

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

**FOOD AND NUTRITION**

**0648/01**

Paper 1 Theory

October/November 2005

**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.

**Section A**

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

**Section B**

Answer **all** questions in the spaces provided on the Question Paper.

**Section C**

Answer either question 8(a) or 8(b) on the lined pages at the end of the Question Paper.  
The number of marks is given in brackets [ ] at the end of each question or part question.

For Examiner's Use	
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8	
<b>Total</b>	

This document consists of **12** printed pages.



**Section A**

Answer **all** questions.

1 (a) Name **three** nutrients which can provide energy.

- 1. .... 2. ....
- 3. ....

(b) Give the energy value of 1 g of each of the nutrients named above.

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

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

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

(d) Explain what is meant by the term BMR (Basal Metabolic Rate).

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

(e) What happens when energy intake is greater than energy output?

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

**(f)** Discuss **five** reasons for different individual energy requirements.

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**2 (a)** State **four** good sources of iron.

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.....[2]

**(b)** Explain the importance of iron in the body.

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.....[3]

**(c)** Name the deficiency disease caused by a lack of iron.

.....[1]

**(d)** Give **two** symptoms of the deficiency disease named above.

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

**(e)** Name the vitamin which aids the absorption of iron.

.....[1]

3 Describe and explain:

(a) digestion in the duodenum;

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(b) absorption in the ileum.

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4 Current dietary advice is to include fresh fruit and vegetables in the diet each day.

(a) Give **six** reasons for their importance.

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.....[3]

(b) Suggest how children can be encouraged to eat fresh fruit and vegetables.  
Give reasons for your suggestions.

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.....[3]

**[Section A Total: 40]**

**Section B**

Answer **all** questions.

5 (a) State **four** reasons for the importance of cereals in many parts of the world.

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

(b) Name **four** cereals.

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

(c) The following ingredients can be used to make shortcrust pastry.

- 200 g plain flour
- 100 g fat
- 50 ml cold water

Describe, with reasons, the method of making shortcrust pastry.

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(d) Give the oven temperature for baking shortcrust pastry.

.....[1]

(e) State and explain the changes which take place when the pastry is being baked.

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6 Write an informative paragraph on each of the following:

(a) soya;

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.....[5]





7 Bacteria can make food unsafe to eat.

(a) Name **two** types of bacteria which cause food poisoning.

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.....[1]

(b) State the effect of the following temperatures on bacteria:

(i)  $-18^{\circ}\text{C}$

.....

(ii)  $4^{\circ}\text{C}$

.....

(iii)  $37^{\circ}\text{C}$

.....

(iv)  $70^{\circ}\text{C}$

.....[2]

(c) Discuss the safe storage, preparation, cooking and serving of meat.

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(d) Discuss ways in which enzymes can bring about changes in foods.

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[Section B Total: 45]

**Section C**

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

8 (a) Discuss the points to consider when planning meals. Explain the particular nutritional needs of teenagers and suggest how their needs can be met when planning their meals.

or

(b) Discuss advantages and disadvantages of using convenience foods. Suggest ways in which convenience foods can be used in family meals.

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Dotted lines for writing.

**[Section C Total: 15]**

**[Total for Paper: 100]**

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