



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	
<b>Total</b>	

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



**Section A**

Answer **all** questions.

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]



5

(b) absorption in the small intestine.

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..... [3]

[Section A Total: 40]

**Section B**

Answer **all** questions.

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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[5]



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

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:

- 25g flour
- 25g margarine
- 250ml milk
- 50g 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]

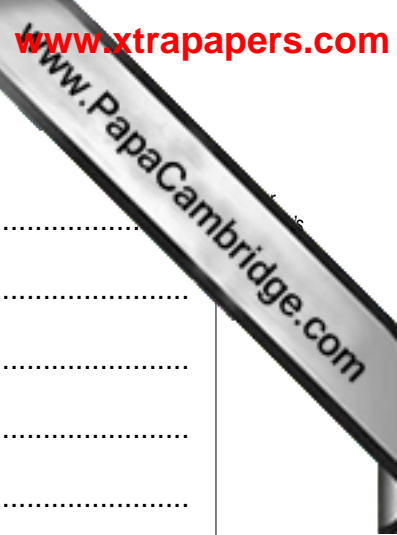
(d) Suggest **three** reasons for a lumpy sauce.

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

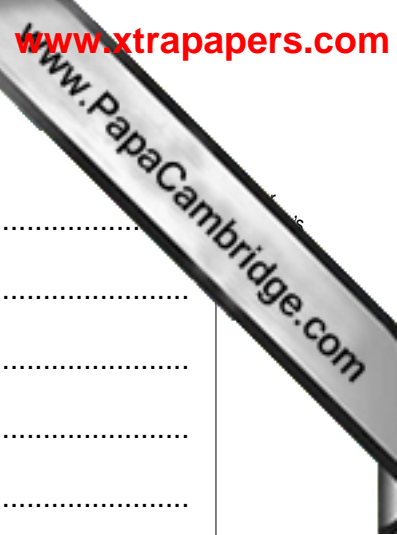








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[Section C Total: 15]



