

**GENERAL CERTIFICATE OF EDUCATION BOARD**  
General Certificate of Education Examination

**JUNE 2025**

**ADVANCED LEVEL**

Subject Title	<b>FOOD SCIENCE AND NUTRITION</b>
Paper No./Title	<b>Paper 2 (ESSAY TYPE)</b>
Subject Code No.	<b>0740</b>

**Duration: Three Hours**

**INSTRUCTIONS TO CANDIDATES**

**Candidates are required to answer FOUR questions, choosing one question from each section**  
**Each question carries 25 marks.**

*You are reminded of the necessity for good English and orderly presentation in your answers.*

## SECTION A

1. (a) Elaborate the role of Recommended Dietary Allowance (RDA). (4 marks)
  - (b) Describe three (3) factors that affect RDA. (6 marks)
  - (c) Give the importance of the following nutrients to the body:
    - (i) Carbohydrates (5 marks)
    - (ii) Proteins (5 marks)
    - (iii) Fats (5 marks)
 (Total =25 marks)
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2. (a) Classify carbohydrates indicating their, examples, sources and functions. (9 marks)
  - (b) Differentiate between poaching and simmering. (4 marks)
  - (c) In a tabular form, enumerate the different types of fat-soluble vitamins indicating their sources and functions. (8 marks)
  - (d) Outline the effects of wet heat on starch. (4 marks)
- (Total =25 marks)

## SECTION B

3. (a) Using your knowledge on food related diseases, explain the causes, signs and symptoms, preventive measure on the following:
    - (i) Gout (5 marks)
    - (ii) Goitre (5 marks)
    - (iii) Peptic ulcer (5 marks)
  - (b) State and explain the possible ways by which household food security can be improved. (10 marks)
- (Total=25 marks)
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4. (a) (i) Define the term "Food Quality Control". (2 marks)
  - (ii) Explain how a food manufacturing company carries out an effective food quality control in Cameroon. (5 marks)
  - (iii) Explain the problems faced by consumers in Cameroon in relation to food. (8 marks)
  - (b) Bring out the differences between Food laws and Food standards in relation to food quality. (6 marks)
  - (c) State four (4) importance of Consumer Education. (4 marks)
- (Total = 25 marks)



## SECTION C

5. (a) Explain the following basic terms used in food science.
- (i) Antioxidant (2 marks)
  - (ii) Flavouring agent (2 marks)
  - (iii) Antimicrobial growth (2 marks)
  - (iv) Sweeteners (2 marks)
- (b) Write short notes on the following methods of preservation with examples.
- (i) Pasteurization (4 marks)
  - (ii) Freezing (4 marks)
  - (iii) Chemical (4 marks)
- (c) Give five (5) reasons why we should preserve food. (5 marks)
- (Total =25 marks)

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6. (a) (i) Differentiate between cereals and legumes. (5 marks)
- (ii) Give the role of cereals in the diet. (3 marks)
- (b) (i) Define kilning and give its advantages in beer fermentation. (5 marks)
- (ii) With the aid of an equation briefly explain what happens during fermentation of corn beer. (6 marks)
- (c) Explain the difference between oil-in-water emulsion and water-in-oil emulsion. (6 marks)
- (Total =25 marks)

## SECTION D

7. (a) Briefly explain the following terms with examples;
- (i) Food fads (4 marks)
  - (ii) Food fallacies (4 marks)
  - (iii) Food Taboos (4 marks)
  - (iv) Outline three (3) factors affecting food habits. (3 marks)
- (b) Advance five factors that affect food production in your community. (10 marks)
- (Total =25 marks)

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8. (a) Identify five (5) causes of Protein Energy Malnutrition (PEM). (5 marks)
- (b) Differentiate between Organic and Inorganic foods. (8 marks)
- (c) Suggest ways by which water can be treated to make it portable on a large scale in Cameroon. (6 marks)
- (d) Plan a lunch for a strict vegetarian. (6 marks)
- (Total =25 marks)