

Write your name here

Surname

Other names

Centre Number

Candidate Number

**Edexcel GCE**

# Design and Technology

**Food Technology**

**Advanced**

**Unit 3: Food Products, Nutrition and Product Development**

Tuesday 4 June 2013 – Morning

**Time: 2 hours**

Paper Reference

**6FT03/01**

**You do not need any other materials.**

Total Marks

## Instructions

- Use **black** ink or ball-point pen.
- If pencil is used for diagrams/sketches it must be dark (HB or B). Coloured pens, pencils and highlighter pens must not be used.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided  
– *there may be more space than you need.*

## Information

- The total mark for this paper is 70.
- The marks for **each** question are shown in brackets  
– *use this as a guide as to how much time to spend on each question.*
- Questions labelled with an **asterisk** (\*) are ones where the quality of your written communication will be assessed  
– *you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.*

## Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

**P39257A**

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**PEARSON**

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

**1** (a) Name **four** main ingredients used in commercial ice cream making.

(4)

1 .....

2 .....

3 .....

4 .....

(b) Outline the process used to produce ice cream.

(4)

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**(Total for Question 1 = 8 marks)**



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**Turn over for Question 2.**



2 (a) Name **two** fat-soluble vitamins and a different food source for each vitamin.

(4)

Fat-soluble vitamin

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Food source

.....

Fat-soluble vitamin

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Food source

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(b) Outline **two** dietary functions for each of the following vitamins.

(i) Vitamin B1

(2)

1 .....

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2 .....

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(ii) Vitamin B2

(2)

1 .....

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2 .....

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(iii) Vitamin C

(2)

1 .....

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2 .....

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**(Total for Question 2 = 10 marks)**



3 (a) Explain why the freezing process is an effective method of preserving fish.

(4)

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(b) Compare and contrast the nutritional value of oily fish with that of white fish.

(6)

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**(Total for Question 3 = 10 marks)**



4 (a) The Department of Health recommends 'five a day' (fruit and vegetables).

Discuss why this recommendation is important for good health.

(6)

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(b) Novel proteins and meat analogues are widely used in the food industry.

Describe how food manufacturers have used novel proteins/meat analogues in food product development.

(6)

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**(Total for Question 4 = 12 marks)**

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\*6 Discuss the advantages and disadvantages of genetically modifying food crops.

(10)

[Dotted lines for writing]

(Total for Question 6 = 10 marks)



\*7 Micro-organisms are used in the production of yogurt and cheese.

(a) Explain the stages of yogurt production.

(6)

A series of 22 horizontal dotted lines for writing the answer.



(b) Discuss the use of moulds in the cheese making process.

**(6)**

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**(Total for Question 7 = 12 marks)**

**TOTAL FOR PAPER = 70 MARKS**





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