CBCS SCHEME

ACHARYA INSTITUTE OF TECHNOLOGY MCA LIBRARY Date BANGALORE

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BBT654B

Sixth Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026

Food, Nutrition and Health

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

		Module – 1	M	L	C
Q.1	a.	Define food, nutrition and health. Explain the relationship between them.	10	L1	CO1
	b.	Explain the physiological, psychological and social functions of food.	10	L2	CO1
		OR			
Q.2	a.	Write a detailed note on water soluble vitamins.	10	L1	CO1
	b.	List and explain the functions and dietary sources of any three important minerals.	10	L1	CO1
		Module – 2			
Q.3	a.	Explain the nutritional requirements and apply appropriate meal planning strategies for any two life stages.	10	L2	CO2
	b.	Write short notes on BMI and BMR. How are they useful in assessing health?	10	L1	CO2
		OR			
Q.4	a.	Explain dieting and faulty food habits. What are disorders caused by them?	10	L2	CO2
	b.	Explain the long term consequences of child hood obesity and how it affects adult health and productivity.	10	L2	CO2
		Module – 3			
Q.5	a.	Define Nutritional Deficiency. Explain the types and methods of measurement.	10	L1	CO3
	b.	Write short notes on any three nutritional deficiency disorders: i) Vitamin A deficiency, ii) iron deficiency Anemia and iii) Iodine deficiency disorders.	10	L1	CO3

		OR			
Q.6	**a.**	Discuss the causes, effects and preventive measures for obesity.	**10**	**L2**	**CO3**
	b.	Discuss the case study where Ramesh, a 45-year old IT professional, has been following a sedentary lifestyle with frequent intake of junk food, sugary drinks and late night meals. Recently he was diagnosed with high blood sugar, high blood pressure and fatty liver what lifestyle and dietary habits could have led to these health issues? Explain how poor diet contributes to conditions like diabetes, hypertension and fatty liver. Suggest dietary and life style changes for Ramesh to manage and prevent further complications.	**10**	**L2**	**CO3**
		Module – 4			
Q.7	**a.**	Define Food Spoilage. Explain biological and chemical causes of spoilage. List any five signs of spoilage in perishable foods.	**10**	**L1**	**CO4**
	b.	State and explain five principles of food preservation. How do they help in improving shelf life of food?	**10**	**L2**	**CO4**
		OR			
Q.8	**a.**	Discuss the steps in planning balanced meal for the elderly. Mention dietary modifications and suggest a sample menu.	**10**	**L2**	**CO4**
	b.	List advantages and limitations of home scale preservation methods. Suggest two suitable methods for rural households with justification.	**10**	**L1**	**CO4**
		Module – 5			
Q.9	**a.**	Explain the stages of food product development. Illustrate with an example how an idea transformed into a marketable food product.	**10**	**L2**	**CO5**
	b.	Explain the role of interdisciplinary teams in food product development. State the contributions of food technologists, marketing experts and quality control personnel.	**10**	**L2**	**CO5**
		OR			
Q.10	**a.**	Explain the difference between line extension and new product development in the food industry. Provide two examples of each.	**10**	**L2**	**CO5**
	b.	Discuss the economic, environmental and cultural considerations in food product development. Provide examples to support your answer.	**10**	**L2**	**CO5**

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