

**GENERAL CERTIFICATE OF SECONDARY EDUCATION
DESIGN AND TECHNOLOGY**

A522

Food Technology
Sustainable Design

Candidates answer on the question paper.

OCR supplied materials:

None

Other materials required:

None

**Thursday 23 June 2011
Afternoon**

Duration: 1 hour



| | | | |
|--------------------|--|-------------------|--|
| Candidate forename | | Candidate surname | |
|--------------------|--|-------------------|--|

| | | | | | | | | | | |
|---------------|--|--|--|--|--|------------------|--|--|--|--|
| Centre number | | | | | | Candidate number | | | | |
|---------------|--|--|--|--|--|------------------|--|--|--|--|

MODIFIED LANGUAGE

INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. Pencil may be used for graphs and diagrams only.
- 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. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Answer **all** the questions in Section A **and** Section B.
- Do **not** write in the bar codes.

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 (*).
- This document consists of **12** pages. Any blank pages are indicated.

Section A

Answer **all** questions.

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

On questions 1 – 5 **circle** your answer.

- 1** Which of the following food packages is difficult to recycle?
- (a) Tetra packs
 - (b) Card
 - (c) Paper
 - (d) Glass [1]
- 2** Which food can be sold as 'free range'?
- (a) Fish
 - (b) Eggs
 - (c) Pork
 - (d) Vegetables [1]
- 3** Processed foods usually contain less:
- (a) Sugar
 - (b) Fat
 - (c) Salt
 - (d) Fibre [1]
- 4** When are brussel sprouts in season in the UK?
- (a) July
 - (b) December
 - (c) March
 - (d) August [1]

- 5 Which of the following is an example of secondary recycling?
- (a) Composting raw vegetables
 - (b) Using plastic carrier bags as a bin liner
 - (c) Eating left over food
 - (d) Using a carrier bag more than once. [1]

6 The symbol shown stands for:



..... [1]

7 Storing food correctly reduces food waste.
State how cheese should be stored in the home.
..... [1]

8 State **one** way to reuse plastic containers.
..... [1]

9 State what is meant by the Ethical Trading Initiative.
..... [1]

10 There are some pieces of information which manufacturers must put on food packaging.
State **one** piece of information they may put on if they wish.
..... [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 reducing the amount of salt we eat | <input type="checkbox"/> | <input type="checkbox"/> | [1] |
| 12 Frozen food should be stored below -18°C | <input type="checkbox"/> | <input type="checkbox"/> | [1] |
| 13 One function of calcium is heart regulation | <input type="checkbox"/> | <input type="checkbox"/> | [1] |
| 14 Reduced fat products are always low in calories | <input type="checkbox"/> | <input type="checkbox"/> | [1] |
| 15 Some plastic packaging is made from a sustainable source | <input type="checkbox"/> | <input type="checkbox"/> | [1] |

Total [15]

Turn over

Section B

Answer **all** questions.

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

16 There has been an increase in sales of ready made desserts.

(a) State **two** reasons for this increase.

- 1
-
- 2
- [2]

(b) Give **three** reasons why product analysis is carried out on food products.

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

17 Fig. 1 shows the packaging materials used on a luxury savoury flan product.

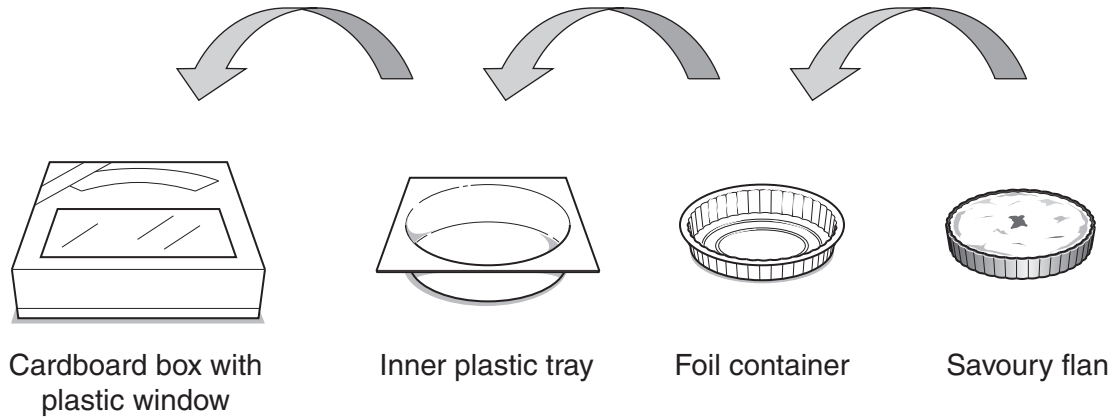


Fig. 1

(a) State **one** part of the packaging material used for the savoury flan which is biodegradable.

..... [1]

(b) The manufacturer wants to improve the packaging to be more environmentally friendly. Explain **three** ways this could be done.

1

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

2

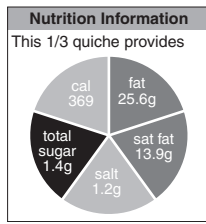
.....
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.....
.....

3

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

[6]

- (c) Fig. 2 shows the nutritional labelling on the front of the savoury flan package. Name this system.



.....

[1]

Fig. 2

Fig. 3 shows the main ingredients used in the savoury flan.

| Shortcrust pastry | Pesto, Tomato and Mozzarella Cheese filling | |
|--|--|---|
| <ul style="list-style-type: none"> • white flour • butter • water • salt | <ul style="list-style-type: none"> • double cream • full fat milk • eggs – free range • cherry tomatoes • mozzarella cheese • cheddar cheese | <ul style="list-style-type: none"> • onion • cornflour • garlic • salt • pepper • pesto |

Fig. 3

- (d) The savoury flan is to be changed so that it can be promoted as part of a healthier range of luxury food products. Complete the table below to show **two** different ways this could be done.

| Ingredient in Savoury Flan | Ingredient changed to | Reason |
|----------------------------|-----------------------|--------|
| 1 | | |
| 2 | | |

[4]

- (e) The manufacturer has chosen to use free range eggs in the product. Give **one** reason for this.

.....
 [1]

- (f) Consumers need allergy information on food products. State **two** ingredients in the savoury flan which would be listed in the allergy information.

1

2 [2]

Total [15]
Turn over

18 It is estimated that consumers throw away £10 billion of food each year.

(a) Some of the food thrown away could have been reused to make other dishes. State **three** safety rules for using left over foods.

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

(b) Give **three** ways a family could reduce their food waste.

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

(c) Explain why the number of people growing their own vegetables has increased.

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

Fig. 4 shows the vegetables grown by a gardener in the UK.

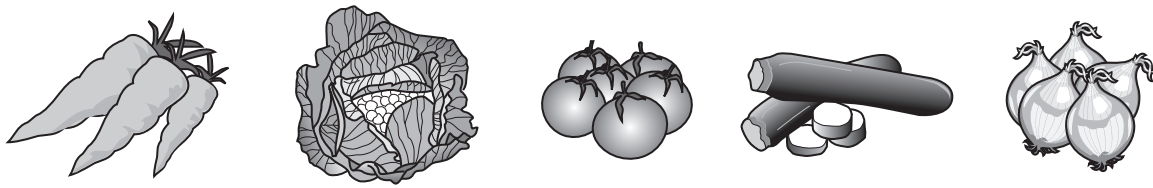


Fig. 4

(d) The gardener has produced more vegetables than he can use before they start to perish. Give **three** ways the gardener could make sure these vegetables are not wasted.

- 1
 - 2
 - 3
- [3]

(e) Explain why we are being encouraged to think more about the amount of fruit and vegetables we eat.

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

Total [15]

10
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11
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