Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm Semester –II Examination Dec. - 2011

Subject code: 920201 Subject Name: Drug Design and Discovery Time: 10.30 am – 01.30 pm		Date: 12/12/2011		
		•	Total Marks: 80	
	 Att Ma 	empt any five questions. lke suitable assumptions wherever necessary. Jures to the right indicate full marks.		
Q.1	(a)	What is QSAR? Explain Different physiochemical para	meters utilized	06
	(b)	in QSAR analysis. Enlist stastical methods used to develop QSAR equatio multivariate methods in detail.	n & explain	06
	(c)	Explain Hansch & Free Wilson approach.		04
Q.2	(a)	Differentiate between Ligand based & Structure based drug de Explain SBDD in detail with suitable examples.		08
	(b)	Define force field. Enlist & explain different force field CADD.	l utilized in	08
Q.3	(a)	How stereochemistry & physiochemical properties affe of Drug molecule, explain with suitable examples.	ect the activity	08
	(b)	Define isosterism & bioisosterism. Explain with suitable	le examples.	08
Q.4	(a)	What is virtual screening. Explain the concept & tools screening.	of virtual	16
Q.5	(a)	Explain the following 3D-QSAR methods (Any two): I. COMFA II. Apex 3D III. DISCO		16
Q. 6	(a) (b)	Explain the importance of drug design approach in drug Enlist various approaches of drug discovery & explain briefly.		08 08
Q.7		Write short notes on:		16
	(a) (b)	Targets & theories of drug action Prodrug design & its application in drug design.		
