



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER



FOOD AND NUTRITION

0648/01

Paper 1 Theory

May/June 2014

2 hours

Candidates answer on the Question Paper.

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name on all the work you hand in.
Write in dark blue or black ink.
You may use an HB soft pencil for any diagrams or graphs.
Do not use staples, paper clips, glue or correction fluid.
DO NOT WRITE IN ANY BARCODES.

Section A

Answer **all** questions.
You are advised to spend no longer than 45 minutes on Section A.

Section B

Answer **all** questions.

Section C

Answer **either** Question 6(a) **or** 6(b).

At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [] at the end of each question or part question.

This document consists of **11** printed pages and **1** blank page.

Section A

Answer all questions.



1 Cheese is a good source of calcium.

(a) Name **two other** minerals and **two** vitamins also found in cheese.

Minerals:

Vitamins:

1

1

2

2 [4]

(b) Name **two** diseases caused by a deficiency of calcium in the body.

Disease:

1

2 [2]

(c) Describe **two** symptoms of **one** of the diseases named in (b).

Disease

Symptom 1

Symptom 2 [2]

(d) (i) Name the vitamin which helps in the absorption of calcium.

Vitamin [1]

(ii) Identify **two** good food sources of this vitamin.

Sources:

1

2 [2]

(e) Identify **two** good food sources of calcium other than dairy products.

Sources:

1

2 [2]

(f) Cheese is often used to add flavour and colour to a coating sauce.

(i) Describe the differences between a coating sauce and a pouring sauce.

.....

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..... [2]

(ii) Complete the following list of ingredients and quantities for a cheese sauce.

50g butter	100g cheddar cheese
..... plain flour	500 ml

(iii) Describe the process of making a cheese sauce using the roux method.

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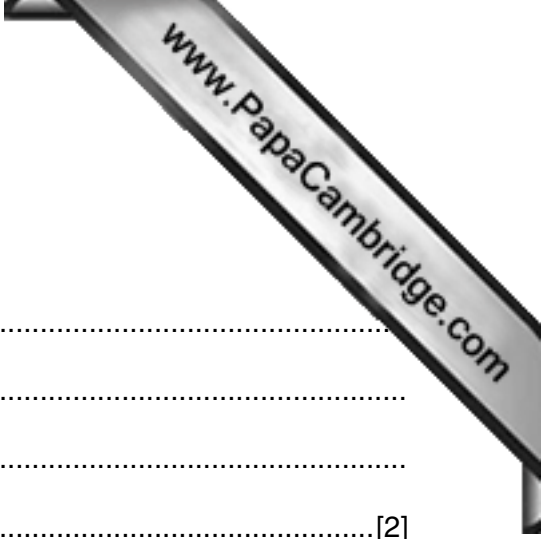
..... [5]

(g) The fat and protein in cheese can be difficult to digest.

Describe and explain how the body breaks down or digests cheese in the mouth and in the ileum.

(i) In the mouth [1]

(ii) In the ileum [3]



2 (a) Convenience foods often have a high sugar content.

Give **four** other **disadvantages** of convenience foods.

- 1
- 2
- 3
- 4 [2]

(b) Too much sugar can be unhealthy.

Explain in detail how sugar can cause tooth decay.

-
-
-
-
- [4]

(c) Name **one** other disease that can be caused by a high intake of sugar and explain how too much sugar causes this disease.

-
-
- [3]

(d) Dextrose and malt syrup are alternative names for sugar on food labels.

Give **two** other names that can be used for sugar on food labels.

-
- [2]

(e) Sugar is a carbohydrate.

Name the **three** elements that make up all carbohydrates.

- [1]

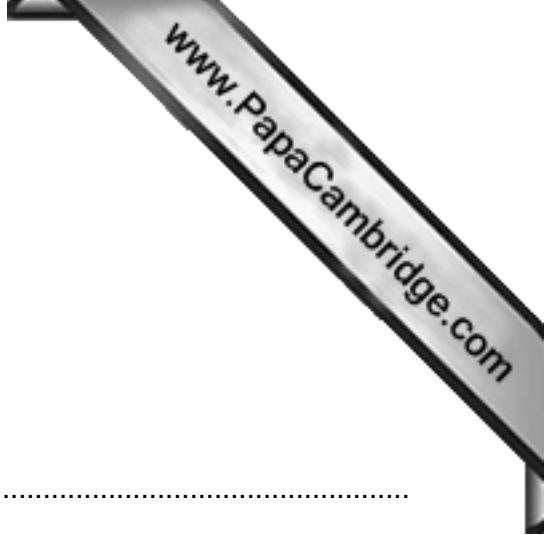
(f) Explain the term *dextrinisation*.

-
-
- [2]

[Section A Total: 40]

Section B

Answer **all** questions.



3 Describe and explain the following:

(a) convection as a method of heat transfer;

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.....[6]

(b) hypertension;

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.....[5]

(c) pasteurisation.

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.....[5]

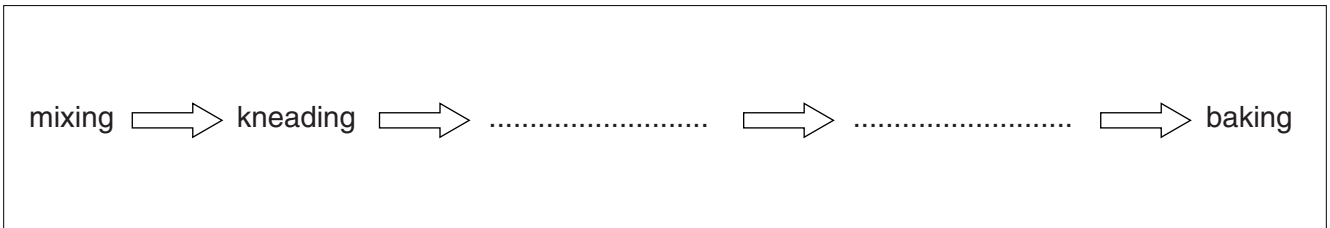


4 (a) Complete the table to explain the causes of these faults in the making of a Victoria sponge cake.

Fault	Cause
Cake has sunk in the middle.	
Cake has risen unevenly.	
Cake has risen to a peak and is cracked.	
Cake has a hard, sugary crust.	

[4]

(b) Complete the flowchart below to summarize the method of making bread.



[2]

(c) Explain the purpose of the kneading process when making bread.

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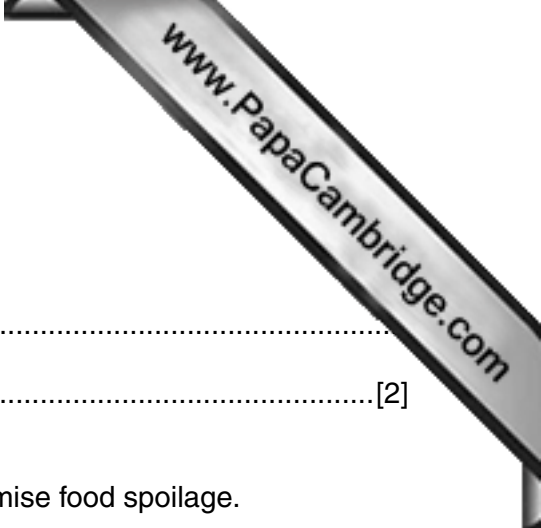
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[3]



(d) Bread and cake both contain carbohydrate and fat.

State the energy value of 1 g of carbohydrate and 1 g of fat.

carbohydrate
fat [2]

5 (a) State how the following foods should be safely stored to minimise food spoilage.

flour
cheese
potatoes
frozen fish [4]

(b) Salmonella is a type of food poisoning bacteria.

Name **three** symptoms of food poisoning.

1
2
3 [3]

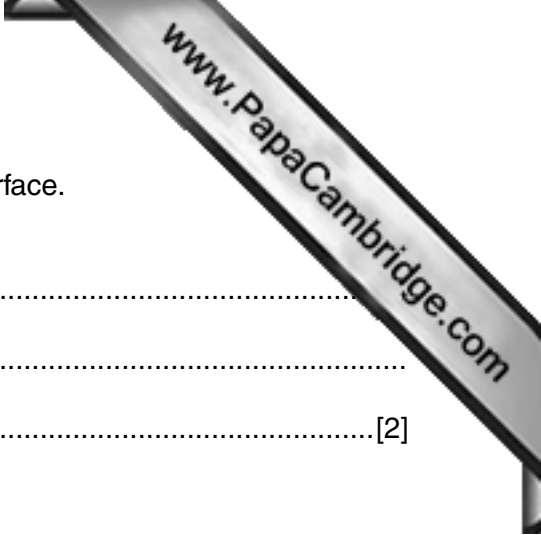
(c) Pregnant women are advised not to eat soft cheeses.

Explain why they should follow this advice.

.....
.....
.....
..... [2]

(d) Suggest **six** personal hygiene rules that a person preparing food in a kitchen should follow.

1 2
3 4
5 6 [3]



(e) Suggest a material that is suitable to make a kitchen work surface.
Give **two** reasons why it is a suitable material.

- (i) Material
- (ii) Reasons
.....[2]

(f) The kitchen can be a dangerous place.

Describe how to help a person who has received an electric shock from a hand mixer.

.....
.....
.....
.....
.....[3]

[Section B Total: 45]

Section C

Answer **either** 6(a) **or** 6(b).



- 6 (a) “Women who follow a vegetarian diet may encounter health problems during and after pregnancy.”

Discuss this statement making reference to the nutritional needs of the mother and the baby.

[15]

Or

- (b) “Food can be preserved well in a refrigerator, and other methods of preservation are no longer important to consumers.”

Discuss this statement whilst making reference to the reasons for preservation and the principals involved in at least **four** other methods of preserving food.

[15]

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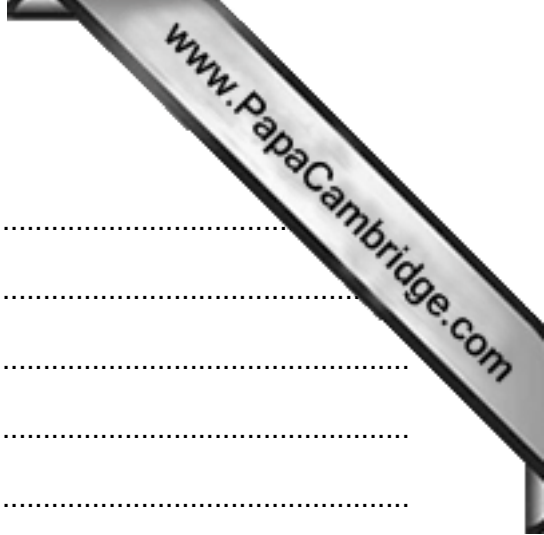
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[Section C Total: 15]

[Total for Paper: 100]

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