



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

CANDIDATE
NAME

CENTRE
NUMBER

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NUMBER

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FOOD AND NUTRITION

0648/01

Paper 1 Theory

May/June 2009

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 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 9 **or** Question 10.

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 **13** printed pages and **3** blank pages.



Section A

Answer **all** questions.

For
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Use

1 (a) Name the elements which make up fat.

1 2
3 [3]

(b) Fat can be used to provide the body with energy.

Name **two** other sources of energy.

1 2 [2]

(c) Identify **four** uses of energy in the body.

1
2
3
4 [4]

2 Vitamin A and vitamin D are fat-soluble vitamins.

(a) State **three** functions of vitamin A.

1
2
3 [3]

(b) Name **four** sources of vitamin A.

1 2
3 4 [2]

(c) Name the deficiency disease associated with a lack of vitamin A.

..... [1]

(d) State **two** functions of vitamin D.

- 1
- 2 [2]

(e) Name **four** sources of vitamin D.

- 1 2
- 3 4 [2]

(f) Name the deficiency disease associated with a lack of vitamin D.

..... [1]

3 (a) Describe the digestion of fat in the duodenum.

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..... [3]

(b) Describe the absorption of fat in the ileum.

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..... [2]

4 (a) Explain the importance of Non-Starch Polysaccharide/NSP (dietary fibre) in a healthy diet.

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..... [4]

(b) Name **four** good sources of NSP.

1 2
3 4 [2]

5 Water is vital to life.

(a) Discuss **four** uses of water in the body.

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

(b) Name the condition which results from a deficiency of water.

..... [1]

(c) Give **two** symptoms of the condition identified in (b).

1 2 [1]

(d) Identify, with reasons, **three** groups of people who have a particular need for water.

Group 1

Reason 1

Group 2

Reason 2

Group 3

Reason 3 [3]

[Section A Total: 40]

*For
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Section B

Answer **all** questions.

*For
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Use*

6 (a) All meals should be balanced.

Identify, with examples, **five** other points to consider when planning meals.

Point 1

.....

Example 1

Point 2

.....

Example 2

Point 3

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Example 3

Point 4

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Example 4

Point 5

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Example 5 [5]

(b) Discuss the particular dietary needs of pregnant women.

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[5]

(c) Explain the problems associated with a diet which is high in fat.

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[5]

*For
Examiner's
Use*

7 Write an informative paragraph on each of the following:

(a) different uses of sugar in the preparation of dishes;

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..... [5]

(b) rules, with reasons, for successful shortcrust pastry;

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..... [5]

(c) High Biological Value (HBV) protein for vegans.

For
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Use

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[5]

8 (a) Name six nutrients in fish.

1	2
3	4
5	6

[3]

(b) Explain three methods of preserving fish.

Method 1

Explanation

Method 2

Explanation

Method 3

Explanation

[3]

(c) Frying is a popular method of cooking.

(i) Give **three** reasons for coating some foods before frying.

- 1
- 2
- 3 [3]

(ii) Suggest **two** suitable coatings.

- 1
- 2 [2]

(iii) Explain **four** safety points to consider when frying.

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

[Section B Total: 45]

Section C

Answer **either** Question 9 **or** Question 10.

*For
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9 Explain the steps you would take when preparing, cooking and serving food to ensure that it is safe to eat. [15]

OR

10 Discuss methods of heat transference when cooking and the advantages and disadvantages of each method. [15]

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