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Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

2191209654

FOOD & NUTRITION **0648/13**

Paper 1 Theory **October/November 2024**

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 Define the term *balanced diet*.

.....

..... [2]

2 Undernutrition is when the body has an insufficient amount of nutrients.

(a) Identify **one** disease that results from an insufficient amount of vitamin B_{12} (cobalamin).

..... [1]

(b) Name **four** different sources of vitamin B_{12} that are suitable for vegetarians.

1 .....

2 .....

3 .....

4 .....

[4]

[Total: 5]

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3 Sugar is found in many different foods.

(a) Name **one** food that contains fructose.

..... [1]

(b) Name **one** food that contains lactose.

..... [1]

(c) Describe the effects of dry heat on sugar.

.....

.....

.....

.....

.....

..... [4]

[Total: 6]

4 Vitamin A is found in food as retinol or beta-carotene.

Name **four** different good sources of beta-carotene.

1 .....

2 .....

3 .....

4 .....

[4]

5 **(a)** State the function of maltase in the digestive system.

.....

..... [2]

(b) State where in the digestive system maltase is found.

..... [1]

[Total: 3]

6 Carbohydrate provides the body with energy.

(a) Name **two** other nutrients that provide energy.

1 .....

2 .....

[2]

(b) **(i)** State what is meant by energy balance.

..... [1]

(ii) State how to achieve energy balance.

.....

..... [1]

(c) State **one** unit used to measure energy in food.

..... [1]

(d) State **four** different factors that affect a person's energy requirements.

1 .....

2 .....

3 .....

4 .....

[4]

[Total: 9]

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7 Explain the importance of iodide in the diet.

.....

.....

.....

..... [3]

8 Current dietary advice is to drink at least two litres of water a day. One reason for this advice is because water improves the absorption of water-soluble vitamins.

(a) Name **three** different water-soluble vitamins.

1 .....

2 .....

3 .....

[3]

(b) Give **five** other different reasons for drinking at least two litres of water a day.

1 .....

2 .....

3 .....

4 .....

5 .....

[5]

[Total: 8]

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Section B

Answer **all** questions.

9 Shortcrust pastry is made using plain flour, fat, water and salt.

(a) State and explain **two** functions of the plain flour when making shortcrust pastry.

1 .....

.....

2 .....

.....

[4]

(b) State and explain **two** functions of the fat when making shortcrust pastry.

1 .....

.....

2 .....

.....

[4]

(c) Sometimes faults occur during the making of shortcrust pastry products.

(i) State **four** reasons why the shortcrust pastry may be soft and crumbly.

1 .....

2 .....

3 .....

4 .....

[4]

(ii) State **four** reasons why the shortcrust pastry may be hard and tough.

1 .....

2 .....

3 .....

4 .....

[4]

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(d) There are many ways in which shortcrust pastry can be given extra flavour.

Suggest **three** different seeds that could be used to flavour shortcrust pastry.

1 .....

2 .....

3 .....

[3]

[Total: 19]

10 Eggs are used in a wide variety of dishes and have many functions.

(a) Complete the table to name **two** different dishes for each function of eggs.

function of eggs	name of dish
coating	1 ..... 2 .....
aeration	1 ..... 2 .....

[4]

(b) State **two** other functions of eggs in food preparation.

1 .....

2 .....

[2]

[Total: 6]

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11 Freezing is a popular method of preservation.

(a) Explain how freezing preserves food.

.....

.....

.....

.....

.....

..... [4]

(b) Some foods, such as whole tomatoes, do **not** freeze successfully.

Explain why freezing would **not** be a suitable preservation method for a whole tomato.

.....

.....

..... [2]

(c) State **two** alternative methods for preserving tomatoes.

1 .....

2 .....

[2]

[Total: 8]

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12 Food additives are used in many convenience foods.

State **five** benefits of using emulsifiers in convenience foods.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

.....

[5]

13 **(a)** Explain **two** benefits to the consumer of the manufacturer's contact details on a food label.

1 .....

.....

2 .....

.....

[2]

(b) Name **three** details on a food label that ensure the food product can be safely consumed.

1 .....

2 .....

3 .....

[3]

(c) Manufacturers often use tamper-evident seals on packaging.

State **two** methods that may be used to help consumers be aware that a food product has **not** been contaminated or misused.

1 .....

2 .....

[2]

[Total: 7]

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Section C

Answer **either** Question 14 **or** 15.

14 Some countries recommend eating at least five portions of fruit and vegetables a day.

- Discuss nutritional reasons for including fruit and vegetables in the diet.
- Discuss other reasons for including fruit and vegetables in the diet.

[15]

OR

15 Chicken is a popular commodity to include in family meals.

- Discuss guidelines to follow when buying and storing fresh chicken to use the next day.
- Discuss methods of tenderising chicken before it is cooked and describe the changes that occur during cooking.

[15]

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