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Centre number						Candidate number				
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**OXFORD CAMBRIDGE AND RSA EXAMINATIONS
GENERAL CERTIFICATE OF SECONDARY EDUCATION**

A522

DESIGN AND TECHNOLOGY

**Food Technology
Sustainable Design**

THURSDAY 23 JUNE 2011: Afternoon

DURATION: 1 hour

SUITABLE FOR VISUALLY IMPAIRED CANDIDATES

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. 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.**

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 (*).**

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 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 on more than one occasion. [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 State ONE optional piece of information
manufacturers may decide to put on food packaging.**

_____ [1]

**Which of the following statements are TRUE or FALSE?
Write down True or False after each statement.**

11 We should be reducing the amount of salt we eat

[1]

12 Frozen food should be stored below -18°C

[1]

13 One function of calcium is heart regulation

[1]

14 Reduced fat products are always low in calories

[1]

15 Some plastic packaging is made from a sustainable source

[1]

Total [15]

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]

[6]

(d) Suggest ONE fruit which could be used in the pie in each of the different seasons.

Autumn _____

Winter _____

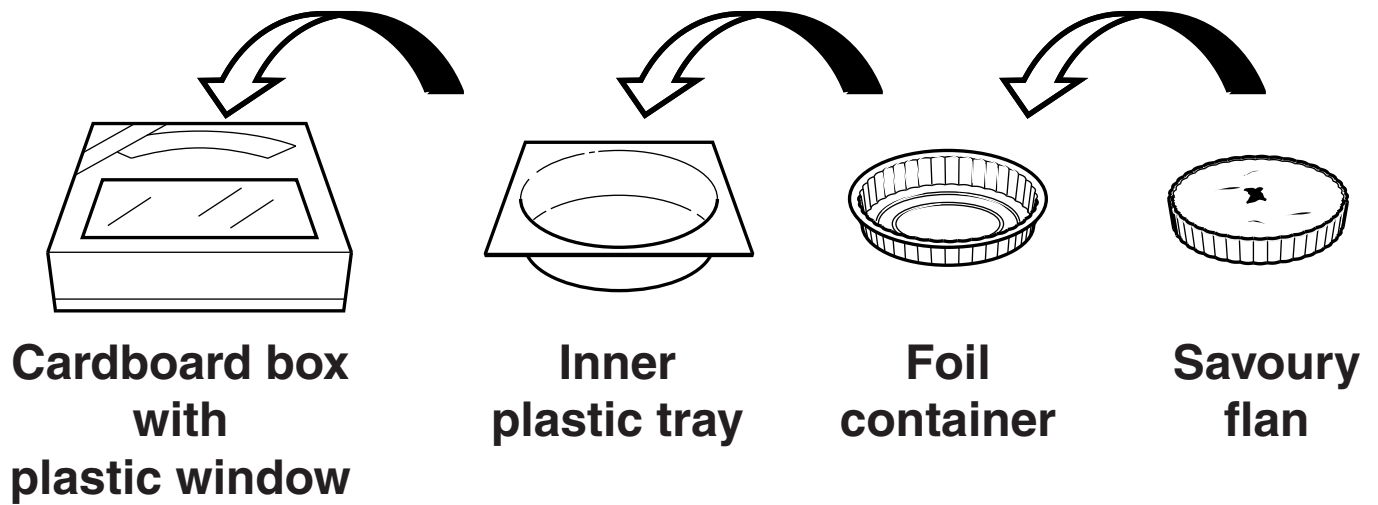
Spring _____

Summer _____ **[4]**

Total [15]

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]

2 _____

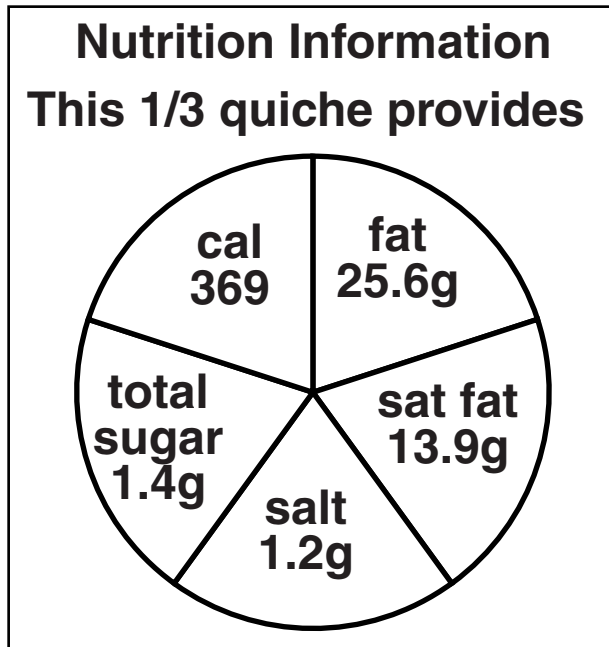
_____ [2]

3 _____

_____ [2]

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

Fig. 2



[1]

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

Fig. 3

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

(d) The savoury flan is to be changed so that it can be promoted as part of a healthier range of luxury food products.

Choose two ingredients from the savoury flan. Write down how the ingredients can be changed and give a reason for each change.

1 _____

_____ [2]

2 _____

_____ [2]

(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]

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 _____

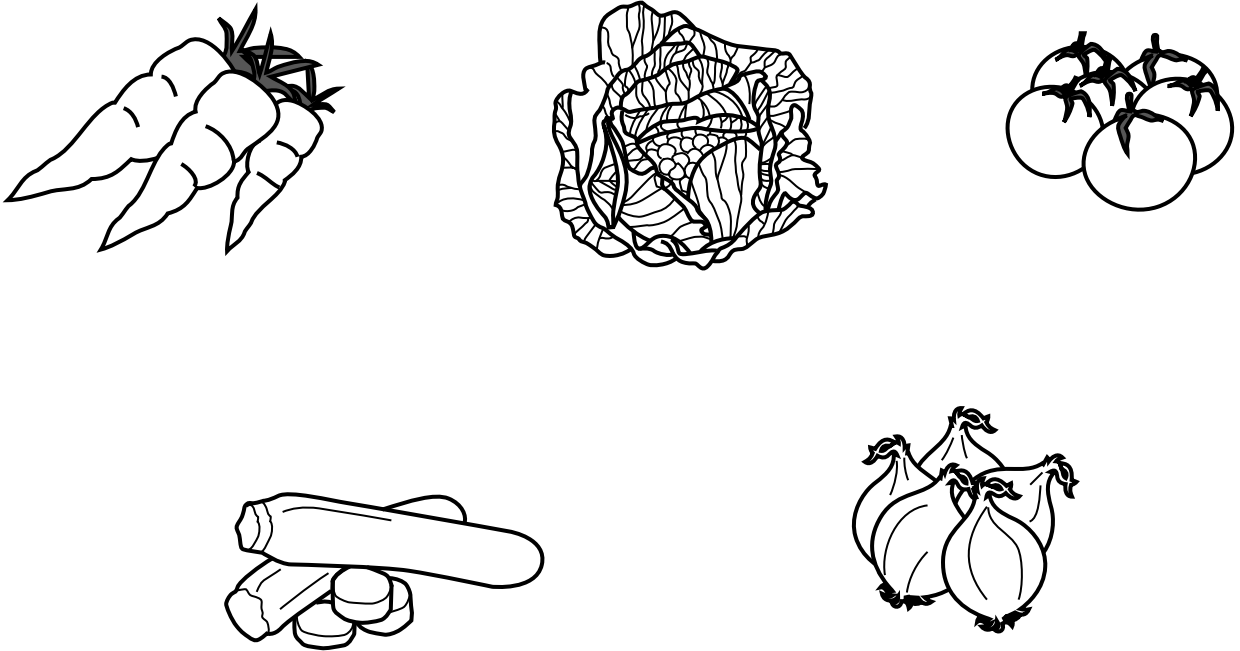
_____ **[3]**

(c) Explain why there has been an increase in the number of people growing their own vegetables.

[3]

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

Fig. 4



(d) The gardener has produced more vegetables than he is able to consume before they start to perish. Give THREE ways the gardener could ensure these vegetables are not wasted.

1 _____

2 _____

3 _____

_____ **[3]**

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

[3]

Total [15]

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