

1908/105
FOOD PROCESSING AND
PRESERVATION
Oct./Nov. 2022
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN FISHERIES SCIENCE AND TECHNOLOGY

MODULE I

FOOD PROCESSING AND PRESERVATION

3 hours

INSTRUCTIONS TO CANDIDATES

You should have an answer booklet for this examination.

This paper consists of TWO sections; A and B.

Answer ALL the questions in section A and any FOUR questions from section B in the answer booklet provided.

Each question in section A carries 4 marks while each question in section B carries 15 marks.

Maximum marks for each part of a question are as shown.

Candidates should answer the questions in English.

This paper consists of 3 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A (40 marks)

Answer ALL the questions in this section.

1. Distinguish between shipping containers and retail containers as packaging materials. (4 marks)
2. Explain two properties of food which influence the rate of spoilage. (4 marks)
3. Define each of the following terms:
 - (a) canning; (2 marks)
 - (b) pasteurization. (2 marks)
4. Explain the significance of food concentration. (4 marks)
5. Explain the importance of food frying in food processing. (4 marks)
6. State four ways by which packaging increases the shelf-life of foods. (4 marks)
7. State two advantages and two disadvantages of freezing as a method of food preservation. (4 marks)
8. Outline the criteria for choosing a practical method of food preservation. (4 marks)
9. Explain each of the following functions of packaging:
 - (a) product communication; (2 marks)
 - (b) product convenience. (2 marks)
10. Explain the functional properties of sugars in food preservation. (4 marks)

SECTION B (60 marks)

Answer any FOUR questions from this section.

11. Explain the applications of the following commercial freezing procedures in food processing:
- (a) air blast tunnel freezing; (5 marks)
 - (b) cryogenic freezing; (5 marks)
 - (c) plate freezing. (5 marks)
12. Explain the measures applied to prevent food contamination:
- (a) prior to delivery at a food processing establishment; (10 marks)
 - (b) in dry food stores. (5 marks)
13. Discuss the purpose of blanching fruits and vegetables. (15 marks)
14. Explain five methods used to dry foods. (15 marks)
15. (a) Describe the considerations for choosing a chemical food preservative. (10 marks)
- (b) State five aims of a food standards agency. (5 marks)
16. Explain the use of acids in food preservation. (15 marks)

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