



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER



FOOD AND NUTRITION

0648/11

Paper 1 Theory

October/November 2016

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 pen.

You may use an HB 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 9(a) **or** 9(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 **12** printed pages.

Section A

Answer **all** questions.

1 (a) Name **two** elements from which fats and oils are formed.

1 2 [1]

(b) Name **two** vitamins that are found in fatty food.

1
2 [2]

(c) State **two** differences between saturated fat and polyunsaturated fat.

1
.....
2
..... [2]

(d) Name **four** examples of polyunsaturated fat.

1 2
3 4 [2]

(e) Current dietary advice is to reduce the amount of saturated fat in the diet.

Suggest **five** ways of following this advice.

1
2
3
4
5 [5]

(f) One use of butter is for spreading on bread.

Suggest **five** other uses of fats and oils in cooking. Name an appropriate fat or oil in each case.

use 1

fat or oil

use 2

fat or oil

use 3

fat or oil

use 4

fat or oil

use 5

fat or oil

[5]

(g) Describe the effects of heat on butter.

.....

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.....

..... [3]

(h) Describe the roles of bile and lipase in the digestion of fat:

(i) bile;

.....

..... [1]

(ii) lipase.

.....

..... [2]

[Total: 23]

2 (a) Name **two** sources of vitamin B₁ (thiamin).

1..... 2..... [1]

(b) List **three** symptoms of a deficiency of vitamin B₂ (riboflavin).

1
2
3 [3]

(c) State **two** functions of vitamin B₁₂ (cobalamin).

1
2 [2]

[Total: 6]

3 (a) Explain the function of iodine in a balanced diet.

.....
..... [1]

(b) Name the deficiency disease associated with a lack of iodine.

..... [1]

(c) Name **two** sources of iodine.

1 2 [1]

[Total: 3]

4 (a) Non-starch polysaccharide (NSP)/dietary fibre is essential for a healthy diet.

Name **four** good sources of NSP.

1 2

3 4

[2]

(b) Outline problems associated with a lack of NSP in the diet.

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[6]

[Total: 8]

Section B

Answer **all** questions.

5 (a) Milk can be processed to extend its shelf life.

Give **five** other reasons for preserving food.

- 1
- 2
- 3
- 4
- 5 [5]

(b) Name **one** method of pasteurising milk.

..... [1]

(c) Describe the process of manufacturing condensed milk.

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..... [3]

(d) Give advice, with reasons, on the storage of fresh milk in the home.

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..... [4]

[Total: 13]

6 The following ingredients can be used to make cheese scones:

- 250 g self-raising flour
- 50 g butter
- 50 g cheese
- 125 ml milk

(a) Name the method which could be used to make the scones.

..... [1]

(b) The scones are cooked using conduction and convection.

Explain the term *convection*.

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..... [3]

(c) Describe what happens to cheese when it is cooked.

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..... [2]

(d) Self-raising flour contains starch.

Describe the effect of dry heat on starch.

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

[Total: 8]

7 (a) Air can be introduced into dishes in many ways. Complete the table below. An example has been given for you.

method of introducing air	dish
whisking egg white	meringue

[4]

(b) Name a dish which uses steam (water vapour) to make it rise.

..... [1]

(c) Bread rises due to the action of yeast.

Name **two** conditions required by yeast for it to reproduce (bud).

1

2

[2]

(d) Fermentation occurs in bread making. Name the gas produced.

..... [1]

(e) State what happens to the yeast if:

(i) boiling water is used to make the dough;

..... [1]

(ii) the dough is put into a freezer.

..... [1]

(f) Suggest, with reasons, **two** suitable types of flour for making bread.

1

.....

2

.....

[2]

[Total: 12]

8 Discuss, with reasons, factors to consider:

(a) to ensure good kitchen hygiene;

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..... [4]

(b) when choosing kitchen flooring;

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..... [4]

(c) when choosing kitchen pans.

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..... [4]

Section C

Answer **either** Question 9(a) **or** 9(b).

9 (a) Identify and discuss specific dietary needs during pregnancy. [15]

OR

(b) Discuss the advantages and disadvantages of each of the following methods of cooking:

(i) steaming;

(ii) frying. [15]

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