

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

1954/03

Paper 3 (Foundation Tier)

THURSDAY 19 JUNE 2008

Afternoon
 Time: 1 hour

Candidates answer on the question paper

Additional materials: No additional materials are required



* C O P / T 3 9 4 3 9

Candidate
Forename

Candidate
Surname

Centre
Number

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Candidate
Number

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INSTRUCTIONS TO CANDIDATES

- Write your name in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use blue or 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.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided.

INFORMATION FOR CANDIDATES

- The number of marks for each question is given in brackets [] at the end of each question or part question.
- The marks allocated and the spaces provided for your answers are a good indication of the length of answers required.
- The total number of marks for this paper is **50**.
- Question 5, Product Analysis, is based on the theme **Chilled Dessert Products**.

FOR EXAMINER'S USE	
1	
2	
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TOTAL	

This document consists of **12** printed pages.

1 Fig. 1 shows a kitchen with many hazards.

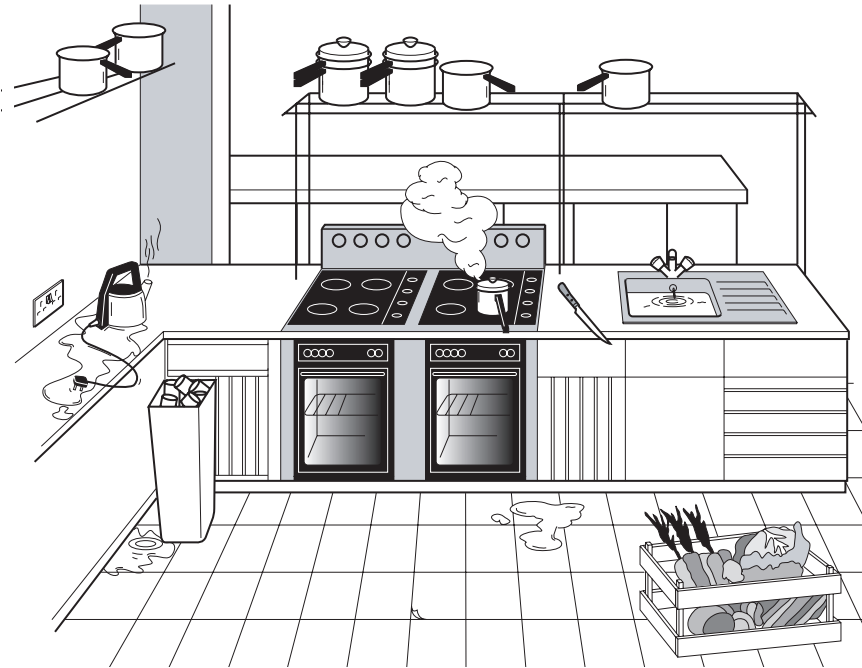


Fig. 1

(a) State **four** hazards shown in Fig. 1.

- 1 [1]
- 2 [1]
- 3 [1]
- 4 [1]

(b) State **two** hygiene rules when tasting food during preparation and cooking.

- Rule 1 [1]
- Rule 2 [1]

(c) (i) When preparing food, cuts should be covered with waterproof plasters.

State the colour of the plasters used in the food industry.

..... [1]

(ii) Give **one** reason why coloured plasters are used.

.....
..... [1]

(d) State **two** hygienic ways to prevent flies causing contamination in a kitchen.

1 [1]

2 [1]

[Total: 10]

- 2 Cereal bars have become popular.
Fig. 2 shows a cereal bar.



Fig. 2

- (a) Give **two** reasons why the cereal bar packaging in Fig. 2 might appeal to children.

Reason 1
..... [1]

Reason 2
..... [1]

- (b) Give **two** reasons why cereal bars have become more popular.

Reason 1
..... [1]

Reason 2
..... [1]

- (c) There is concern over the eating habits of young children.

Give **two** reasons why young children should not be given too much sugar in their diet.

Reason 1
..... [1]

Reason 2
..... [1]

(d) Dried fruits can be added to cereal bars to reduce the amount of sugar.

(i) Give **two** examples of other products where dried fruit could be used to reduce the amount of sugar in a recipe.

Example 1 [1]

Example 2 [1]

(ii) State **two** other benefits of using dried fruit in a recipe.

Benefit 1 [1]

Benefit 2 [1]

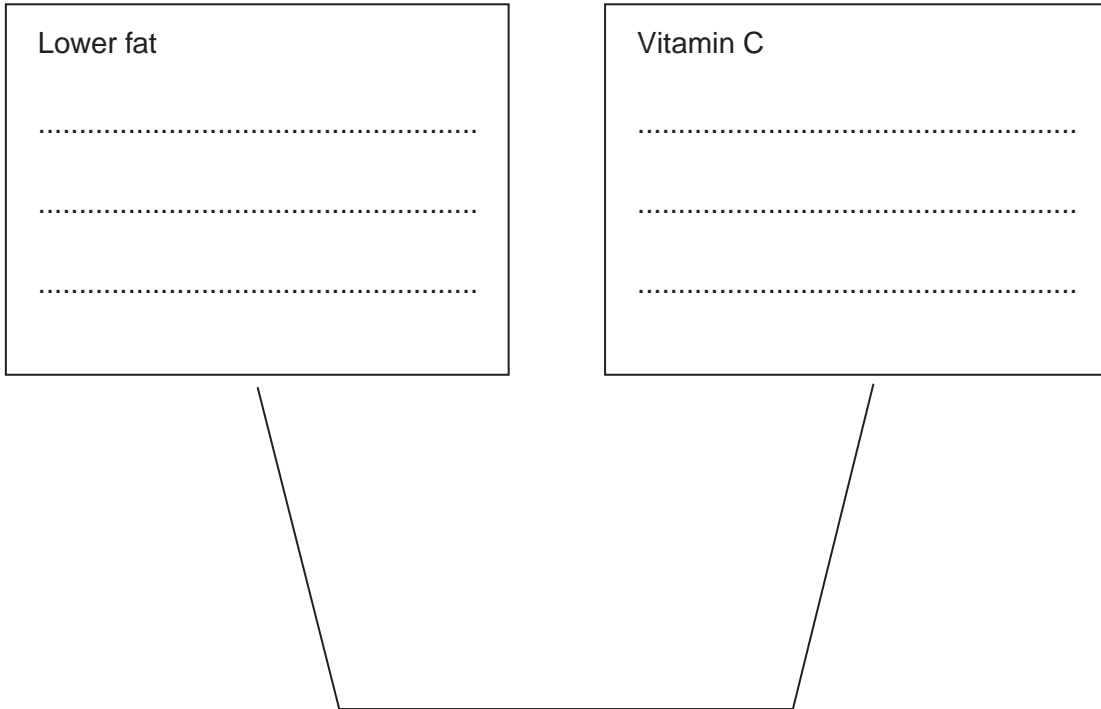
[Total: 10]

3 A food manufacturer wants to develop a new range of pre-packaged ready prepared toppings for jacket potatoes.

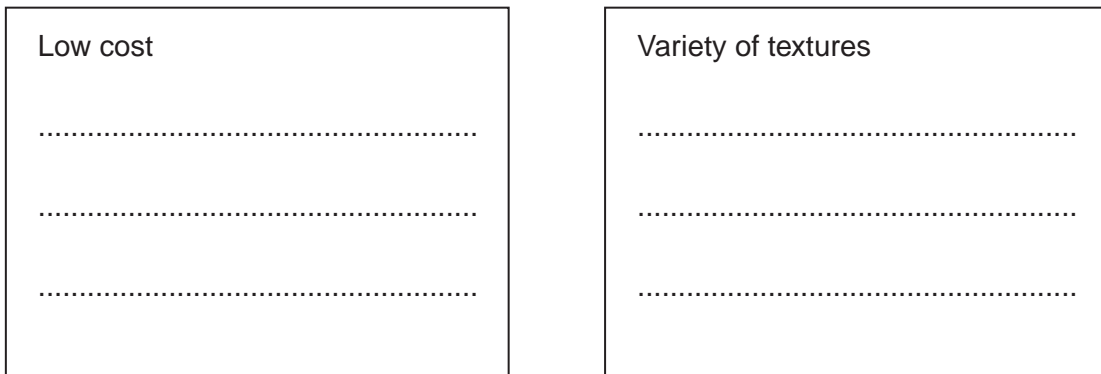
The design specification for the topping is to:

- contain vitamin C
- be sold as a lower fat product.
- include a variety of textures
- be low cost

(a) In the outline below draw a new jacket potato topping to meet the design specification. State how each design specification point has been met. Write your answers in the boxes.



Outline of container for the new jacket potato topping
DO NOT DRAW THE PACKAGING



[4]

(b) State **two** ways that the manufacturer could promote the new jacket potato topping.

1 [1]

2 [1]

(c) Jacket potatoes are a good source of fibre.

Give **one** function of fibre in the diet.

..... [1]

(d) Jacket potatoes can be baked without adding any fat.

State **one** other method of cooking potatoes that does not use any fat.

..... [1]

(e) Vitamin C is easily lost when preparing and cooking vegetables.

Give **two** ways to reduce the loss of Vitamin C when preparing and cooking vegetables.

1

..... [1]

2

..... [1]

[Total: 10]

4 Computer systems are used by many food manufacturers to control equipment and machinery during the manufacture of food products.

Fig. 3 shows part of a production line for the manufacture of biscuits.



Fig. 3

(a) Give **two** reasons why a biscuit manufacturer could decide to invest in a computer system for designing the packaging for a new product range.

Reason 1

..... [1]

Reason 2

..... [1]

(b) Give **two** advantages to a manufacturer of using robotics in biscuit production.

Advantage 1

..... [1]

Advantage 2

..... [1]

(c) Explain **two** ways in which computer systems could control equipment and machines in the production of biscuits.

1
.....
..... [2]

2
.....
..... [2]

(d) A manufacturer has decided to produce the biscuits by batch production.

Give **two** benefits to the manufacturer of using this method of production.

Benefit 1
..... [1]

Benefit 2
..... [1]

[Total: 10]

- 5 A food manufacturer wants to extend its 'Healthy Option' range to include chilled desserts. Fig. 4 shows a chilled cheesecake product.

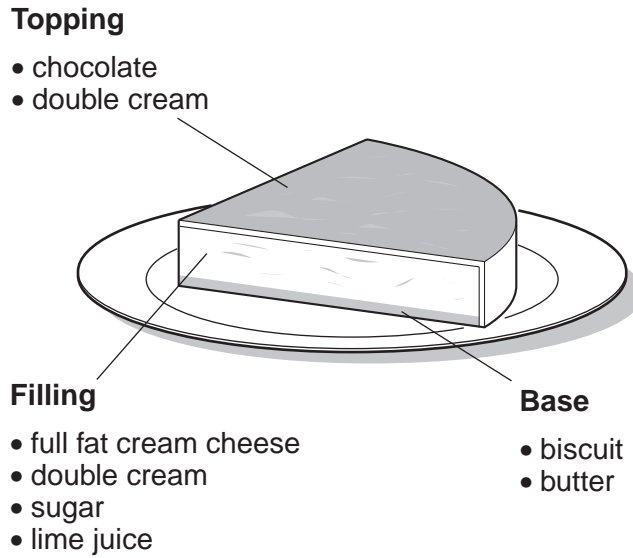


Fig. 4

- (a) State **one** ingredient that could be used to set the filling layer of the cheesecake.

..... [1]

- (b) The manufacturer has decided to change the ingredients of the cheesecake shown in Fig. 4 to meet healthy eating guidelines. Explain **three** different ways this could be done.

Lower the fat

.....

..... [2]

Lower the sugar

.....

..... [2]

Increase the fibre

.....

..... [2]

(c) State the name of the equipment that is used in the food industry to check the temperature of chilled foods.

..... [1]

(d) Explain how the chilling process is carried out in the food industry.

.....
.....
.....
..... [2]

[Total: 10]

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