

Centre Number	Candidate Number	Name
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UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
International Certificate of Secondary Education

**FOOD AND NUTRITION**

**0648/01**

Paper 1 Theory

May/June 2004

**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 in the spaces provided on the Question Paper.  
You may use a soft pencil for any diagrams, or rough working.  
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions in the spaces provided on the Question Paper.  
You are advised to spend no longer than 45 minutes on Section A.  
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	
1	
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<b>Total</b>	

If you have been given a label, look at the details. If any details are incorrect or missing, please fill in your correct details in the space given at the top of this page.

Stick your personal label here, if provided.

This document consists of **11** printed pages and **1** blank page.



**Section A**

Answer **all** questions.

**1** Starches and sugars are carbohydrates and provide the body with energy.

**(a)** Name the elements from which carbohydrates are formed.

.....[3]

**(b)** Name **two** other nutrients which can provide energy.

.....[2]

**(c)** Define the following terms and give **two** examples of each.

**(i)** monosaccharides

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

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

**(ii)** disaccharides

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

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

**(d)** Starch is a polysaccharide.

**(i)** What do you understand by the term Non-Starch Polysaccharide (NSP)?

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

**(ii)** How is it used by the body?

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

**(iii)** Name **four** foods which are good sources of NSP.

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

(e) Describe the digestion and absorption of starch in:

the mouth

.....  
.....  
.....

the small intestine

.....  
.....  
.....  
.....[6]

2 Iron is important for the production of energy.

(a) Explain how iron is used by the body.

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

(b) Describe the symptoms of a deficiency of iron in the diet.

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

(c) Name **four** foods which are good sources of iron.

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

(d) Name the vitamin which is important for the absorption of iron.

.....[1]

3 Dietary advice is to reduce the intake of sugar.

(a) Give reasons for this advice.

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

(b) How can sugar be reduced in the diet?

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

4 Discuss ways of encouraging good eating habits in children.

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.....[5]

[SECTION A TOTAL: 40]

**Section B**

Answer **all** questions.

5 (a) State, with examples, **four** reasons for serving sauces with meals.

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

(b) (i) Describe the making of a roux sauce using the following ingredients:

25 g (1 oz) flour  
25 g (1 oz) margarine  
250 ml (1/2 pt) milk

- .....  
.....  
.....  
.....  
.....  
.....
- [5]

(ii) Suggest **two** ways to change the flavour.

- .....  
.....
- [1]

(c) Give **two** reasons for each of the following:

(i) using a wooden spoon when making the sauce;

1. ....

2. ....[1]

(ii) lumps in the finished sauce.

1. ....

2. ....[1]

(d) Describe the changes which take place during the cooking of the sauce.

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

6 The kitchen should be a safe, pleasant place in which to work.

(a) State how accidents can be prevented when:

(i) storing and using knives;

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

(ii) deep frying;

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

(iii) using electrical equipment.

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

**(b)** Write an informative paragraph on **each** of the following:

**(i)** work surfaces;

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.....[3]

**(ii)** ventilation.

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.....[3]

**7 (a)** List **six** of the nutrients found in fish.

- |         |            |
|---------|------------|
| 1. .... | 4. ....    |
| 2. .... | 5. ....    |
| 3. .... | 6. ....[3] |

**(b)** State **six** points to look for when buying fresh fish.

- |         |            |
|---------|------------|
| 1. .... | 4. ....    |
| 2. .... | 5. ....    |
| 3. .... | 6. ....[3] |

(c) Describe how to:

(i) clean a whole fresh fish before cooking;

.....

.....

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.....[2]

(ii) prepare fish for freezing.

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.....[2]

(d) (i) Explain why freezing preserves fish.

.....

.....[1]

(ii) Name **two** other methods of preserving fish.  
In each case, state the principles of preservation involved.

Method 1 .....

Principle .....

Method 2 .....

Principle .....[4]

[SECTION B TOTAL: 45]



**Section C**

Answer **either 8(a) or 8(b)**.

- 8 (a) Meals should be well-balanced.
  - (i) Explain other points to consider when planning and cooking family meals.
  - (ii) Explain, with examples, how vegans (strict vegetarians) can be provided with High Biological Value (HBV) protein.

**OR**

- (b) Discuss the reasons for preserving food and explain how spoilage is prevented in named methods of preservation.

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**[SECTION C TOTAL: 15]**

**[Total for Paper: 100]**

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