

Centre Number						Candidate Number				
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Other Names										
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For Examiner's Use	
Examiner's Initials	
Question	Mark
1	
2	
3	
4	
5	
6	
7	
TOTAL	



General Certificate of Secondary Education
June 2012

Home Economics Food and Nutrition

45851

Unit 1 Written Paper

Monday 14 May 2012 9.00 am to 10.30 am

You will need no other materials.

Time allowed

- 1 hour 30 minutes

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 100.
- You are reminded of the need for good English and clear presentation in your answers. Quality of Written Communication will be assessed in answers written in continuous prose.



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Answer **all** questions in the spaces provided.

1 The table below shows the nutritional content of bread.

Type of bread	Protein (g)	Calcium (mg)	Iron (mg)	Dietary fibre (NSP) (g)
White	8.4	110	1.6	3.8
Brown	8.5	100	2.2	5.9
Wholemeal	9.2	54	2.7	7.4

1 (a) Which bread contains the most iron?

.....
(1 mark)

1 (b) Why does white bread contain more calcium than brown or wholemeal bread?

.....
(1 mark)

1 (c) Which vitamin helps the body to absorb calcium?

.....
(1 mark)

1 (d) Name the disease caused by a lack of iron in the diet.

.....
(1 mark)

1 (e) Describe how the absorption of iron can be affected by the foods we eat.

.....
.....
.....
(2 marks)



1 (f) Select **one** type of bread from the table to use to make a sandwich for a packed lunch.

Type of bread:

.....

Discuss the nutritional value of this bread for a teenager.

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(4 marks)

1 (g) List **three** foods that could be added to a packed lunch for a teenager to increase iron intake.

1

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3

(3 marks)

13

Turn over for the next question

Turn over ▶



2 The ingredients listed below are for a cheese sauce.

Cheese sauce
40g butter 40g plain flour 500ml milk 100g grated cheese Salt and pepper

2 (a) Which ingredient is used to thicken the sauce?

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(1 mark)

2 (b) Name **two** methods that could be used to make the sauce.

.....
.....
(2 marks)

2 (c) Why is the sauce not suitable for someone suffering from coeliac disease?

.....
(1 mark)

2 (d) Suggest **three** ways the sauce could be modified to follow healthy eating guidelines.

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(3 marks)



2 (e) Explain how the process of gelatinisation causes the sauce to thicken.

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(5 marks)

12

Turn over for the next question

Turn over ▶



3 (a) Name **two** water soluble vitamins.

1.....

2.....

(2 marks)

3 (b) By law, which **two** vitamins are added to margarine/low fat spreads?

1.....

2.....

(2 marks)

3 (c) Explain why raw vegetables contain more vitamins than cooked vegetables.

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(2 marks)



3 (d) Complete the table below.

Vitamin	Functions in the body	Main food sources
B2 (Riboflavin)
Folic Acid
C (Ascorbic acid)

(9 marks)

15

Turn over for the next question

Turn over ▶



4 (a) Name **three** microorganisms that cause food to spoil.

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.....

(3 marks)

4 (b) List **three** conditions microorganisms need in order to multiply.

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(3 marks)

4 (c) Complete the following sentences about temperature control.

(i) Water boils at °C

(ii) The temperature of a freezer should be below °C

(iii) Bacteria multiply rapidly between and °C

(iv) When heating food the internal temperature should reach °C

(4 marks)



4 (d) Explain how you can prevent food poisoning when storing and preparing food in the home.

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(9 marks)

19

Turn over for the next question

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5 (a) Complete the table below to show **four** types of additive and their function.
One example has been done for you.

Type of additive	Function
Preservative	To make food safe to eat for longer

(8 marks)

5 (b) What does the 'E' in E number mean?

.....
(1 mark)

5 (c) What are the advantages and disadvantages of additives in processed food?

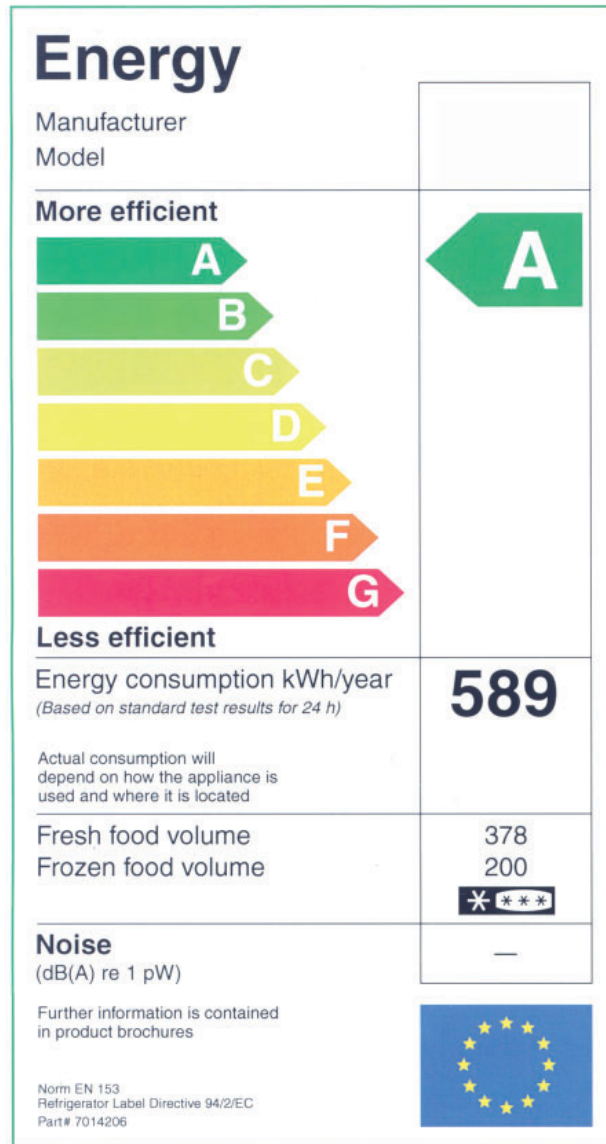
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(6 marks)

15



6 (a) The label below is found on a new refrigerator.



Explain how this label would help someone to choose a new refrigerator.

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(4 marks)

6 (b) Identify **two** types of refrigerator available to consumers.

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(2 marks)

Turn over ▶



6 (c) Give **two** modern features that may be found in refrigerators.

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.....
(2 marks)

6 (d) Explain how the Sale and Supply of Goods Act protects the consumer when buying a new refrigerator.

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(2 marks)

10

7 (a) What are the advantages and disadvantages of shopping at a farmers' market?

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(4 marks)

7 (b) Consumers can shop for food in hypermarkets, specialist shops or on the Internet.
Discuss the suitability of each method as a way of shopping for a busy family.

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Turn over ▶



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(12 marks)

END OF QUESTIONS

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