Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-V • EXAMINATION – SUMMER 2013

Subject Code: 650015 Subject Name: Bioinformatics Time: 02.30 pm - 05.00 pm Instructions: Date: 20-05 Total Mark			-2013	
			: 70	
Instru	1. 2.	Atto Ma	empt all questions. ke suitable assumptions wherever necessary. ures to the right indicate full marks.	
Q.1		(a)	Explain central dogma of molecular biology with diagram	07
Q.2		(b)	Explain biologist model with example Explain the following in detail	07
Q.2		(a)	What is public biological database with types of databases	07
		(b)	What is data annotation and data format	07
			OR	
0.1		(b)	Explain motifs and profiles with examples	07
Q.3		(a)	Attempt all questions Write a short note on	04+
		(a)	1) Genbank	03
			2) PDB	
		(b)	Explain pairwise sequence comparison in detail OR	07
Q.3		(a)	What is phylogenetic tree? and Explain types of phylogenic tree in detail.	07
		(b)	What is mutation and explain point and segmental mutation in detail	07
Q.4			Attempt following questions	
		(a)	Explain chemical composition of Protein structure in detail	07
		(b)	What is Data mining and explain data mining techniques OR	07
Q. 4		(a)	Explain SCOP,CATH and UNIPROT in detail.	07
		(b)	Explain Blast algorithm and its options	07
Q.5			Explain in brief	
		(a)	Write a short note on	03+
			1) Global alignment	04
		(b)	2) Gap panalty What is Genomes and Genomics	07
		(b)	OR	07
Q.5		(a)	Explain CGI and XML in detail	07
•		(b)	Explain SwissPort, Ghostview ,GV ,Xgobi with example.	07
