

Surname		Other Names	
Centre Number		Candidate Number	
Candidate Signature			

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General Certificate of Secondary Education
June 2005

**DESIGN AND TECHNOLOGY:
FOOD TECHNOLOGY (SHORT COURSE)
Foundation Tier**

**3552/F
F**



Thursday 16 June 2005 1.30 pm to 3.00 pm

<p>In addition to this paper you will require:</p> <ul style="list-style-type: none"> a pen, pencil, ruler, eraser, pencil sharpener and coloured pencils.
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For Examiner's Use	
Number	Mark
1	
2	
3	
4	
5	
6	
7	
TOTAL	
Examiner's initials	

Time allowed: 1 hour 30 minutes

Instructions

- Use blue or black ink or ball point pen. Use pencil and coloured pencils only for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** the questions in the spaces provided.
- All working must be shown.
- Do all rough work in this book. Cross through any work you do not want marked.

Information

- The maximum mark for this paper is 100.
- Mark allocations are shown in brackets.
- Wherever calculations are needed you should show your working.
- You are reminded of the need for good English and clear presentation.

THERE ARE NO QUESTIONS PRINTED ON THIS PAGE

Answer **all** the questions in the spaces provided.

Question 1 is about the product range.

- 1 A supermarket wishes to extend the range of milk products.



- (a) Name different types of milk that are sold in the following areas of the supermarket:

Area of supermarket	Type of milk sold
In the chill cabinet	1.
	2.
In non chilled areas	1.
	2.

(4 marks)

- (b) Name **two** other products made from milk.

1

2

(2 marks)

QUESTION 1 CONTINUES ON THE NEXT PAGE

Turn over ►

(c) (i) Name **one** method of research used by supermarkets to find out about customer's views on milk chocolate.

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(1 mark)

(ii) Describe how this research is carried out.

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(4 marks)

11

Question 2 is about choice of ingredients.

2 Manufacturers must choose the correct ingredients for a product.

The table below compares different types of milk.

Nutrients per 500 ml	Whole milk	Semi skimmed milk	Skimmed milk
Energy (kcal)	1550	1135	800
Protein (g)	18	19	19
Fat (g)	22	9	0.5
Carbohydrate (g)	26	28	28
Calcium (mg)	670	690	700

Use the information in the table.

(a) (i) Which type of milk is most suitable for use in a healthy option product?

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(1 mark)

(ii) Give reasons for your choice.

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(4 marks)

QUESTION 2 CONTINUES ON THE NEXT PAGE

Turn over ►

(b) (i) Which type of milk is most suitable for use in a high energy milk drink for children?

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(1 mark)

(ii) Give reasons for your choice.

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(4 marks)

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10

Question 3 is about designing new food products.

- 3** A catering company makes lunches for delivery to primary school kitchens. The test kitchen is developing new ideas for **cold desserts**.

A successful **cold dessert** will:

- use milk or milk products
- be easy to serve as single portions
- appeal to children
- be served chilled.

- (a) With the aid of notes and sketches, produce **two** different design ideas which meet the design criteria. **DO NOT** draw any packaging.

Design idea 1

(5 marks)

Design idea 2

(5 marks)

QUESTION 3 CONTINUES ON THE NEXT PAGE

Turn over ►

(b) Choose **one** of your design ideas for the manufacturer to develop.

Design idea 1

Design idea 2

Explain how the chosen idea is suitable for children.

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(5 marks)

(c) Name **three** main ingredients needed to make your chosen cold dessert.
Explain why each ingredient is used.

Ingredients	Why used

(6 marks)

(d) Produce a plan for making your chosen idea in the test kitchen.

You may use flow charts, diagrams, notes or sketches in your answer.

(10 marks)

TURN OVER FOR THE NEXT QUESTION

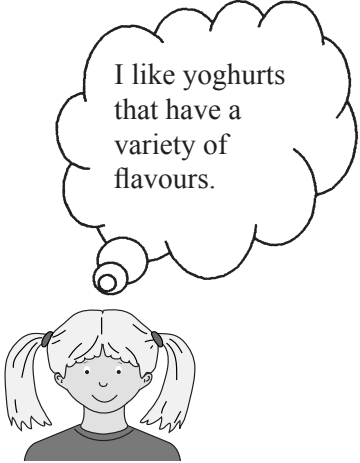
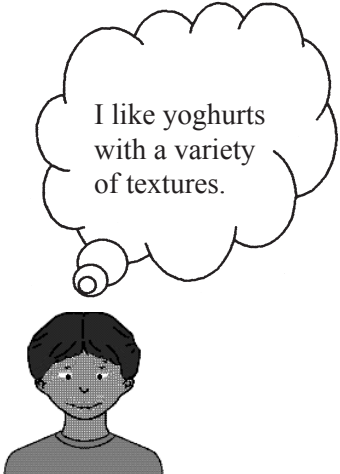
Turn over ►

Question 4 is about development of food products.

4 (a) A food manufacturer is developing new yoghurt products to meet the needs of consumers.

(i) Name **two** ingredients that could be added to natural yoghurt.

(ii) Explain your choice of ingredients.

	Ingredients to be added	Why these ingredients are added
<p>Consumer 1</p>  <p>I like yoghurts that have a variety of flavours.</p>	1	
	2	
<p>Consumer 2</p>  <p>I like yoghurts with a variety of textures.</p>	1	
	2	

(8 marks)

(b) What are the advantages of using the following equipment?

(i) A hand blender.



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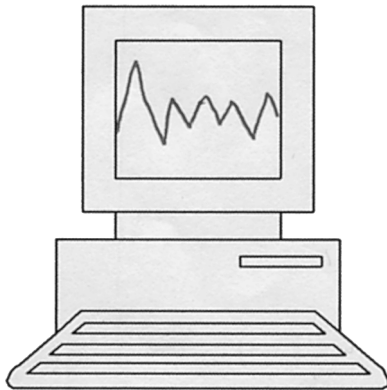
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(3 marks)

(ii) A computer to record temperatures.



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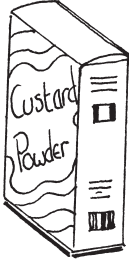
(3 marks)

TURN OVER FOR THE NEXT QUESTION

Turn over ►

Question 5 is about materials and ingredients used in making products.

5 (a) Describe *different* quality checks which need to be made on each of the following ingredients.

Ingredients	Quality check
<p>Tub of double cream</p> 	
<p>Fresh strawberries</p> 	
<p>Box of custard powder</p> 	

(6 marks)

(b) Standard components are used to save time during food production.

Describe **one** other advantage of using standard components.

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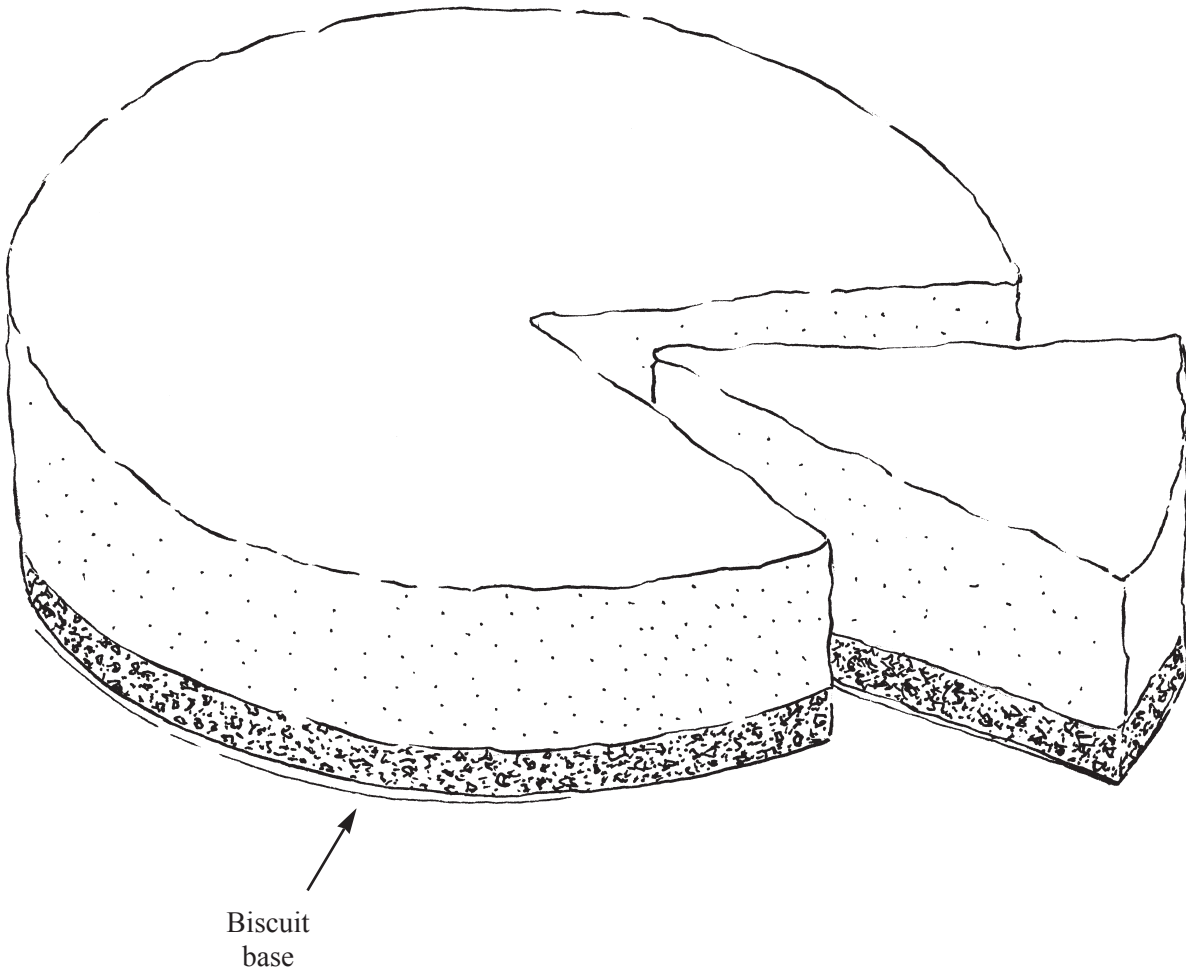
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(2 marks)

- (c) Use notes and sketches to describe how a quality finish can be achieved by decorating the top of a cheesecake.

Your design idea should use a mixture of fruit, chocolate and cream.

Design idea:



Description:

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(5 marks)

QUESTION 5 CONTINUES ON THE NEXT PAGE

Turn over ►

(d) Explain why food manufacturers use the following.

(i) 1 egg to 125 ml of milk in an egg custard

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(2 marks)




(ii) Butter in shortcrust pastry

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(2 marks)

Question 6 is about packaging and labelling.


6 (a) Explain why the following materials are used in the packaging of ready made custards.

Material:	Why is this material suitable?
 Plastic lid	
 Foil cover	
 Paperboard carton	

(6 marks)

(b) The following symbol is often seen on packaging.

Explain what the symbol means.

Symbol	Meaning
	

(2 marks)

TURN OVER FOR THE NEXT QUESTION

Question 7 is about hygienic and safe working practices.

7 (a) Explain how a food worker will show good working practices in

(i) personal hygiene;

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(3 marks)

(ii) kitchen hygiene.

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(3 marks)

(b) Explain what happens to the quality of the finished product if safe working practices are **not** followed.

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(3 marks)

END OF QUESTIONS