



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

Paper 1 Theory

6065/01

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	
Section A	
Section B	
Total	

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



Section A

Answer **all** questions.For
inner's

- 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]

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]

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 with three eggs. [2]
- (b) Describe, with reasons, how the cake is made and baked. [1]
- (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°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]

