

1802/102
1819/102
1907/102
FOOD SCIENCE AND NUTRITION
March/April 2023
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL
CRAFT CERTIFICATE IN BAKING TECHNOLOGY
CRAFT CERTIFICATE IN FOOD AND BEVERAGE PRODUCTION, SALES
AND SERVICE
CRAFT CERTIFICATE IN CATERING AND ACCOMMODATION
MODULE I

FOOD SCIENCE AND NUTRITION
3 hours

INSTRUCTIONS TO CANDIDATES

*This paper consists of TWO sections; A and B.
Answer ALL the questions in Section A and any THREE questions from section B in
the answer booklet provided .
Marks for each question are as indicated.
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 (55 marks)

Answer **ALL** the questions in this section.

1. (a) State **two** functions of vitamin A in the body. (2 marks)
Help in body immune help maintain body from disease
- (b) Identify **four** groups of nutrients. (2 marks)
carbohydrate, fat, protein, vitamins
2. (a) Highlight **two** uses of anti-oxidants in food. (2 marks)
Help
- (b) Explain the meaning of enzyme deficiency. (2 marks)
It is a condition
3. Differentiate between an invalid and convalescent. (4 marks)
4. (a) Highlight **two** ways food is broken down into nutrients for absorption. (2 marks)
- (b) State **two** sources of the following nutrients:
 - (i) folic acid;
 - (ii) calcium.(2 marks)
5. (a) State **four** functions of roughage in the diet. (4 marks)
- (b) Identify **four** foods that are naturally acidic. (2 marks)
6. (a) Highlight **two** functions of food in the body. (2 marks)
7. Differentiate between malnutrition and under nutrition. (4 marks)
lack of nutrient in the body
8. Distinguish between macro-nutrients and micro-nutrients. (4 marks)
between macro and micro nutrients
9. Highlight **four** dietary recommendations for a healthy lifestyle. (4 marks)
Exercise regularly, eat healthy, drink water, avoid alcohol
10. Highlight **two** ways of preventing the following nutritional disorders:
 - (a) heart disease; *Eating less* (2 marks)
 - (b) pellagra. (2 marks)
11. Identify **two** examples of the following food additives:
 - (i) preservatives; (1 mark)
 - (ii) colouring; *cake* (1 mark)
 - (iii) sweetening; (1 mark)
 - (iv) thickeners. *ice cream* (1 mark)
12. State **two** aims of preserving food. (2 marks)
13. (a) Explain the meaning of the term rancidity. (2 marks)
- (b) Giving an example, identify **two** sources of fat. (3 marks)

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14. Highlight **two** uses of yoghurt in the diet. (2 marks)
15. State **two** causes of marasmus. (2 marks)

SECTION B (45 marks)

Answer any **THREE** questions from this section.

16. (a) State **five** reasons for being a vegetarian. (5 marks)
(b) Explain **five** factors to consider when preparing food for an expectant mother. (10 marks)
17. (a) State uses of each of the following food additives:
(i) emulsifiers;
(ii) acids;
(iii) colourings;
(iv) flavours;
(v) sweeteners. (5 marks)
- (b) Explain **five** ways of reducing fat in the diet. (10 marks)
18. (a) Highlight **five** critical control point of food contamination according to HACCP. (5 marks)
(b) Explain **five** ways bacteria can be transferred into food. (10 marks)
19. (a) Highlight **five** ways in which HIV and AIDS can be transmitted. (5 marks)
(b) Explain **five** causes of malnutrition. (10 marks)
20. (a) Identify **three** examples of each of the following types of fat:
(i) solid fat;
(ii) oil. (3 marks)
- (b) State **two** properties of sugars. (2 marks)
- (c) Explain **five** functions of carbohydrates in the body. (10 marks)

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