

CBCS SCHEME



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15BT744

Seventh Semester B.E. Degree Examination, Dec.2019/Jan.2020

Food Biotechnology

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. What are Browning reactions? Describe the non – enzymatic browning reactions in detail. (08 Marks)
- b. Explain the nutritional aspects of carbohydrates, proteins and fats in food. (08 Marks)

OR

- 2 a. Define Colloidal system. What are the different types of colloidal systems present in foods? Describe the stability of colloidal systems. (08 Marks)
- b. Write short notes on : i) Anti – nutritional factors in food ii) Food faddism and faulty food habits. (08 Marks)

Module-2

- 3 a. Elaborate on the various membrane filter methods available for the detection of micro – organism in foods. (08 Marks)
- b. Discuss the gastroenteritis caused by Salmonella in detail. (08 Marks)

OR

- 4 a. Write short notes on : i) Agar droplet method ii) Dye reduction. (08 Marks)
- b. Describe the intrinsic and extrinsic factors that influence microbial growth in foods. (08 Marks)

Module-3

- 5 a. Elaborate on the protection of foods by drying or dehydration. (08 Marks)
- b. Give a concise account of the production of wine. (08 Marks)

OR

- 6 Write short notes on the following :
 - a. Pasteurization.
 - b. Food preservatives.
 - c. Sauerkraut.
 - d. Vinegar. (16 Marks)

Module-4

- 7 a. Explain the proximate analysis of food constituents. (08 Marks)
- b. Write short notes on : i) Labelling of food constituents ii) Edible films. (08 Marks)

OR

- 8 a. What are the objectives of food processing? Discuss the effects of food processing on food constituents. (08 Marks)
- b. Elaborate on the role of enzymes in food industry. (08 Marks)

Module-5

- 9 a. Give a concise account of the thermal properties frozen food. (08 Marks)
- b. Write a note on equipments related to pulping and fruit juice extraction. (08 Marks)

OR

- 10 a. Discuss food dehydration, its kinetics and methods in detail. (08 Marks)
- b. Write short notes on : i) Food safety ii) Plate Freezers and Immersion freezers. (08 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.