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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

FRIDAY 29 JANUARY 2010: 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 clearly in capital letters, your Centre Number and Candidate Number in the boxes on the first page.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Answer ALL the questions in Section A AND Section B.
- Write your answer to each question in the space provided.

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 15 minutes on this section.

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

- 1 Which colour chopping board should be used for preparing raw meat?
- (a) Blue
 - (b) Green
 - (c) White
 - (d) Red [1]
- 2 Which of the following is the correct date stamp on fresh fish products?
- (a) Display until
 - (b) Sell by
 - (c) Use by
 - (d) Best before [1]
- 3 Steaming vegetables means:
- (a) More vitamin C is retained
 - (b) More vitamin C is lost
 - (c) The fat content is increased
 - (d) The fat content is reduced [1]

- 4 When are strawberries in season in the UK?
(a) July
(b) December
(c) March
(d) February [1]

- 5 Modified starches are used in low fat products to:
(a) Prevent syneresis
(b) Make them have a better colour
(c) Make the product last longer
(d) Increase the sugar content [1]

- 6 The symbol shown stands for:



_____ [1]

- 7 State ONE way food manufacturers help consumers to make informed decisions about the products they buy.
_____ [1]

- 8 State ONE function of iron in the body.
_____ [1]

9 Manufacturers often use MAP to extend the shelf life of ready prepared vegetables.

State what the initials MAP stand for.

_____ [1]

10 State how some food manufacturers encourage consumers to recycle packaging.

_____ [1]

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

Tick (✓) the box to show your answer.

TRUE FALSE

11 We should refuse to buy foods which are over packaged. [1]

12 Organic foods are cheaper than economy varieties. [1]

13 UHT products have a longer shelf life than pasteurised ones. [1]

14 Hands should be washed in cold water before handling food. [1]

15 Food should be reheated only once. [1]

Total [15]

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SECTION B

Answer ALL questions.

You are advised to spend 45 minutes on this section.

- 16 Fig. 1 shows a ready prepared sandwich and the ingredients list shows the country of origin (source).

INGREDIENTS

White Bread (UK)
Tomatoes (Spain)
Bacon (Holland)
Lettuce (Spain)
Mayonnaise (England)
Butter (New Zealand)



Fig. 1

- (a) Give TWO ways the carbon footprint of the filling ingredients could be reduced.

1 _____ [1]

2 _____ [1]

(b) We are encouraged to reduce the amount of fats we eat.

State THREE ways the manufacturer of the sandwich could ensure the fat content is as low as possible.

1 _____ [1]

2 _____ [1]

3 _____ [1]

(c) Name ONE high risk food in the sandwich.

_____ [1]

(d) When preparing fresh food products containing vegetables there is always going to be some waste.

State ONE environmentally friendly way of disposing of the vegetable food waste.

_____ [1]

(e) When the sandwich is being produced the manufacturer is required to make sure it is safe to eat.

Describe TWO ways the manufacturer can do this.

1 _____

_____ **[2]**

2 _____

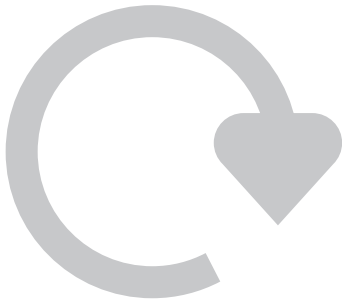
_____ **[2]**

(f) Fig. 2 shows two symbols found on sandwich packaging.

Name the TWO symbols.



_____ [1]



_____ [1]

Fig. 2

(g) The cardboard used in the packaging comes from a 'sustainable source'.

Explain what 'sustainable source' means.

_____ [2]

Total [15]

17 Many farmers are selling local produce from farm shops.

(a) Give TWO reasons why consumers may choose to purchase food from a farm shop.

Reason 1 _____
_____ [1]

Reason 2 _____
_____ [1]

(b) The poultry sold from the farm shop is ‘free range’.

Explain what is meant by ‘free range’.

_____ [2]

(c) Sales of poultry continue to increase.

Give TWO nutritional reasons why chicken is a popular food.

Reason 1 _____ [1]

Reason 2 _____ [1]

(d) Some consumers choose to purchase ‘free range’ poultry products.

(i) Give TWO reasons why consumers may choose to purchase ‘free range’ products.

Reason 1 _____
_____ [1]

Reason 2 _____
_____ [1]

(ii) Give ONE reason why some consumers do not purchase ‘free range’ products.

_____ [1]

(e) Explain how eggs should be stored in the home.

_____ [2]

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18 Households often have a lot of left over food which is thrown away.

(a) Some food waste is caused by not storing food at the correct temperature.

State the correct temperature for a refrigerator.

_____ °C [1]

(b) The following are a list of ingredients which were about to be thrown away at the end of a week.

- cold chicken
- banana – slightly over ripe
- mashed potatoes
- bread – slightly dry
- sponge cake
- carrots
- eating apples
- cauliflower

Complete the chart opposite to show TWO SAVOURY and ONE SWEET product which reuses some of these ingredients.

The first one has been done for you.

(c) Give TWO environmental reasons why we should reduce our food waste.

1 _____ [1]

2 _____ [1]

SAVOURY
NAME OF DISH: <i>Cauliflower Cheese</i>
INGREDIENT(S) USED FROM THE LIST: <i>Cauliflower</i>
ADDITIONAL INGREDIENTS REQUIRED TO MAKE THE DISH: <i>Milk Flour Margarine Cheese</i>

SAVOURY
NAME OF DISH: _____ [1]
INGREDIENT(S) USED FROM THE LIST: _____ [1]
ADDITIONAL INGREDIENTS REQUIRED TO MAKE THE DISH: _____ [1]

SWEET
NAME OF DISH: _____ [1]
INGREDIENT(S) USED FROM THE LIST: _____ [1]
ADDITIONAL INGREDIENTS REQUIRED TO MAKE THE DISH: _____ [1]



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