

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER 2018****Subject Code:2160408****Date:05/05/2018****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 (a) Explain the process of tomato fruit ripening.	03
(b) What are bioactive peptides? Give examples.	04
(c) Describe Agrobacterium-mediated gene transfer method and its significance.	07
Q.2 (a) Explain plant variety certificates.	03
(b) Comment on production of high value peptides and proteins.	04
(c) Discuss any two methods of direct gene transfer and their significance.	07
OR	
(c) Comment on the importance of marine compounds for industrial applications.	07
Q.3 (a) Write the advantages of biofertilizers.	03
(b) Biopesticides are boon or bane? Justify.	04
(c) Briefly describe various types of biofertilizers.	07
OR	
Q.3 (a) Write a note on the nutritive value of foods.	03
(b) Comment on agricultural waste management.	04
(c) Explain the concept of organic farming and highlight its benefits.	07
Q.4 (a) Explain any two methods of food preservation.	03
(b) Highlight the health benefits of probiotics.	04
(c) Describe microbiological examination of foods.	07
OR	
Q.4 (a) Highlight the health benefits of fermented foods.	03
(b) Explain the principles underlying the destruction of microorganisms by irradiation.	04
(c) Comment on food borne intoxicants and mycotoxins.	07
Q.5 (a) Explain the concept of biopharming.	03
(b) Explain Single Cell Protein (SCP) and its benefits.	04
(c) Describe production strategy and importance of mushroom.	07
OR	
Q.5 (a) Briefly explain food laws and standards.	03
(b) Comment on microbial deterioration of food products	04
(c) Comment on the role of artificial sweeteners in controlling diseases and deficiencies.	07
