

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION)**

**CLASS: B.TECH
BRANCH: BIOTECHNOLOGY**

**SEMESTER: Vth
SESSION: MO/2022**

SUBJECT: BE315 FOOD SCIENCE AND TECHNOLOGY

TIME: 2 HOURS

FULL MARKS: 25

INSTRUCTIONS:

1. The total marks of the questions are 25.
 2. Candidates attempt for all 25 marks.
 3. Before attempting the question paper, be sure that you have got the correct question paper.
 4. The missing data, if any, may be assumed suitably.
 5. Tables/Data handbook/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q1 (a)	What are the major food groups? Describe the importance of fruits and vegetables in your diet.	[2] CO1	3
Q1 (b)	What are the factors responsible for the growth of microorganisms in food?	[3] CO2	2
Q2 (a)	What is beta carotene? List a few applications in the food industry.	[2] CO2	3
Q2 (b)	Name five microorganisms that are being used to obtain natural food colorants. Why artificial food colorants are harmful?	[3] CO4	2
Q3 (a)	What is malnutrition? Suggest some major steps to prevent malnutrition in children in the Indian context.	[2] CO5	4
Q3 (b)	Describe all the possible sources of microorganisms in food.	[3] CO6	5
Q4 (a)	Describe any fermented food obtained from Milk. How it is beneficial to health.	[2] CO2	3
Q4 (b)	What are the sources of Enterobacteriaceae in meat products? Provide five names of Enterobacteriaceae which caused food-borne illness.	[3] CO2	2
Q5 (a)	Define probiotics and their importance for health.	[2] CO5	5
Q5 (b)	What are psychrophilic microorganisms? Name some psychrophilic food-borne pathogens.	[3] CO2	2

::: 28/09/2022 :::E