Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER				

3942031845

FOOD & NUTRITION **0648/12**

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.

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Section A

Answer **all** questions.

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

1 Oranges are citrus fruits.

(a) Name **three** other citrus fruits.

1 .....

2 .....

3 .....

[3]

(b) Fruits are an important part of the diet as they have a high water content.
State **three** different effects on the body if there is a lack of water in the diet.

1 .....

2 .....

3 .....

[3]

(c) Fruits such as apricots are a good source of vitamin A as beta-carotene.

(i) State **three** functions of vitamin A.

1 .....

2 .....

3 .....

[3]

(ii) Vitamin A is also found in food as retinol.
Name **three** different sources of retinol.

1 .....

2 .....

3 .....

[3]

(d) State and explain **two** reasons why including fruit in the diet can help reduce the risk of obesity.

reason 1 .....

explanation .....

reason 2 .....

explanation .....
[4]

[Total: 16]

2 **(a)** Name **three** different animal sources of vitamin B_2 (riboflavin).

1 .....

2 .....

3 .....
[3]

(b) Name the deficiency disease caused by a lack of vitamin B_1 (thiamin).

..... [1]

[Total: 4]

3 **(a)** Iron and phosphorus are minerals that are found in eggs.

(i) State **two** functions of iron.

1 .....

2 .....
[2]

(ii) State **two** functions of phosphorus.

1 .....

2 .....
[2]

(b) Describe **two** different physical changes that happen when eggs are heated.

1 .....

2 .....
[2]

[Total: 6]

4 The ingredient list from a carton of tomato and red pepper soup is shown.

Ingredients: water, tomatoes, onion, red pepper, wheat flour, tomato purée, cream, butter, basil, garlic, salt, pepper.

Explain why someone who is a coeliac should **not** eat this soup.

.....

.....

..... [3]

5 Keeping foods at the correct temperature can help prevent food poisoning.
State the recommended temperature for the following:

(a) refrigerator

..... [1]

(b) freezer

..... [1]

(c) core temperature for cooked food.

..... [1]

[Total: 3]

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6 **(a)** State **two** reasons to include each of the following nutrients in the diet of a 70-year-old male:

(i) vitamin C

1 .....

2 .....
[2]

(ii) calcium

1 .....

2 .....
[2]

(iii) non-starch polysaccharide (NSP) / dietary fibre.

1 .....

2 .....
[2]

(b) State **one** reason to reduce each of the following in the diet of a 70-year-old male:

(i) salt

..... [1]

(ii) sugar.

..... [1]

[Total: 8]

Section B

Answer **all** questions.

7 The following ingredients can be used to make shortbread biscuits using the rubbing-in method.

125 g plain wholemeal flour
25 g cornflour
100 g butter
50 g caster sugar

(a) Suggest **two** reasons why butter is used for the shortbread.

1 .....

2 .....
[2]

(b) Suggest **two** reasons why plain wholemeal flour is used for the shortbread.

1 .....

2 .....
[2]

(c) Suggest **one** reason why cornflour is used for the shortbread.

..... [1]

(d) Give **four** steps for making the shortbread dough using the rubbing-in method.

1 .....

2 .....

3 .....

4 .....
[4]

(e) Name **three** spices that could be used to flavour the shortbread.

1 .....

2 .....

3 .....
[3]

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(f) Suggest **two** ways the biscuits can be shaped before baking.

1 .....

2 .....
[2]

(g) Before baking, shortbread is traditionally decorated by piercing with a fork.
Suggest **one** other reason for this process.

..... [1]

(h) Suggest **two** reasons why shortbread biscuits should **not** be stored in a container with cakes.

1 .....

2 .....
[2]

[Total: 17]

8 State **four** guidelines to follow for the safe storage of kitchen knives.

1 .....

2 .....

3 .....

4 .....
[4]

9 State **four** guidelines to follow for the safe storage of raw chicken.

1 .....

2 .....

3 .....

4 .....
[4]

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[Turn over

10 **(a)** Describe **two** ways eggs may be used to make pastry products look attractive.

1 .....

2 .....
[2]

(b) Name **two** different dishes that use eggs as part of a coating.

1 .....

2 .....
[2]

(c) State why eggs are used for binding food products.

..... [1]

(d) Name **two** dishes that use eggs for binding.

1 .....

2 .....
[2]

(e) Name and describe **one** test that can be used to tell if an egg is fresh.

name of test .....

description .....

.....

.....
[3]

[Total: 10]

11 Pregnant women are advised **not** to eat soft cheese as it may contain listeria which could cause miscarriage.
Name **four** other types of foods that should be avoided during pregnancy.

1 .....

2 .....

3 .....

4 .....
[4]

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12 The aim of preservation is to prevent food spoilage due to the growth of microorganisms.

Once a food has been preserved, it must be stored in a sealed container to prevent contamination.

Explain **three** other ways that the preservation principles used for each of the following foods prevent spoilage:

(a) frozen peas

1 .....

2 .....

3 .....
[3]

(b) a jar of tomato chutney.

1 .....

2 .....

3 .....
[3]

[Total: 6]

Section C

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

13 Frying is a popular method of cooking.
Discuss:
- the disadvantages of frying
- safety points to follow when deep frying.

[15]

OR

14 Convenience foods are a popular choice when preparing meals.
Discuss the advantages of convenience foods for elderly people who live alone.

[15]

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