Centre Number			Candidate Number		
Surname					
Other Names					
Candidate Signature					



General Certificate of Education Advanced Subsidiary Examination January 2011

# Design and Technology: FOOD1 Food Technology

Unit 1 Materials, Components and Application

Thursday 20 January 2011 9.00 am to 11.00 am

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 guestion 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.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s) in the left-hand margin.
- 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				
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Question	Mark			
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	Answer all questions in this section.	
1	Name <b>two</b> functions of carbohydrates in the body.	
	(2 marks)	2
2	Name <b>two</b> food sources of retinol in the diet.	
	(2 marks)	2
3	What are the effects of too much sodium in the diet?	
	(2 marks)	2
4	Name <b>two</b> macro nutrients.	
	(2 marks)	
		2



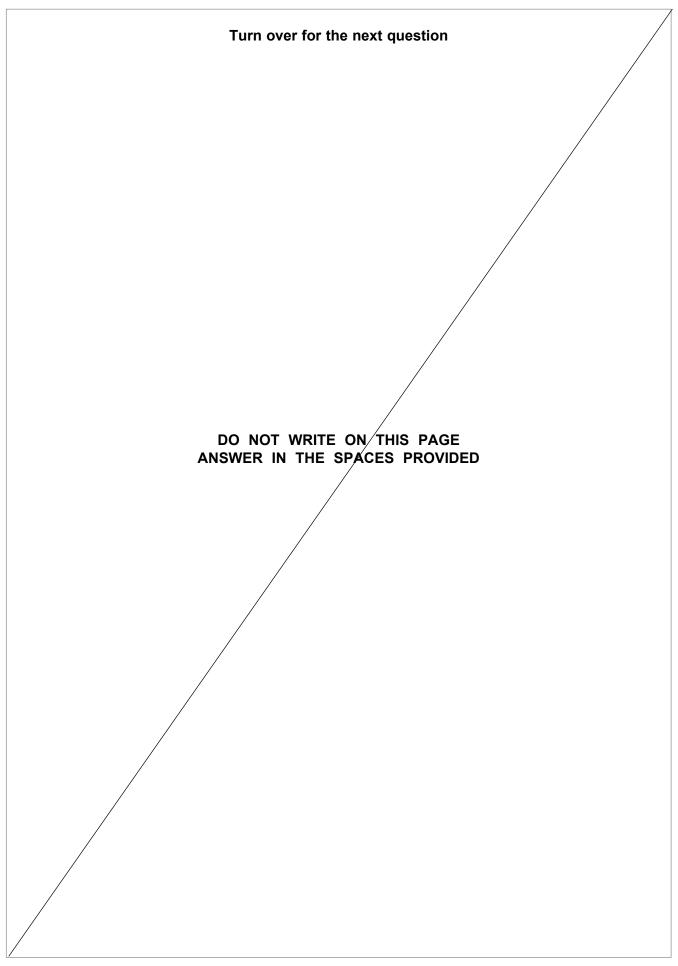
5	Describe <b>two</b> effects of Vitamin C deficiency in the body.	
	(2 marks)	
		2
6	State <b>two</b> functions of water in the diet.	
	(2 marks)	
		2
7	Describe the factors affecting BMR (Basal Metabolic Rate) in the body.	
	(4 marks)	





8	Explain, with examples of specific food products, the function of emulsifying agents.
	(4 marks)







# Section B

# Answer either Question 9 or Question 10.

9 (a)	Discuss the significance of social trends and changes in lifestyles on food product development.
	(10 marks)



<b>)</b>	Describe the testing and evaluation techniques that could be used to assess the viability of a food product.
	(10 ma



# Do not answer Question 10 if you have answered Question 9.

product development.



10 (b)	Discuss the nutritional considerations when designing ready meals for the elderly.
	(10 marks)





## Section C

Answer the question in this section.

**11 (a)** Describe how a cheese and tomato pizza could be developed to

• increase iron and Vitamin C content (5 marks)

• improve flavour (5 marks)

• reduce saturated fat content (5 marks)

• increase NSP. (5 marks)

You may use annotated sketches to illustrate your answer.



Question 11 continues on the next page Turn over ▶



food categories.

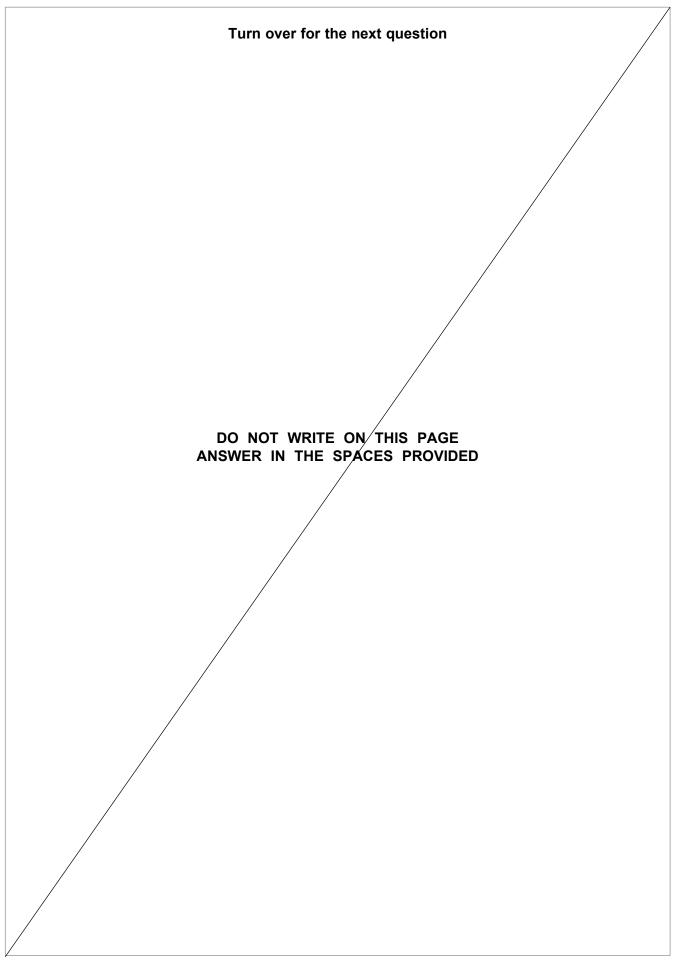


11 (c)	Explain, with examples, the role of Computer Aided Design (CAD) and Computer Aided Manufacture (CAM) in food product development.
	(10 marks)

40

**END OF QUESTIONS** 







Question	Write the question numbers in the left-hand margin
number	<u> </u>





Question	Write the question numbers in the left-hand margin
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