

# CBCS SCHEME

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18BT753

## Seventh Semester B.E. Degree Examination, June/July 2023 Food, Nutrition and Human Health

Time: 3 hrs.

Max. Marks: 100

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

### Module-1

- 1 a. Explain how physical, mental and social health play an important role in healthy well being. (10 Marks)  
b. Highlight different fat soluble and water soluble vitamins. (10 Marks)

OR

- 2 a. "The physiological functions performed by food are energy giving body building, protective and regulative functions". Justify the statement. (10 Marks)  
b. Distinguish between micro and macro nutrients. Add a note on role of calcium and iodine in maintaining good health. (10 Marks)

### Module-2

- 3 a. Compare the meal planning for pediatrics V/s geriatrics. Justify your answer. (10 Marks)  
b. Distinguish between BMI and BMR. What are the factor affecting BMR? List the formulate for calculating BMR using Harris-Benedict's equation for males and females. (10 Marks)

OR

- 4 a. Write short notes on :  
i) Food Pyramid (05 Marks)  
ii) Role dieticians in maintain good health. (05 Marks)  
b. Describe in detail about various lung volumes and capacities. (10 Marks)

### Module-3

- 5 a. Define biological value and protein efficiency ratio. Explain in detail the causes, symptoms and treatment of Iron Deficiency Anemia (IDA) (10 Marks)  
b. Distinguish between Type I and Type II Diabetes Mellitus. Explain the dietary considerations to control sugar levels. (10 Marks)

OR

- 6 a. Write short notes on :  
i) Zinc Deficiency (05 Marks)  
ii) Obesity (05 Marks)  
b. Elucidate the etiology, symptoms, diagnosis and treatment of cardiovascular diseases. (10 Marks)

### Module-4

- 7 a. Enumerate the different methods of processing used in the food industry. Highlight the importance of food processing. (10 Marks)  
b. Summarize the nutritional contributions and changes that occurs during cooking of pulses and eggs. (10 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.

**OR**

- 8 a. Explain in detail the various methods of cooking. Add a note on advantages and disadvantages of each of these methods. (10 Marks)
- b. Categories the various nutrients losses during food processing. Add a note on methods to minimize the nutrient losses. (10 Marks)

**Module-5**

- 9 a. Define food product development. List the different steps involved in food product development. (10 Marks)
- b. Explain the standards and guidelines with respect to FSSAI and HACCP. (10 Marks)

**OR**

- 10 a. Comment on the market concerns, consumer, demands, technological concerns and governmental influences in development new food product. (10 Marks)
- b. Describe the types of new food products. Add a note on repositioned and reformulated foods. (10 Marks)

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