* 0000800000001 *

Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

* 8922252686 *

FOOD & NUTRITION **0648/13**

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 cause of a deficiency disease.

..... [1]

2 Proteins contain the elements hydrogen and nitrogen.

(a) Name **three** other elements found in proteins.

1 .....

2 .....

3 .....
[3]

(b) When protein is heated, coagulation occurs.

Name **three** dishes where coagulation occurs.

1 .....

2 .....

3 .....
[3]

(c) State **two** reasons why athletes require a good supply of protein in their diet.

1 .....

2 .....
[2]

(d) Name the enzyme found in the ileum that converts peptones to amino acids.

..... [1]

[Total: 9]

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3 Monosaccharides are sugars.

(a) Define the term monosaccharide.

..... [1]

(b) Name **two** examples of monosaccharides.

1 .....

2 .....

[2]

(c) Eating too much sugar may result in tooth decay.

(i) Name **one** other health issue that may result from eating too much sugar.

..... [1]

(ii) Describe the effects of the health issue named in **(c)(i)** on the body.

.....

.....

.....

.....

..... [3]

[Total: 7]

4 Fats help protect vital organs in the body.

Give **four** other functions of fats in the body.

1 .....

2 .....

3 .....

4 .....

[4]

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

(a) (i) State where in the body the majority of calcium is stored.

..... [1]

(ii) Explain why someone who is lactose intolerant may have an inadequate calcium intake.

.....

.....

.....

..... [3]

(b) State **two** reasons why someone may become anaemic.

1 .....

2 .....

[2]

(c) State **four** functions of phosphorus in the body.

1 .....

2 .....

3 .....

4 .....

[4]

[Total: 10]

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6 Many processed foods contain large amounts of salt.

(a) Name **three** different types of processed foods that could be high in salt.

1 .....

2 .....

3 .....

[3]

(b) State **two** reasons why salt is added to processed foods.

1 .....

2 .....

[2]

[Total: 5]

7 Water is essential to life, so it is important to have good hydration.

State **four** occasions when extra hydration may be needed.

1 .....

2 .....

3 .....

4 .....

[4]

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Section B

Answer **all** questions.

8 The following ingredients can be used to make a sponge cake by the whisking method.

4 eggs
100 g caster sugar
100 g plain flour

(a) Complete the table to give **two** different functions of eggs and caster sugar in the sponge cake.

ingredient	functions
eggs	1 ..... 2 .....
caster sugar	1 ..... 2 .....

[4]

(b) The eggs and sugar are whisked until thick and creamy, and then the flour is added.

State **one** reason for each of the following instructions when adding the flour to the whisked mixture.

(i) sieve the flour

..... [1]

(ii) fold in the flour carefully

..... [1]

(iii) use a metal spoon to fold in the flour

..... [1]

(iv) use a figure of eight to fold in the flour

..... [1]

(v) continue folding until no dry flour is visible

..... [1]

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(c) Suggest **three** different types of icing that could be used to decorate the finished sponge cake.

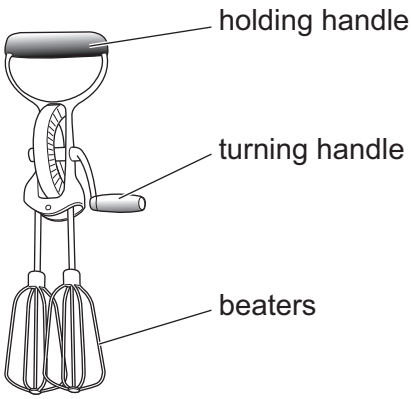
1 .....

2 .....

3 .....

[3]

(d) A rotary whisk is a useful piece of kitchen equipment when making a whisked sponge cake.



State **one** piece of advice to consider for each of the following points when buying a new rotary whisk.

(i) holding handle

..... [1]

(ii) beaters

..... [1]

(iii) weight

..... [1]

(iv) turning handle

..... [1]

(e) State **two** other points to consider when buying a new rotary whisk.

1 .....

2 .....

[2]

[Total: 18]

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9 Fruit is an important source of non-starch polysaccharide (NSP)/dietary fibre.

(a) State **six** functions of dietary fibre in the body.

1 .....

2 .....

3 .....

4 .....

5 .....

6 .....

[6]

(b) Apples, pears and bananas are examples of ingredients for a fresh fruit salad.

Suggest **four** points to consider when buying fresh fruit.

1 .....

2 .....

3 .....

4 .....

[4]

(c) The fresh fruit salad was prepared and left on the kitchen work surface for one hour. All the fruits have turned brown.

(i) Name this type of browning.

..... [1]

(ii) Suggest **two** ways to prevent this type of browning occurring when preparing a fresh fruit salad.

1 .....

2 .....

[2]

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(d) Describe basic first aid treatment for someone who has cut their finger with a sharp knife when preparing a fresh fruit salad.

.....

.....

.....

.....

.....

..... [4]

[Total: 17]

10 Describe **five** guidelines to improve keeping quality and reduce contamination when storing fresh food in a refrigerator. Give a reason for each answer.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

.....

[10]

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Section C

Answer **either** Question 11 **or** 12.

11 Cereals form the main part of the diet for many people of the world.
Discuss the nutritional and health benefits of cereals.
With examples, demonstrate the varied uses of wheat, maize and rice in family meals.

[15]

OR

12 Discuss the advantages of preserving food in the home.
With examples, suggest different methods of preserving apples by the use of temperature.
Explain the principles involved in each identified method.

[15]

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