Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) - EXAMINATION - SUMMER 2017

Subject Code: 2160408 Date: 05/05/2017

Subject Name: Agriculture and Food Biotechnology

Time: 10:30 AM to 01:00 PM Total Marks: 70

Instructions:

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

			MARKS
Q.1	1 2	Short Questions Name the bacterium associated with root nodules of legumes. The uptake of DNA into the bacterial cell is facilitated by the presence of in the medium.	14
	3	The undesirable change in a food that makes it unsafe for human consumption is known as	
	4 5 6 7 8 9	The most common food poisoning microbes are & Bacterium used for indirect transfer of genes in the crops is Botulism is caused by The major carriers of salmonellosis are & Aflatoxin is produced by The crushed grapes used wine manufacturing is also called	
	10 11	The bacterium commonly found to be involved in the fermentation of milk is The predominant microbes in the frozen foods are &	
	12 13	HTST pasteurization stands for Freezing at below °C will kill most pathogenic food bacteria and inactivate toxins.	
	14	Salt as a preservative plasmolyzes &	
Q.2	(a) (b) (c)	What are artificial sweeteners? Give two examples. Explain the nutritive value of foods. Discuss the role of artificial sweeteners in controlling diseases and deficiencies.	03 04 07
		OR	
Q.3	(c) (a) (b) (c)	Comment on the common microbial contaminants of foods. Briefly explain food as the source of energy. Describe food grades and standards. Comment on the biochemical changes occurring in the food products due to microbial contamination. OR	07 03 04 07
Q.3	(a)	What are food-borne intoxicants?	03
-	(b) (c)	Comment on tomato fruit ripening and its significance. What is food preservation? Describe commonly used food preservation methods.	04 07

tilizers? Give two examples of biofertilizers.	03
ic concept of organic farming.	04
ne use of bio-pharming for the production of high	07
OR	
edical applications of marine compounds.	03
th benefits of probiotics.	04
tegy for the production of liquid biofertilizers.	07
sticides? Give two examples of biopesticides.	03
nefits of organic farming.	04
tegy for the production of biopesticides.	07
OR	
microbial examination of foods.	03
products are boon or bane? Justify.	04
e commercial food processing methods.	07
	OR dedical applications of marine compounds. the benefits of probiotics. tegy for the production of liquid biofertilizers. Sticides? Give two examples of biopesticides. nefits of organic farming. tegy for the production of biopesticides.
