



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

CANDIDATE
NAME

CENTRE
NUMBER

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CANDIDATE
NUMBER

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FOOD AND NUTRITION

0648/12

Paper 1 Theory

October/November 2012

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 a soft pencil for any diagrams or graphs.

Do not use staples, paper clips, highlighters, 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 8(a) **or** 8(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.

For Examiner's Use	
Section A	
Section B	
Section C	
Total	

This document consists of **14** printed pages and **2** blank pages.



Section A

Answer **all** questions.

For
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Use

- 1 (a) Name **three** nutrients which provide the body with energy.

Nutrient 1

Nutrient 2

Nutrient 3 [3]

- (b) State the energy value of 1 g of each of the nutrients named in (a).

Nutrient 1

Nutrient 2

Nutrient 3 [3]

- (c) Define the term *energy balance*.

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..... [1]

- (d) Discuss reasons why individuals have different energy requirements.

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..... [6]

- (e) Explain what happens if too much energy-giving food is eaten.

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..... [4]

- 2 Iron is involved in the production of energy.

- (a) Name **two** animal sources of iron.

1

2 [1]

- (b) Name **two** plant sources of iron.

1

2 [1]

- (c) Name the pigment which gives blood its red colour.

..... [1]

- (d) Explain the function of the pigment named in (c).

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..... [2]

- (e) Name the deficiency disease associated with iron.

..... [1]

- (f) State **four** symptoms of the disease named in (e).

1

2

3

4 [2]

- 3 (a) One of the functions of vitamin C is to promote the absorption of iron.

Give **three** other functions of vitamin C.

1

2

3 [3]

- (b) Name **two** good sources of vitamin C.

1

2 [1]

- (c) Name the deficiency disease associated with vitamin C.

..... [1]

- (d) Why is it important to have a daily supply of vitamin C?

..... [1]

- 4 The small intestine plays an important part in digestion and absorption.

Describe and explain:

- (a) digestion in the small intestine;

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..... [6]

(b) absorption in the small intestine.

For
Examiner's
Use

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..... [3]

[Section A Total: 40]

Section B

Answer **all** questions.

For
Examiner's
Use

5 Write an informative paragraph on each of the following:

(a) the use of a refrigerator;

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..... [5]

(b) different uses of fats and oils;

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(c) the advantages and disadvantages of steaming.

For
Examiner's
Use

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..... [5]

- 6 (a) State **four** reasons for serving sauces and give an example for each reason.

For
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Use

Reason 1

Example 1

Reason 2

Example 2

Reason 3

Example 3

Reason 4

Example 4 [4]

- (b) The following ingredients can be used to make cheese sauce:

25 g flour
25 g margarine
250 ml milk
50 g cheese

- (i) Describe, with reasons, how to make cheese sauce by the roux method.

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..... [4]

- (ii) Name **two** dishes which include cheese sauce.

1

2 [1]

(c) Identify **three** different ways to reduce the amount of fat in the cheese sauce.

1

2

3 [3]

(d) Suggest **three** reasons for a lumpy sauce.

1

2

3 [3]

For
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Use

7 Discuss:

For
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Use

(a) the importance of food packaging;

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..... [5]

(b) the information on food labels;

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(c) the use of additives in processed food.

For
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Use

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..... [5]

[Section B Total: 45]

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- Identify and discuss problems that could be associated with vegetarian diets. [15]

[illegible]

This image shows a full page of a handwriting practice worksheet. It consists of multiple sets of three horizontal dashed lines, providing a guide for letter height and placement. The lines are evenly spaced across the entire page, which is otherwise blank.

This image shows a full page of a handwriting practice worksheet. It consists of multiple sets of three horizontal dashed lines, providing a guide for letter height and placement. The lines are evenly spaced across the entire page, leaving ample room for writing practice. There is no text or other markings on the page.

[Total for Paper: 100]

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