Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – WINTER • 2014

	•	Code: 170401 Date: 25-11-201	.4
Ti	-	Attempt all questions. Make suitable assumptions wherever necessary.	'0
Q.1	(a)	What is enzyme immobilization? Discuss any two methods of immobilization of enzymes. Describe various forces responsible for stabilizing protein structures.	07 07
Q.2	(b)(a)(b)	Differentiate between domain and motif of proteins. Give suitable examples. Comment on protein folding and protein modular structure. OR	07 07 07
	(b)	Explain the evolution of globin and dehydrogenase proteins.	07
Q.3	(a) (b)	Describe different levels of protein organization. Whether base sequence of genome is related with amino acid sequence of proteins? Justify.	07 07
Q.3	(a) (b)	OR Comment on the control and integration of functions of proteins. Comment on protein expression patterns in space and time.	07 07
Q.4	(a) (b)	Discuss the use of computer in the field of protein science. Discuss the evolution of protein function with suitable example. OR	07 07
Q.4	(a) (b)	Comment on the roles of molecular chaperons in protein folding. How and why you will use affinity chromatography in protein science.	07 07
Q.5	(a) (b)	What is electrophoresis? Describe its applications in protein science. What is enzyme specificity? Discuss different kinds of enzyme specificities. OR	07 07
Q.5	(a) (b)	Describe the basic strategies involved in the purification of protein mixture. Discuss various types of enzyme inhibition.	07 07
