Centre Number			Candidate Number		
Surname					
Other Names					
Candidate Signature					



General Certificate of Education Advanced Subsidiary Examination June 2012

Design and Technology: FOOD1 Food Technology

Unit 1 Materials, Components and Application

Tuesday 22 May 2012 1.30 pm to 3.30 pm

For this paper you must have:

· normal writing and drawing instruments.

Time allowed

• 2 hours

Instructions

- Use black ink or black ball-point pen. Use pencil only for drawing.
- Fill in the boxes at the top of this page.
- Answer all questions in Section A.
- Answer one question from Section B, either Question 9 or Question 10.
- Answer the question in Section C.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- There are 20 marks for Section A, 20 marks for Section B and 40 marks for Section C.

Advice

- Illustrate your answers with sketches and/or diagrams wherever you feel it is appropriate.
- You are advised to spend approximately 30 minutes on Section A, 30 minutes on Section B and one hour on Section C.

For Examiner's Use		
Examine	r's Initials	
Question	Mark	
1		
2		
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8		
9		
10		
11		
TOTAL		

Section A

	Answer all questions in this section.	
1	State two deficiency diseases associated with the lack of vitamin D.	
	(2 marks)	2
2	Name two sources of iodine.	
	(2 marks)	2
3	Name two food sources of iron.	
	(2 marks)	
4	What is an emulsifying agent?	
	(2 marks)	2



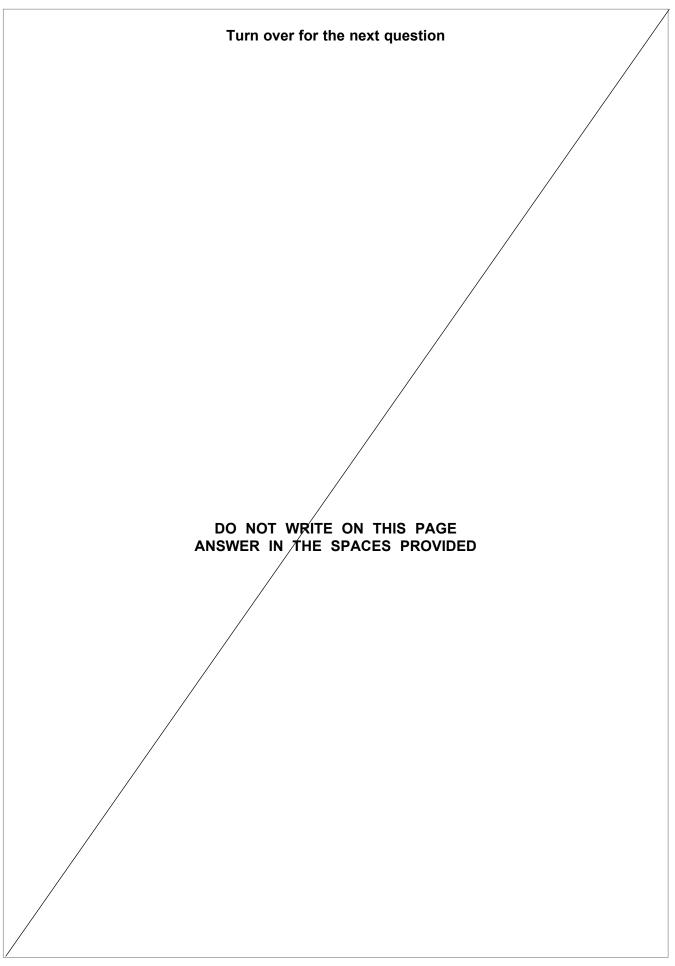
5	Identify two factors affecting BMR (Basal Metabolic Rate).	
	(2 marks)	
6	Explain the term fortification of food products.	
	·	
	(2 marks)	
		2
7	Describe the effects of food preparation on water soluble and fat soluble vitamins.	
	(4 marks)	4

Turn over ▶



3	Explain, with examples, the complementation of protein.	
		// marle
		(4 marks





Turn over ▶



Section B

Answer either Question 9 or Question 10

	Answer ettrier Question 3 or Question 10.
9 (a)	Discuss the influence of changing consumer lifestyles on food product development.
	(10 marks)



Extra space - only	to be used if required.
	Question 9 continues on the next page

Turn over ▶



9 (b)	Identify different communication methods used in the development of new food products.
	(10 marks)

20



tra space - only to be used if required.





	Do not answer Question 10 if you have answered Question 9.
10 (a)	Describe the 'design process' in the production of new food products.
	(10 marks)







10 (b)	What current health factors and concerns need to be considered when developing new food products?
	(10 marks)

20



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Section C

Answer all parts of question 11.

11 (a) Describe how a range of sweet **or** savoury pastry products could be developed to:

• increase the vitamin C content (5 marks)

• lower the saturated fat content (5 marks)

• improve the flavour (5 marks)

• improve the texture. (5 marks)



Question 11 continues on the next page Turn over ▶



11 (b)	Explain the use of computer modelling in the production of food products.						
	(10 marks)						
	(10 marks)						



Question 11 continues on the next page	





11 (c) (i)	Name five pieces of information that could be included on a food label.								
11 (c) (ii)	(5 marks) Choose one piece of information named in part (c) (i) above and discuss its importance to the consumer.								
	(5 marks)								

40

END OF QUESTIONS







