Seat No.:	
No	

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION - SUMMER • 2015

Subject Code: 170401		t Code: 170401 Date: 01/05/201	Date: 01/05/2015	
	•	t Name: Enzymes & Proteins 2.30pm-05.00pm Total Marks: 7	70	
	tructi		70	
	2	Attempt all questions.Make suitable assumptions wherever necessary.Figures to the right indicate full marks.		
Q.1	(a)	Comment on the relationship between base sequence of genome and amino acid sequence of protein.	07	
	(b)	Give the advantages and disadvantages of enzyme immobilization.	07	
Q.2	(a) (b)	Enlist various protein stabilizing forces and describe any three. Comment on primary and secondary level of protein organization.	07 07	
		OR		
	(b)	Comment on tertiary and quaternary level of protein organization.	07	
Q.3	(a) (b)	Describe the use and importance of computers in the study of protein science. Comment on the evolution of different types of proteins.	07 07	
		OR		
Q.3	(a) (b)	Discuss the roles of molecular chaperons in the process of protein folding. Justify the use of affinity chromatography in the study of protein science.	07 07	
Q.4	(a)	Comment on the different types of enzyme specificities.	07	
	(b)	Discuss chemical methods of enzyme immobilization.	07	
0.4	(.)	OR	05	
Q.4	(a) (b)	Comment on the integration and control of various protein functions. Comment on the use of electrophoresis in the study of protein science.	07 07	
Q.5	(a) (b)	Compare competitive and non-competitive enzyme inhibition. Describe the use of Thin Layer Chromatography in the field of protein science.	07 07	
		OR		
Q.5	(a)	What is protein folding? Comment on the evolution of protein modular structure and its significance.	07	
	(b)	Comment on the survey of protein structures and functions.	07	
