

Candidate forename						Candidate surname					
Centre number						Candidate number					

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GCSE

A522/01

DESIGN AND TECHNOLOGY

Food Technology
Sustainable Design

WEDNESDAY 16 MAY 2012: Afternoon

DURATION: 1 hour
plus your additional time allowance

MODIFIED ENLARGED

Candidates answer on the Question Paper.

OCR SUPPLIED MATERIALS:

None

OTHER MATERIALS REQUIRED:

None

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS TO CANDIDATES

- **Write your name, centre number and candidate number in the boxes on the first page. Please write clearly and in capital letters.**
- **Use black ink. HB pencil may be used for graphs and diagrams only.**
- **Answer ALL the questions in Section A AND Section B.**
- **Read each question carefully. Make sure you know what you have to do before starting your answer.**
- **Write your answer to each question in the space provided. If additional space is required, you should use the lined pages at the end of this booklet. The question number(s) must be clearly shown.**

INFORMATION FOR CANDIDATES

- **The number of marks is given in brackets [] at the end of each question or part question.**
- **The total number of marks for this paper is 60.**
- **Your quality of written communication is assessed in the question marked with an asterisk (*).**

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SECTION A

Answer ALL questions.

You are advised to spend about 15 minutes on this section.

On questions 1 – 5 circle or write down your answer.

1 Which food should consumers be reducing in their diet?

(a) Sugar

(b) Apples

(c) Carrots

(d) Chicken

[1]

2 Which date mark is used on a can of baked beans?

(a) Use by date

(b) Display until

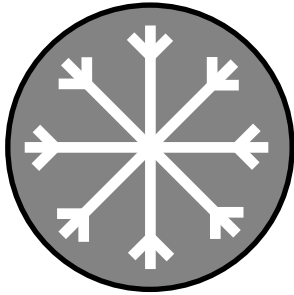
(c) Best before

(d) Sell by

[1]

- 3 Which statement best describes free range chicken production?**
- (a) Chickens that are always kept in small cages**
 - (b) Chickens that are kept indoors in big cages**
 - (c) Chickens that can roam outside and have spacious indoor areas**
 - (d) Chickens that always live in small cages outdoors**
- [1]**
- 4 Which statement describes organic farming?**
- (a) Keeping animals in cramped conditions**
 - (b) Using some artificial fertilisers**
 - (c) Using some artificial pesticides**
 - (d) Artificial fertilisers or pesticides are not used**
- [1]**
- 5 Which group of consumers need to increase their intake of folic acid?**
- (a) Babies**
 - (b) Pregnant women**
 - (c) Teenagers**
 - (d) Elderly**
- [1]**

6 The symbol shown stands for:



_____ [1]

7 Give ONE function of calcium in the diet.

_____ [1]

8 State the colour chopping board which should be used to prepare salad vegetables.

_____ [1]

9 What does ETI stand for?

_____ [1]

10 State the safe working temperature for a refrigerator.

_____ °C [1]

Decide whether each of the following statements is TRUE or FALSE.

Tick (✓) the box to show your answer.

	TRUE	FALSE	
11 We should be increasing the amount of fat we eat	<input type="checkbox"/>	<input type="checkbox"/>	[1]
12 The correct temperature for a freezer is -18°C	<input type="checkbox"/>	<input type="checkbox"/>	[1]
13 Drying foods extends their shelf life	<input type="checkbox"/>	<input type="checkbox"/>	[1]
14 Farmers are paid a fair price for Fairtrade products	<input type="checkbox"/>	<input type="checkbox"/>	[1]
15 All packaging can be composted	<input type="checkbox"/>	<input type="checkbox"/>	[1]
Total [15]			



SECTION B

Answer ALL questions.

You are advised to spend about 45 minutes on this section.

16 Food manufacturers use different packaging materials.

(a) Complete the chart to show TWO advantages and ONE disadvantage of each packaging material.

PRODUCT	ADVANTAGE	DISADVANTAGE
<div></div> <div>Aluminium cans</div>	<div>1 _____</div> <div>_____</div> <div>_____</div> <div>2 _____</div> <div>_____</div> <div>_____</div>	<div>1 _____</div> <div>_____</div> <div>_____</div>
<div></div> <div>Plastic bottle</div>	<div>1 _____</div> <div>_____</div> <div>_____</div> <div>2 _____</div> <div>_____</div> <div>_____</div>	<div>1 _____</div> <div>_____</div> <div>_____</div>

(b) State ONE way manufacturers encourage consumers to recycle packaging materials.

_____ **[1]**

(c) Fig. 1 shows a cake to be packaged.

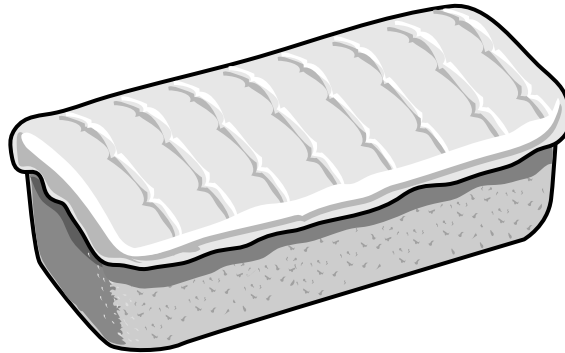


Fig. 1

Give TWO ways a manufacturer could package the cake to reduce its impact on the environment.

1 _____

2 _____

_____ **[2]**

- (d) The cake is preservative free.
State the effect of this on the cake.**

_____ **[1]**

- (e) State how you should store this cake once the package has been opened.**

_____ **[1]**

- (f) Give FOUR pieces of information, other than storage instructions, which are required by law on the cake packaging.**

1 _____

2 _____

3 _____

4 _____ **[4]**

Total [15]

17 Fig. 2 shows a carton of long life pineapple juice.

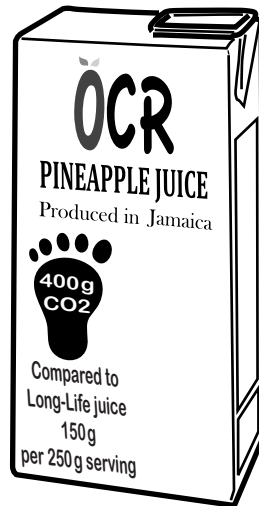


Fig. 2

(a) Explain what is meant by the carbon footprint of a product.

[4]

**(b) The long life pineapple juice comes in a tetra-pack.
Give TWO reasons why these are more difficult to
recycle than plastic cartons.**

1 _____

2 _____

_____ **[2]**

**(c) The sale of fruit juices continues to rise.
Give THREE reasons for the increase in sales.**

1 _____

2 _____

3 _____

_____ **[3]**

(d) A farm shop wants a new food product to promote the use of:

- **UK grown produce**
- **seasonal summer fruits OR vegetables**
- **creative dishes**
- **nutritious products**

Using notes and / or sketches outline the details for ONE new food product that could be promoted.

(e) Give TWO reasons why consumers purchase frozen fruits and vegetables.

1 _____

2 _____

_____ **[2]**

Total [15]

18 Manufacturers include valuable information on food packaging.

(a) Give TWO reasons why nutritional information is included on packaging.

1 _____

2 _____

[2]

(b)* Fig. 3 shows a variety of food products.



Burger in a bap and chips

Lasagne

Fish and chips

Chocolate cake

Crisps

Chocolate bar

Sweet breakfast cereal

Biscuits

Fig. 3

[illegible]

(c) The UK is a multicultural society.

(i) Give THREE ways a person's culture can influence what they eat.

1 _____

2 _____

3 _____ **[3]**

(ii) Describe how the food industry is meeting the cultural needs of the consumer.

_____ **[4]**

Total [15]

[illegible]

[illegible]

[illegible]

[illegible]

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