

GUJARAT TECHNOLOGICAL UNIVERSITY
B. PHARM. - SEMESTER – VIII EXAMINATION – OCTOBER 2012

Subject code: 280003**Date: 29/10/2012****Subject Name: Pharmaceutical Chemistry - X (Medicinal Chemistry)****Time: 02.30pm - 05.30pm****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) Discuss chemistry and SAR of Cardiac glycosides.	06
	(b) Discuss SAR of Thiazide diuretics.	05
	(c) Give IUPAC name and synthesis of Hydrochlorthiazide and Acetazolamide.	05
Q.2	(a) Classify Diuretics. Discuss Loop diuretics in detail and give synthesis of Furosemide.	06
	(b) Write note on Antiobesity drugs.	05
	(c) Discuss Sympatholytic antihypertensive drugs.	05
Q.3	(a) Write note on drugs acting on Renin angiotensin system.	06
	(b) Classify calcium channel blockers. Discuss dihydropyridines in detail.	05
	(c) Give IUPAC name and synthesis of Metoprolol and Captopril.	05
Q.4	(a) Classify antiarrhythmic drugs.	06
	(b) Write note on organic nitrates and nitrites.	05
	(c) Discuss Coagulants and anticoagulants.	05
Q.5	(a) Discuss SAR of Statins.	06
	(b) Give Mode of action, IUPAC name and synthesis of Clofibrate.	05
	(c) Write note on Antiplatelet agents.	05
Q. 6	(a) What is Lead compound? Explain methods for Lead identification.	06
	(b) Discuss methods for Lead optimization.	05
	(c) Write note on Molecular Modelling.	05
Q.7	(a) Explain Hansch random walk Theory.	06
	(b) Differentiate SAR and QSAR. Which physicochemical parameters are used in QSAR.	05
	(c) Write note on combinatorial chemistry.	05
