Seat No.:	Enrolment No.
Seat No	Emoniem No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION - SUMMER 2013

Su Tii	bject ne: 1 cructic 1. 2.	Attempt all questions.	
Q.1	(a) (b)	Discuss fermentation profile of amylase production. What metabolic parameters should be considered during glutamic acid fermentation?	07 07
Q.2	(a) (b)	Explain various chemical and physical parameters to be taken care in ethanol fermentation. Describe the fermentation and recovery process of streptomycin.	07 07
	(2)	OR	0.
	(b)	Compare chemical and biological methods of ethanol fermentation.	07
Q.3	. ,	Discuss with suitable example process of solid state and submerge fermentation.	10
	(b)	Draw a label diagram of fermentation process.	04
Q.3	(a)	OR What are the significances of medium for any fermentation process? What are the different media components required for an organism?	07
	(b)	Explain in detail about primary and secondary screening. Write down the steps for screening of an antibiotic producing strain of an organism.	07
Q.4		Explain recovery process of citric acid. Name of organism used in citric acid fermentation. Discuss in detail about fermentation profile of lipase production	04 03 07
Q.4		Elaborate the steps of cephalosporin production. Write a note on strain improvement.	07 07
Q.5	(a)	Draw a schematic diagram of an ideal fermenter and discuss the ideal	07
	(b)	parameters of it. Differentiate between primary and secondary metabolites with suitable examples. In which phase of growth cycle of an organism it produces?	07
Q.5	(a)	Enlist various preservation techniques for industrially important strain of microorganisms. Discuss them in detail	10
	(b)	_	04
