



# CBCS SCHEME

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18BT641

Sixth Semester B.E. Degree Examination, June/July 2023

## Food Process Engineering

Time: 3 hrs.

Max. Marks: 100

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

### Module-1

- 1 a. What are the basic functions of the nutrients in food? Enlist various constituents of food. (10 Marks)
- b. Define Rancidity. List out the factors and types of Rancidity. (10 Marks)

OR

- 2 a. Explain the main colloidal systems prominent in food stating the phases and giving relevant examples for each. (10 Marks)
- b. Classify the different types of browning reactions seen in food. (10 Marks)

### Module-2

- 3 a. List various extrinsic and intrinsic factors of food spoilage. (10 Marks)
- b. Describe the most probable number technique of enumeration of food micro-organisms. (10 Marks)

OR

- 4 a. Explain in brief:
  - (i) Primary sources of micro organisms in food and food products
  - (ii) Synopsis of food borne molds(10 Marks)
- b. Write short notes on:
  - (i) Standard plate count
  - (ii) Due-reduction test(10 Marks)

### Module-3

- 5 a. Explain preservation of food by high temperature techniques. (10 Marks)
- b. Discuss on fermented foods – A history of improvement. (10 Marks)

OR

- 6 a. State your point of view on:
  - (i) Application by radiation of food
  - (ii) Preservation of food by drying methods(10 Marks)
- b. Tabulate the different types of fermented dairy products. (10 Marks)

### Module-4

- 7 a. Name any five properties of enzymes that are important to food scientist. (10 Marks)
- b. Define Nutraceuticals. Add a note on its importance. (10 Marks)

OR

- 8 a. Define food packaging. Write the different techniques involved in food packaging. (10 Marks)
- b. Write a note on flavor enzymes. (05 Marks)
- c. List any commercial enzymes and tabulate their applications in food industry. (05 Marks)

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Module-5

- 9 a. Discuss on the various thermal properties of frozen foods. (10 Marks)  
b. How is food quality and safety ensured through Hazard Analysis and Critical Control Point (HACCP)? (10 Marks)

OR

- 10 a. Define GMP. Explain how GMP guidelines will help to maintain the quality of the product. (10 Marks)  
b. Explain the various forms of food freezing equipments. (10 Marks)

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