR activity of Thiazide diuretics. **05**
- Q.4** (a) How do computer aided Physico-chemical methods helps for drug interaction sequel to drug design **06**
(b) Write a note on Angiotensin II receptor antagonist with example **05**
(c) Discuss mode of action of Thiazide and carbonic anhydrase inhibitors. **05**
- Q.5** (a) Sketch out the process of blood clotting schematically and discuss on the intervention part of anticoagulants. **06**
(b) Write a note on organic nitrates. **05**
(c) Give structures of following **05**
(a) Hydralazine (c) Acetazolamide
(b) Procainamide (d) Spiranolactone
- Q.6** (a) Write a note on Antiplatelet agents and Thrombolytic agents. **06**
(b) Role of Combinatorial chemistry **05**
(c) Write a note on Plasma expanders **05**
- Q.7** (a) What do you mean by Molecular Modeling? What are two major aspects of molecular modeling? Explain **06**
(b) Write a note on Antiobese drugs. **05**
(c) Synthesis of (a) Warfarin (b) Dobutamine **05**