



CBCS SCHEME

21BT652

Sixth Semester B.E./B.Tech. Degree Examination, June/July 2026

Food, Nutrition and Health

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. How do fat soluble vitamins and water soluble vitamins differ from one another? (10 Marks)
- b. It is said that health is a state of complete physical, mental and social well-being and not merely the absence of disease. Justify the statement. (10 Marks)

OR

- 2 a. With respect to the sources and deficiencies caused, explain the importance of calcium and phosphorus. (10 Marks)
- b. The physiological functions performed by food are the energy giving, body building protective and regulatory functions. Justify with examples. (10 Marks)

Module-2

- 3 a. "The food pyramid helps in making healthy eating easier". Justify with respect to guidelines set by ICMR. (10 Marks)
- b. How would you choose a meal plan for a pregnant and lactating individual? (10 Marks)

OR

- 4 a. What is Balanced Diet? How will one change the nutrition for an athlete / sports person? (10 Marks)
- b. How do BMR and BMI differ from each other? Calculate the BMR for a 20 year old female weighing 100 lbs and 5'2" tall. Do you think she comes under the Malnutritional category? (10 Marks)

Module-3

- 5 a. Distinguish between Biological value and Protein Efficiency ratio. (08 Marks)
- b. What are the factors of diet for coronary heart disease? (05 Marks)
- c. Explain the deficiencies caused by Iron and Iodine. (07 Marks)

OR

- 6 a. Distinguish between Type I, Type II and Type III Diabetes Mellitus. (08 Marks)
- b. Explain the etiology of atherosclerosis. (05 Marks)
- c. Describe dietary changes should be made for individuals with hyperlipidemia and fatty liver. (07 Marks)

Module-4

- 7 a. Explain the common nutrient losses during processing of food. (10 Marks)
- b. "Heat is the enemy of flavour and essential to the development of many desired flavour components"? Do you agree? Whether Yes / No substantiate. (05 Marks)
- c. Explain the role of Atmospheric Packaging of food. (05 Marks)

OR

- 8 a. How does nutritional losses differ in fruits and vegetables (05 Marks)
- b. Compare and contrast the changes in nutritional content of dairy products cereals and pulses. (10 Marks)
- c. Compare the methods used in high temperature preservation. (05 Marks)

Module-5

- 9 a. With a case study analyse as to why many food startups do not flourish and transform to Unicorns (10 Marks)
- b. Explain the role of HACCP and FSSAI in food quality. (10 Marks)

OR

- 10 a. Distinguish between Repositioned and reformulated foods citing examples (10 Marks)
- b. What are the various factors to be considered in food product development? (10 Marks)

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