

(6 pages)

Reg. No. :

Code No. : 30725 E Sub. Code : EEMI 41

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2025.

Fourth Semester

Microbiology

Elective — FOOD PROCESSING TECHNOLOGY

(For those who joined in July 2023 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Which of the following is not a preservation factor?
 - (a) To restrict oxygen
 - (b) Radiation
 - (c) Heat
 - (d) Mechanical damage

2. The widely used application of asepsis is _____.
 - (a) clean handling
 - (b) decontamination
 - (c) packaging
 - (d) radiation
3. Nitrates play a role in colour of _____.
 - (a) fruits
 - (b) vegetables
 - (c) meat
 - (d) sweet meat
4. Deterioration of fatty fish produces applicable amounts of 'stale fishy' which is _____.
 - (a) trimethylamine
 - (b) chloramines
 - (c) ammonia
 - (d) unsaturated fatty acids
5. Rapid heating of cream, accompanied by injecting steam is known as _____.
 - (a) pasteurization
 - (b) vacreating
 - (c) sterilization
 - (d) cooking
6. The centrifugal procedure used for removing bacteria from milk is _____.
 - (a) centrifugation
 - (b) bactofugation
 - (c) separation
 - (d) fermentation

7. Which of the following is a type of fat that is commonly found in processed food?
- Saturated fat
 - Monosaturated fat
 - Polysaturated fat
 - Triglycerides
8. What is the recommended daily intake of fat as a percentage of total energy intake?
- 10-20%
 - 20-35%
 - 35-50%
 - 50-60%
9. Food poisoning caused by a gram negative curved motile rod identified in Japan is _____.
- Vibrio parahaemolyticus
 - Salmonella typhimurium
 - Escherichia coli
 - Shigella sonnei
10. Traveler's diarrhoea is caused due to the toxins produced by _____.
- Clostridium
 - Bacillus
 - Escherichia
 - Yersinia

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) List out the application of food preservation.
- Or
- (b) Classify preservation factors with their modes of action.
12. (a) Discuss the factor influencing the kind and rate of spoilage of fish.
- Or
- (b) Write note on the preservatives incorporated in ice.
13. (a) Discuss in detail about milk pasteurization.
- Or
- (b) Focus on Kefir production process.
14. (a) Write short notes on degumming process.
- Or
- (b) State the importance of 'solvent extraction' in fat and oils.

15. (a) List out microbial cultures used for food fermentation.

Or

(b) Describe in brief about Mycotoxins.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 600 words.

16. (a) Describe the action of radiation on microorganisms.

Or

(b) Write note on organic acids and their salts in the preservation of foods.

17. (a) Discuss in detail about the use of heat in the preservation of fish food.

Or

(b) Write a detail notes on spoilage of meat under aerobic and anaerobic conditions.

18. (a) Explain about the stages in cheese production.

Or

(b) Write short notes on the following :

(i) Butter milk

(ii) Kumiss.

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19. (a) Discuss the process of fractionation.

Or

(b) Explain about deodorization in oil processing.

20. (a) What are the methods adopted for microbiological examination of foods?

Or

(b) Classify food-borne disease. Describe about botulism.

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