Centre No.					Pape	r Refer	ence			Surname	Initial(s)
Candidate No.			1	9	7	0	/	2	H	Signature	

## 1970/2H

# **Edexcel GCSE**

## **Design and Technology: Food Technology**

(Full Course – 1970) Paper 2H

# **Higher Tier**

Wednesday 23 June 2010 - Afternoon

Time: 1 hour 30 minutes

Materials required for examination	Items included with question papers
Nil	Nil

#### **Instructions to Candidates**

In the boxes above, write your centre number, candidate number, your surname, initials and signature. Check that you have the correct question paper.

Answer ALL the questions. Write your answers in the spaces provided in this question paper.

#### **Information for Candidates**

The marks for individual questions and the parts of questions are shown in round brackets: e.g. (2). There are 4 questions in this question paper. The total mark for this paper is 88.

There are 16 pages in this question paper. Any blank pages are indicated.

You may use drawing equipment. If pencil is used for diagrams/sketches it must be dark (HB or B). Coloured pens, pencils and highlighter pens must not be used.

All measurements are in millimetres (mm) unless otherwise stated.

#### **Advice to Candidates**

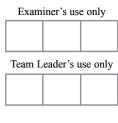
You are reminded of the importance of clear English and careful presentation in your answers. Include diagrams in your answers where these are helpful.

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Question	Leave
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3	
4	
Total	

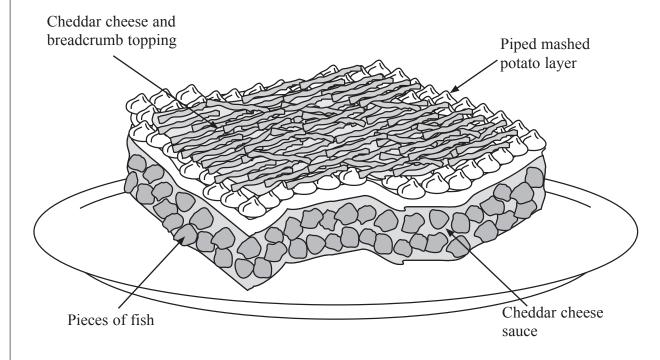
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### Answer ALL the questions. Write your answers in the spaces provided.

1. The drawing below shows a fish pie which is sold pre-packaged in supermarkets.



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1 W O 5	pecification points for the fish pie are that it must:
•	appeal to a wide range of age groups contain a variety of tastes and textures.
	nder each of the following headings, give <b>one</b> more point that should be included in a specification for the fish pie.
Fo	or each point, give <b>one</b> reason why it should be included.
(i)	Quality
	Point
	Reason
	(2
(ii	) Environment
	Point
	Reason
	(2
(ii	i) Safety
	Point
	Reason
	(2
thi	ne component used in the fish pie is the cheddar cheese sauce. One reason whis cheese sauce is suitable for this product is that the sauce binds the fish togethe make it easier to remove from the tray.
Gi	ive <b>two</b> other reasons why cheddar cheese sauce is a suitable component from
	nich to make the fish pie.

	processing stage using the grating method.	
	Give <b>two</b> reasons why grating is a suitable process to manufacture the cheddar che and breadcrumb topping.	es
	1	· • • •
	2	(2
(d)	The sauce is made with cornflour.	
	Give <b>two</b> properties of cornflour that make it a suitable ingredient for the sauce.	
	For each property give <b>one</b> reason why it makes cornflour suitable for the sauce.	
	Property 1	
	Reason	
	Property 2	
	Reason	
		(4
(e)	The manufacturer of the fish pie uses sampling during production.	
	Explain <b>one</b> reason for sampling during the manufacture of the fish pie.	
		(2

	Explain <b>one</b> reason why piping is used for finishing this potato layer.
	(2)
(a)	
(g)	Two specification points for the fish pie are that it must:
	<ul><li>appeal to a wide range of age groups</li><li>contain a variety of tastes and textures.</li></ul>
	Explain, under the following headings, how the fish pie achieves these specification points.
	(i) Appeal to a wide range of age groups.
	(2)
	(ii) Contain a variety of tastes and textures.
	(2)
	(Total 22 marks)

		nt types of pastry contain similar ingredients, but the proportion of those ingredients techniques used in the production make each type of pastry unique.
(a)	(i)	Give <b>three</b> different types of pastry.
		2
		3(3)
	(ii)	Name <b>two</b> different ingredients used in pastry making and state the function of each one.
		Ingredient 1
		Function
		Function(4)
(b)	Sta	ndard components are often used in the mass production of food products.
	Exp	plain <b>one</b> benefit to the food manufacturer of using standard components.
		(2)
(c)		order to maintain quality control, manufacturers work to critical dimensions and erances.
	Exp	plain what is meant by the term 'tolerances'.
		(2)

т	
L	ist <b>four</b> characteristics of batch production.
1	
2	
3	
•.	
4	
•	
(a) (i	) CAD and CAM are ICT applications used in Food Technology.
(6) (1	
	Give three ways CAD can be used in Food Technology.
	1
	2
	2
	2
	3



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<ul><li>(ii) Explain two ways CAM systems make the manufacturing process faster an more flexible.</li></ul>	d
1	
2	
(4	Q2
(Total 22 marks	)





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**3.** A small local bakery is developing multicultural bread products.

The specification for each of the multicultural bread products is that they must:

- be a bread product with a multicultural theme
- contain ingredients that have a good texture and flavour
- be filling, but low in fat
- have a shape that is easy to produce by manufacturing methods.
- (a) In the spaces opposite, use sketches and, where necessary, brief notes to show **two** different **multicultural bread** product design ideas that meet this specification.

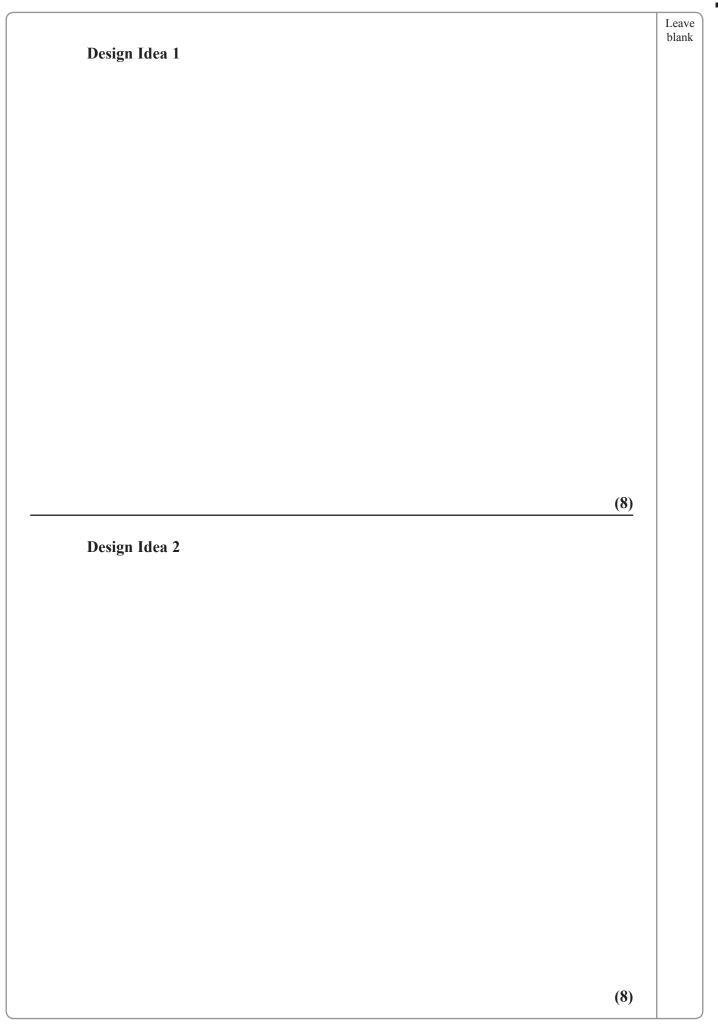
Do **not** evaluate your designs in part (a).

Candidates are reminded that if pencil is used for diagrams/sketches, it must be dark (HB or B). Coloured pens, pencils and highlighter pens must **not** be used.

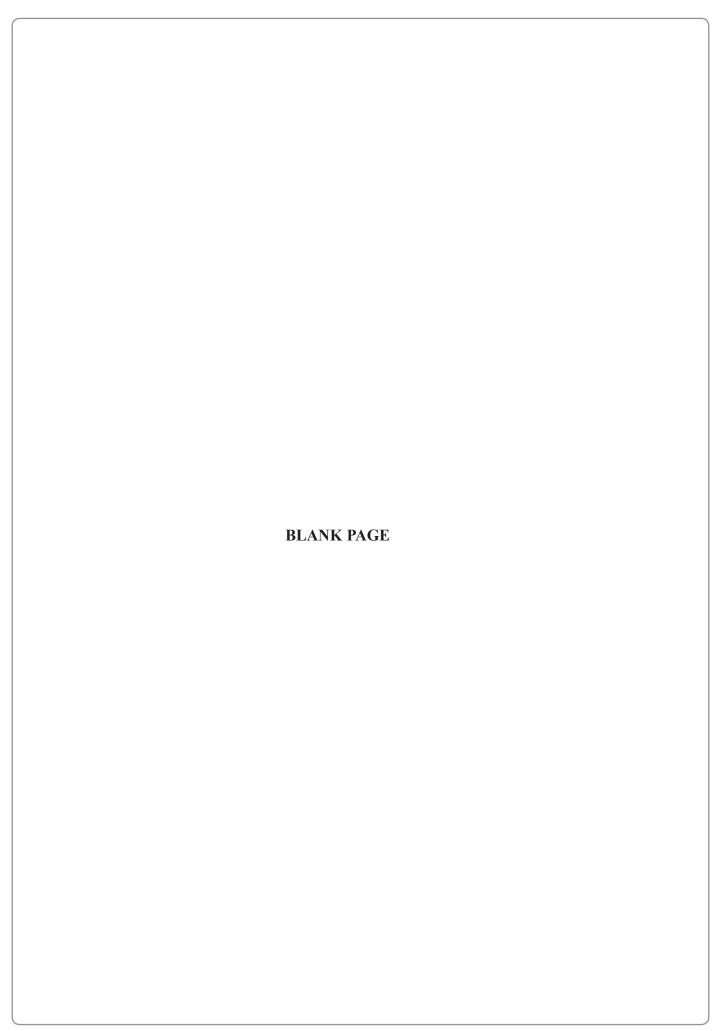
PLEASE DO NOT WRITE OR DRAW IN THIS SPACE.

PLEASE USE THE SPACES OPPOSITE FOR YOUR DESIGNS.





Evaluate how one of your designs succeeds or fails to meet each of these specification points.  Write the number of your chosen idea (1 or 2) here:  (i) The bread product must contain ingredients that have a good texture and flavour.  (2)  (ii) The bread product must be filling, but low in fat.  (2)  (iii) The bread product must have a shape that is easy to produce by manufacturing methods.  (2)  (2)  (2)  (3)	) T	hree of the original specification points are repeated below.
(i) The bread product must contain ingredients that have a good texture and flavour.  (2)  (ii) The bread product must be filling, but low in fat.  (2)  (iii) The bread product must have a shape that is easy to produce by manufacturing methods.		
(ii) The bread product must be filling, but low in fat.  (2)  (iii) The bread product must have a shape that is easy to produce by manufacturing methods.	V	rite the number of your chosen idea (1 or 2) here:
(ii) The bread product must be filling, but low in fat.  (2)  (iii) The bread product must have a shape that is easy to produce by manufacturing methods.	(i	) The bread product must contain ingredients that have a good texture and flavour.
(ii) The bread product must be filling, but low in fat.  (2)  (iii) The bread product must have a shape that is easy to produce by manufacturing methods.		
(ii) The bread product must be filling, but low in fat.  (2)  (iii) The bread product must have a shape that is easy to produce by manufacturing methods.		
(2)  (iii) The bread product must have a shape that is easy to produce by manufacturing methods.		(2)
(iii) The bread product must have a shape that is easy to produce by manufacturing methods.  (2)	(i	i) The bread product must be filling, but low in fat.
(iii) The bread product must have a shape that is easy to produce by manufacturing methods.  (2)		
(iii) The bread product must have a shape that is easy to produce by manufacturing methods.  (2)		
(iii) The bread product must have a shape that is easy to produce by manufacturing methods.  (2)		
methods		(2)
	(i	
(Total 22 marks)		(2)
		(Total 22 marks)



(a)	Coı	nsumers are becoming more aware of where their food comes from.
	(i)	Describe <b>two</b> reasons why it is good that consumers grow their own fruit and vegetables.
		1
		2
		(4)
	(ii)	Consumers are encouraged to eat more fruit and vegetables.
		Give <b>two</b> reasons why consumers should eat more fruit and vegetables.
		1
		2
		(2)
(b)	Exp	clain why many fruits and vegetables turn brown when cut.
(b)	Exţ	
(b)	Exp	
(b)	Exp	plain why many fruits and vegetables turn brown when cut.
		plain why many fruits and vegetables turn brown when cut.  (2)
	  Giv	plain why many fruits and vegetables turn brown when cut.  (2)
		plain why many fruits and vegetables turn brown when cut.  (2)

**(3)** 

(d)		ditives are synthetic or natural substances added to foods during processing. Foo itives are shown by a number prefixed by an 'E'.
	(i)	Give <b>three</b> reasons why additives might be used in food products.
		1
		2
		3
	(ii)	Explain the significance of the 'E'.
	(iii)	
	(iii)	As well as additives, modern technology can be used to create other useful foo
	(iii)	As well as additives, modern technology can be used to create other useful foo products.
	(iii)	
	(iii)	As well as additives, modern technology can be used to create other useful foo products.



Leave blank

d	explain <b>one</b> cultural and <b>one</b> moral issue that food manufacturers must consider when eveloping new foods.		
C	Cultural		
N	1oral		
	(4)		
	(Total 22 marks) TOTAL FOR PAPER: 88 MARKS		
	END		
	END		