



Cambridge IGCSE™

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FOOD & NUTRITION

0648/12

Paper 1 Theory

May/June 2025

2 hours

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS

- Section A: answer **all** questions.
- Section B: answer **all** questions.
- Section C: answer **one** question.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.

INFORMATION

- The total mark for this paper is 100.
- The number of marks for each question or part question is shown in brackets [].

This document has **12** pages.



Section A

Answer **all** questions.

You are advised to spend no longer than 45 minutes on Section A.

- 1 State the term used to describe the food that is normally eaten every day.

..... [1]

- 2 Protein is a nutrient essential to life.

- (a) Explain why some proteins have a higher biological value (HBV) than others.

.....

 [3]

- (b) (i) Name **two** different animal foods that are a source of HBV protein.

1
 2 [2]

- (ii) Name **three** different plant foods that are a source of HBV protein.

1
 2
 3 [3]

- (c) Young children are very active and require a good supply of protein in their diet to provide energy.

Explain **one** other reason why young children require a good supply of protein in their diet.

.....
 [2]

[Total: 10]



3 Monosaccharides are carbohydrates that provide the body with energy.

(a) Name the monosaccharide that should be eaten to give an immediate release of energy.

..... [1]

(b) Name **two** enzymes involved in the digestion of carbohydrates.

1

2 [2]

[Total: 3]

4 Fats and oils are classified into three groups. Saturated fat is one group.

(a) Name the **two** other groups of fats and oils.

1

2 [2]

(b) Identify **four** health issues that could result from a diet high in saturated fat.

1

2

3

4 [4]

[Total: 6]





5 Vitamin B₁ is also known as thiamin.

(a) State the name of vitamin B₁₂.

..... [1]

(b) State **three** functions of vitamin B₁₂ in the body.

1

2

3

[3]

(c) Explain why some vegans may suffer from a deficiency of vitamin B₁₂.

.....

.....

..... [2]

[Total: 6]

6 Minerals are essential nutrients to include in a balanced diet.

(a) State **four** different reasons why it is important to include calcium in the diet.

1

2

3

4

[4]

(b) A lack of minerals in the diet can lead to deficiency diseases.

(i) Name the deficiency disease caused by a poor supply of iron.

..... [1]

(ii) Name the deficiency disease caused by a poor supply of iodide.

..... [1]





(c) Name **four** different foods that are a good source of phosphorus.

1

2

3

4

[4]

(d) Explain why people who have a high-sodium, low-potassium diet have a high risk of hypertension.

.....

.....

.....

.....

.....

.....

.....

..... [4]

[Total: 14]





Section B

Answer **all** questions.

7 A recipe for gingerbread uses the following ingredients.

250 g plain flour
1 tsp bicarbonate of soda
1½ tsp ground ginger
100 g margarine
50 g brown sugar
150 g syrup
2 eggs
2½ ml milk

(a) Bicarbonate of soda is a chemical raising agent.

(i) Name the gas produced when using bicarbonate of soda.

..... [1]

(ii) Suggest **three** guidelines for storing bicarbonate of soda in the home.

1

2

3

[3]

(b) Describe how to make the gingerbread using the melting method.

.....
.....
.....
.....
.....
.....
.....
.....
..... [5]





(c) Sometimes faults occur when cakes are baked.

Give **two** different reasons for each of the following faults in a baked gingerbread.

(i) There are little air holes on the surface of the baked cake.

1

2

[2]

(ii) The cake has sunk in the middle.

1

2

[2]

[Total: 13]

8 Deep frying is a popular method of cooking potatoes.

(a) Name **two** kinds of oils suitable to use for deep frying.

1

2

[2]

(b) State **two** different effects of deep frying on the nutritional value of potatoes.

1

2

[2]

(c) Sensory evaluation is carried out on the deep-fried potatoes.

State **three** words to describe the texture of deep-fried potatoes.

1

2

3

[3]

[Total: 7]





9 Milk and cheese are dairy foods.

(a) Name **three** other dairy foods.

- 1
- 2
- 3 [3]

(b) State **one** reason why some types of cheese are **not** suitable for lacto-vegetarians.

..... [1]

(c) Mould can often be found on foods such as cheese.

Name **two** different foods that mould commonly grows on.

- 1
- 2 [2]

(d) Describe how cheese should be stored in the home to minimise food spoilage.

.....

.....

.....

..... [3]

(e) Cheese is often used as a filling for sandwiches.

Explain why a person who is lactose intolerant should **not** eat a cheese sandwich.

.....

.....

.....

..... [3]

[Total: 12]



10 One reason for packaging food is to protect it from chemical contamination.

(a) Describe **four** other reasons for protecting food with packaging.

- 1
-
- 2
-
- 3
-
- 4
-

[4]

(b) Metal is often used as a type of packaging material in the food industry.

State **four** disadvantages of using metal as a packaging material.

- 1
- 2
- 3
- 4

[4]

[Total: 8]

11 Describe **five** advantages of using paint as a wall covering in a kitchen.

- 1
- 2
- 3
- 4
- 5

[5]

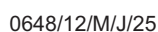


12 Obesity is a common health issue often caused by an incorrect diet. Discuss ways to prevent obesity when planning family meals.

[15]

13 Use your knowledge of nutrition and meal planning to discuss the vitamin requirements of a pregnant lacto-vegetarian and her developing baby. [15]

[15]

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

[illegible]

[illegible]

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