



10BT74

Seventh Semester B.E. Degree Examination, June/July 2019
Food Biotechnology

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART - A

- 1 a. Explain the process of gelatinization and caramelization. Add a note on its application in the food industry. (07 Marks)
b. Give an account of the various steps involved in Milliard browning. (07 Marks)
c. What are the various constituents of food? Explain with examples. (06 Marks)
- 2 a. "Appetite and Satiety are controlled by hormones". Justify. (10 Marks)
b. Give an account of the function of electrolytes. Explain how dehydration can be assessed in a patient. (10 Marks)
- 3 a. What are the various primary sources of contamination in food? (06 Marks)
b. Explain the principles and procedure of dye reduction tests in the quality control of milk. (06 Marks)
c. Give an account of the DMC and membrane filtration techniques of enumeration of microorganisms. (08 Marks)
- 4 a. Explain the various types of spoilage occurring in fruits and vegetation. (10 Marks)
b. Give an account of food poisoning with respect to Campylobacter and Shigella. (10 Marks)

PART - B

- 5 a. What are the various problems associated with freezing and thawing of foods? (10 Marks)
b. Explain the methods used in preservation of food by radiation. Add a note on the legal states in India. (10 Marks)
- 6 a. What is Cheese? Explain the detailed manufacture of different kinds of cheese (08 Marks)
b. Give an account of the fermentation of distilled liquors. (07 Marks)
c. Give a brief account of the production of yogurt. (05 Marks)
- 7 a. Explain the salient features of a general food label. Add a note on nutritional labeling. (08 Marks)
b. Give an account of Modified Atmospheric Packaging and Controlled Atmospheric Packaging. (08 Marks)
c. Explain Protein Efficiency Ratio, Net Protein Utilization and Biological value. (04 Marks)
- 8 a. Write a short note on Flower enzymes. (05 Marks)
b. Give an account of Air blast freezers and Plate freezer. (10 Marks)
c. Explain the HACCP and FSO systems in food safety. (05 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.