Write your name here

Surname	Other names

Edexcel GCE

Centre Number	Candidate Number

Design and Technology

Food Technology
Advanced
Unit 3: Food Products, Nutrition and Product Development

Thursday 23 June 2011 – Afternoon
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 with your spelling, punctuation and grammar, as well as the clarity of expression, on these questions.*

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 ▶

P35001A

1/1/1/1/1

P 3 5 0 0 1 A 0 1 1 2

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

1 (a) Name **two** proteins found in eggs.

(2)

1 .....

2 .....

(b) Give **three** characteristics of egg yolk that make it useful as a food ingredient.

(3)

1 .....

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2 .....

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3 .....

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(c) Explain how the white of an egg inhibits the growth of bacteria.

(3)

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(Total for Question 1 = 8 marks)

2 (a) Name **two** natural sources of sugar (sucrose).

(2)

1 .....

2 .....

(b) Outline the production of sugar from a natural source.

(6)

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(Total for Question 2 = 8 marks)

3 (a) Name **two** diet-related diseases.

(2)

1 .....

2 .....

(b) Outline the key elements of **two** named special diets.

(4)

Special diet 1 .....

Key element .....

.....

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Special diet 2 .....

Key element .....

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(c) Discuss the effects that the 'food miles' issue may have on food production and consumption.

(4)

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(Total for Question 3 = 10 marks)

4 (a) Explain how the malting process is carried out as a preliminary process in beer-making.

(4)

(b) Compare the basic principles of producing red wine with those of producing white wine.

(6)

(Total for Question 4 = 10 marks)

5 (a) State, using notes and/or sketches, the **four** main stages in a food product's life-cycle.

(4)

(b) Discuss the factors which may influence the generation of new food product ideas.

(6)

(Total for Question 5 = 10 marks)

6 (a) Explain why it is advisable to pasteurise cows' milk for human consumption.

(4)

(b) Outline the processes used to produce butter.

(4)

(c) Describe the process of producing skimmed milk from whole milk.

(4)

(Total for Question 6 = 12 marks)

***7** Discuss the functions of the **three** macro-nutrients in the human diet.

Macro-nutrient 1 .....

Macro-nutrient 2 .....

Turn over ▶

Macro-nutrient 3 .....

(Total for Question 7 = 12 marks)

TOTAL FOR PAPER = 70 MARKS