Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER				

7914304900

FOOD & NUTRITION **0648/11**

Paper 1 Theory **October/November 2022**

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. Any blank pages are indicated.

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Section A

Answer **all** questions.

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

1 RDI is an item of information often found on a food label.

(a) State what is meant by RDI.

..... [1]

(b) List **four** other items of information often found on a food label.

1 .....

2 .....

3 .....

4 .....

[4]

[Total: 5]

2 Eggs are used to enrich dishes by adding nutritive value.

Name **two** fat-soluble vitamins found in eggs and state **three** functions of each of these vitamins.

vitamin 1 .....

functions of vitamin 1:

1 .....

2 .....

3 .....

vitamin 2 .....

functions of vitamin 2:

1 .....

2 .....

3 .....

[8]

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3 **(a)** Name the substance that emulsifies fats during digestion.

..... [1]

(b) Describe the role of lipase in the digestion of fats.

.....

.....

..... [2]

[Total: 3]

4 Identify **one** different nutrient needed for each of the following functions:

(a) building bones and teeth

..... [1]

(b) formation of haemoglobin

..... [1]

(c) preventing night blindness

..... [1]

(d) making thyroxine

..... [1]

(e) promoting growth in children

..... [1]

(f) converting carbohydrate to energy.

..... [1]

[Total: 6]

5 Name **four** different foods that contain protein **and** help prevent constipation.

1 .....

2 .....

3 .....

4 .....

[4]

6 Name **four** different foods that can help prevent anaemia.

1 .....

2 .....

3 .....

4 .....

[4]

7 **(a)** State **three** reasons why food is fortified.

1 .....

2 .....

3 .....

[3]

(b) Name **one** fortified food product.

..... [1]

[Total: 4]

8 **(a)** State **three** reasons why pregnant women should ensure an adequate intake of vitamin B_9 (folate).

1 .....

2 .....

3 .....

[3]

(b) Name **three** different foods that are a good source of B_9 (folate).

1 .....

2 .....

3 .....

[3]

[Total: 6]

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Section B

Answer **all** questions.

9 **(a)** Complete the table to show the quantities of ingredients for making a Victoria sandwich cake.

ingredient	quantity
flour	100 g
butter	
sugar	
egg	

[3]

(b) Name **two** methods that could be used to make the Victoria sandwich cake.

1 .....

2 .....
[2]

(c) State **one** different reason why each of the following types of flour would be suitable for making the Victoria sandwich cake:

(i) white flour

..... [1]

(ii) soft flour

..... [1]

(iii) wholemeal flour

..... [1]

(iv) self-raising flour.

..... [1]

(d) Sometimes curdling of ingredients can happen during the mixing process.

(i) State **two** causes of curdling.

1 .....

2 .....
[2]

(ii) State **one** effect of curdling on the finished cake.

..... [1]

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(e) State **two** methods of heat transfer used when baking the cake.

1 .....

2 .....
[2]

(f) Name **one** gas that will make the cake rise during baking.

..... [1]

(g) Caramelisation is one chemical change that takes place in the cake during baking.
Describe the process of caramelisation.

.....

.....

..... [2]

(h) State **one** other chemical change that takes place in the cake during baking.

..... [1]

[Total: 18]

10 The kitchen should be a well-planned area in which to work. One design used for a kitchen layout is an L-shaped design.
Name **three** other types of kitchen layout design.

1 .....

2 .....

3 .....
[3]

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11 Fruit can be preserved by modified atmosphere packaging (MAP) or by canning.

(a) Name **three** other methods that can be used to preserve fruit.

1 .....

2 .....

3 .....

[3]

(b) MAP delays the growth of bacteria by replacing air in the package with other gases.
Name **two** gases that may be used for MAP.

1 .....

2 .....

[2]

(c) Complete the following sentences:

(i) When fruit is canned, it is heated in order to .....

..... [1]

(ii) When fruit is canned, it is sealed in the can to .....

..... [1]

(d) State **one** impact of canning on the sensory properties of fruit.

..... [1]

(e) State **two** guidelines when buying canned fruit.

1 .....

2 .....

[2]

[Total: 10]

12 **(a)** Wheat is a cereal grain.
Name **four** other cereal grains.

1 .....

2 .....

3 .....

4 .....
[4]

(b) Cereals are an important energy food.
State **four** other reasons why cereals are an important part of the diet.

1 .....

2 .....

3 .....

4 .....
[4]

(c) White flour is produced when part of the wheat grain is removed in the refining process.

(i) Name **one** part of the wheat grain that is removed when producing white flour.

..... [1]

(ii) Name **one** health problem that could occur if people eat mainly refined cereals.

..... [1]

(d) Give **four** guidelines for storing white flour in the home.

1 .....

2 .....

3 .....

4 .....
[4]

[Total: 14]

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Section C

Answer **either** Question 13 **or** 14.

13 High levels of bacteria in food can result in food poisoning.
Identify and explain personal, kitchen and food hygiene techniques to avoid causing food poisoning when preparing family meals.

[15]

OR

14 Many households own a microwave oven.
Discuss:

- reasons why a microwave oven is useful for an elderly person who lives alone
- safety when using a microwave oven.

[15]

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