



**Cambridge International Examinations**  
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER



**FOOD AND NUTRITION**

**0648/13**

Paper 1 Theory

**October/November 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 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 **11** printed pages and **1** blank page.

**Section A**

Answer **all** questions.

1 Define the term *a balanced diet*.

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

2 Carbohydrates provide the body with energy.

(a) Name **two** units of energy used to measure food.

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

(b) Describe **four** different ways in which the body uses energy.

1 .....  
2 .....  
3 .....  
4 ..... [4]

(c) Define the term *energy balance*.

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

(d) State **three** effects of energy imbalance.

1 .....  
2 .....  
3 ..... [3]

(e) Complete the following sentences to show how starch is digested.

In the mouth, ..... produced by the ..... glands changes cooked starch to .....

In the ileum, starch is further broken down into ..... which is then absorbed by the ..... in the walls of the small intestine and transported to the ..... [3]

3 It is recommended that the intake of sugar should be lowered.

(a) Apart from energy imbalance, explain **two** health issues associated with eating too much sugar.

- 1 .....
- .....
- 2 .....
- ..... [4]

(b) Suggest **four** ways of reducing sugar in the diet.

- 1 .....
- 2 .....
- 3 .....
- 4 ..... [4]

4 Non-starch polysaccharide (NSP) / dietary fibre is not classed as a nutrient, but is essential for good health.

(a) Give **four** benefits of NSP in the body.

- 1 .....
- 2 .....
- 3 .....
- 4 ..... [4]

(b) Name **three** possible results of a deficiency of NSP in the diet.

- 1 .....
- 2 .....
- 3 ..... [3]

(c) Suggest a total of **four** different ways to increase NSP in the following dishes. State **one** different way for each dish.

soup .....

.....

bread .....

.....

a fruit-based dessert .....

.....

a meat dish .....

.....

[4]

5 Suggest, with reasons, which nutrients a pregnant woman should include in her diet to ensure the health of both mother and baby.

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..... [7]

[Total: 40]

**Section B**

Answer **all** questions.

6 Food spoilage is caused by micro-organisms such as bacteria.

(a) Name **one** other type of micro-organism.

..... [1]

(b) Define the term *cross-contamination* and give **three** examples of how it may occur.

.....

1 .....

2 .....

3 ..... [4]

(c) Explain why chicken is classed as a 'high risk' food.

.....

.....

..... [2]

(d) State and explain **four** pieces of information on a food label which help consumers to use and store high risk food safely.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

..... [4]

(e) Give advice, with reasons, on the storage and re-heating of left-over cooked chicken.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
..... [4]

(f) Suggest **three** points to consider when buying a refrigerator.

1 .....  
.....  
2 .....  
.....  
3 .....  
..... [3]

7 Cereals are included in diets throughout the world.

(a) Give reasons for the importance of cereals.

.....  
.....  
.....  
.....  
.....  
.....  
..... [4]

(b) Rice is a cereal. Name **four** other cereals.

1 .....  
2 .....  
3 .....  
4 ..... [4]

(c) Describe the changes that take place during the boiling of rice.

.....  
.....  
.....  
.....  
.....  
..... [4]

(d) Give advice, with reasons, on the choice of flour for making the following products.

bread rolls .....

.....

.....

shortcrust pastry .....

.....

.....

fairy cakes .....

.....

.....

[6]

(e) Name **three** methods of introducing air into a baked product.

1 .....

2 .....

3 ..... [3]

8 Food should have visual appeal.

Suggest **two** different ways of producing a decorative finish to **each** of the following products.

bread rolls

1 .....

2 ..... [2]

individual savoury shortcrust pastry pies

1 .....

2 ..... [2]

fairy cakes

1 .....

2 ..... [2]

[Total: 45]



**Section C**

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

- 9 (a) Discuss reasons for the increased use of convenience foods and why this may be a concern to some people. [15]

Or

- 9 (b) Suggest reasons why some foods are cooked. Using examples, explain how grilling, stewing and roasting can affect meat. [15]

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A series of 30 horizontal dotted lines for writing.

**[Total: 15]**

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