

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – WINTER • 2014

Subject Code: 170402

Date: 02-12-2014

Subject Name: Agricultural and Food Biotechnology

Time: 10:30 am - 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.

- Q.1** (a) Define the term biopharming. Discuss the production of high value proteins and peptides. **07**
(b) What are the significances of marine compounds for industrial application? **07**
- Q.2** (a) What do you mean by organic farming? How agricultural waste management is done? **07**
(b) Describe direct gene transfer method. **07**
- OR**
- (b) Define biopesticide. Write the advantages of biopesticide. **07**
- Q.3** (a) What is the microbial growth pattern? **07**
(b) Explain about the biochemical changes caused by microorganisms in food? **07**
- OR**
- Q.3** (a) Describe about food poisoning. **07**
(b) Define food preservation. Discuss the biochemical methods of food preservation. **07**
- Q.4** (a) How bioprocessing of dairy product is done? **07**
(b) Enlist and explain methods for microbial examination of food. **07**
- OR**
- Q.4** (a) Write in brief about enzymes in food industry. **07**
(b) Describe in detail about sampling techniques for food analysis. **07**
- Q.5** (a) Write a brief account on nutraceuticals. **07**
(b) What is the basic principle behind food processing? **07**
- OR**
- Q.5** (a) Differentiate between natural sweetener and artificial sweetener. **07**
(b) Explain in brief about mycoprotein production. **07**
