



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
General Certificate of Education Ordinary Level

CANDIDATE  
NAME

CENTRE  
NUMBER

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CANDIDATE  
NUMBER

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**FOOD AND NUTRITION**

**6065/01**

Paper 1 Theory

**May/June 2009**

**2 hours**

Candidates answer Section A on the Question Paper.

Additional Materials: Answer Booklet/Paper



**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** parts of Question 1.  
You are advised to spend no longer than 45 minutes on Section A.

**Section B**

Answer any **four** questions.  
Write your answer on the separate Answer Booklet/Paper provided.  
Enter the numbers of the **Section B** questions you have answered in the grid below.

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	
<b>Section A</b>	
<b>Section B</b>	X
<b>Total</b>	

This document consists of **6** printed pages and **2** blank pages.



Section A

Answer **all** questions.

For  
Examiner's  
Use

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

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

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

Name **two** other sources of energy.

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

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

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

(b) Vitamin A and vitamin D are fat-soluble vitamins.

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

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

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

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

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

..... [1]

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

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

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

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

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

..... [1]

(c) (i) Describe the digestion of fat in the duodenum.

.....  
.....  
.....  
.....  
.....  
..... [3]

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

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

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

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

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

1 ..... 2 .....

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

(e) Water is vital to life.

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

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

..... [4]

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

..... [1]

(iii) Give **two** symptoms of the condition identified in (ii).

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

(iv) 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]

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**Section B**

Answer **four** questions.

- 2 (a) Define the following methods of transferring heat and give **one** example of each method:
- (i) conduction;
  - (ii) convection;
  - (iii) radiation. [3 x 3]
- (b) Discuss the advantages and disadvantages of cooking in a microwave oven. [6]
- 3 (a) All meals should be balanced.  
Identify, with examples, **five** other points to consider when planning meals. [5]
- (b) Discuss the particular dietary needs of pregnant women. [5]
- (c) Explain the problems associated with a diet which is high in fat. [5]
- 4 Write an informative paragraph on each of the following:
- (a) different uses of sugar in the preparation of dishes; [5]
  - (b) rules, with reasons, for successful shortcrust pastry; [5]
  - (c) High Biological Value (HBV) protein for vegans. [5]
- 5 (a) Name **six** nutrients in fish. [3]
- (b) Explain **three** methods of preserving fish. [3]
- (c) Frying is a popular method of cooking.
- (i) Give **three** reasons for coating some foods before frying. [3]
  - (ii) Suggest **two** suitable coatings. [2]
  - (iii) Explain **four** safety points to consider when frying. [4]

- 6 (a) Name, and give quantities of additional ingredients needed for a fatless sponge cake made with three eggs. [2]
- (b) Describe, with reasons, how the cake is made and baked. [6]
- (c) Explain the changes which take place when the cake is baked. [4]
- (d) Suggest reasons for a close texture in the finished cake. [2]
- (e) Name **two** baked items which can be made using this recipe. [1]
- 7 (a) Bacteria can be responsible for food spoilage.  
Name **four** other causes of food spoilage. [2]
- (b) Temperature is important for bacterial growth.  
State the effect of the following temperatures on bacteria:
- (i)  $-18^{\circ}\text{C}$ ;
- (ii)  $4^{\circ}\text{C} - 7^{\circ}\text{C}$ ;
- (iii)  $20^{\circ}\text{C} - 40^{\circ}\text{C}$ ;
- (iv)  $70^{\circ}\text{C} - 100^{\circ}\text{C}$ . [4]
- (c) Give advice on the use of a refrigerator to delay food spoilage. [5]
- (d) Discuss ways to avoid the transfer of bacteria to food during food preparation. [4]

**[Section B Total: 60]**

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