

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)

CLASS: BTECH  
BRANCH: BIOTECHNOLOGY

SEMESTER : V  
SESSION : MO/2022

SUBJECT: BE315 FOOD SCIENCE AND TECHNOLOGY

TIME: 3:00 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
  2. Attempt all questions.
  3. The missing data, if any, may be assumed suitably.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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	FM	CO	BL
Q.1(a) Formulate a balanced diet plan for a person with iron deficiency based on local food items.	[2]	6	1
Q.1(b) Draw a generalized texture profile based on force curve generated as a function of time.	[3]	1	5
Q.1(c) Evaluate the health program run by Govt. of India and examine the steps taken to eradicate malnutrition in girl child.	[5]	6	3
Q.2(a) Classify the food spoilage microorganism.	[2]	2	1
Q.2(b) Describe the importance of fermented food in diet.	[3]	3	3
Q.2(c) Discuss the mode of transmission of typhoid fever and its symptoms.	[5]	1	1
Q.3(a) Define traditional food processing method.	[2]	2	5
Q.3(b) Provide some explanation on baking preferred over oil frying.	[3]	4	6
Q.3(c) Discuss the method of site directed mutagenesis for protein engineered enzymes.	[5]	4	3
Q.4(a) Describe proximate analysis of food.	[2]	2	1
Q.4(b) Provide and overview of pre-harvest and post-harvest factors in food quality.	[3]	5	4
Q.4(c) Explain the main features of Food Safety and Standard act, 2006.	[5]	2	5
Q.5(a) Draw a flow chart for the steps involved in food product development.	[2]	2	3
Q.5(b) Copper is preferred over stainless steel in cooking milk, Explain.	[3]	2	2
Q.5(c) Discuss the importance of omega-3 fatty acids. Identify 5 food items as a source of omega-3 fatty acids.	[5]	3	2

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