* 0000800000001 *

Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

8901646370

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.

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[Turn over

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]

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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]

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5 Vitamin B_1 is also known as thiamin.

(a) State the name of vitamin B_{12}.

..... [1]

(b) State **three** functions of vitamin B_{12} in the body.

1.....

2 .....

3 .....

[3]

(c) Explain why some vegans may suffer from a deficiency of vitamin B_{12}.

.....

.....

..... [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]

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(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.

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..... [4]

[Total: 14]

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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.

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..... [5]

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(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]

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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]

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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 .....

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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]

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Section C

Answer **either** Question 12 **or** 13.

12 Obesity is a common health issue often caused by an incorrect diet.
Discuss ways to prevent obesity when planning family meals. [15]

OR

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

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