

Write your name here

Surname

Other names

**Pearson**  
**Edexcel GCE**

Centre Number

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Candidate Number

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# Design and Technology

**Food Technology**

**Advanced Subsidiary**

**Unit 2: Design and Technology in Practice**

Tuesday 2 June 2015 – Morning

**Time: 1 hour 30 minutes**

Paper Reference

**6FT02/01**

**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.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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**PEARSON**

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

1 (a) Name **two** sugars that are not as sweet as sucrose.

(2)

1 .....

2 .....

(b) Describe the effect of heat on sugar.

(2)

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(c) (i) Name the gelling agent used in jam making.

(1)

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(ii) Identify **three** factors necessary to form a firm gel in jam making.

(3)

1 .....

2 .....

3 .....



(d) Describe **two** characteristics of amylose that influence its ability to form a gel.

(4)

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**(Total for Question 1 = 12 marks)**



**2** (a) Outline how flavours are extracted from fruits in the food industry.

(2)

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(b) Evaluate the use of natural flavours in food products.

(4)

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**(Total for Question 2 = 6 marks)**



3 (a) Describe, using words and/or diagrams, the chemical nature of a mixed triglyceride.

(2)



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(b) Oxidative rancidity of fats is not desirable.

Describe how oxidative rancidity can be prevented.

(2)

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(c) Discuss the characteristics of essential fatty acids in the diet.

(6)

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

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4 Dehydration is a preservation process.

(a) Name **two** methods used to dehydrate or dry foods.

(2)

1 .....

2 .....

(b) Give **two** advantages of dried foods to the consumer.

(2)

1 .....

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2 .....

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(c) Explain why the following pre-treatments may be essential before a food is dried.

(6)

Size reduction

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Blanching

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The addition of preservatives

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**(Total for Question 4 = 10 marks)**





5 (a) Explain **two** effects of controlled atmosphere storage on fresh food.

(4)

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(b) Compare the effects of sterilisation and pasteurisation on food.

(6)

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**(Total for Question 5 = 10 marks)**





6 (a) Describe **two** critical control points that could be applied to the production of chilled ready meals.

(4)

1 .....

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2 .....

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(b) Discuss how the quality of food products is affected by the rate of freezing.

(8)

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**(Total for Question 6 = 12 marks)**





**\*7** Discuss the role of emulsifying agents in food production.

A large rectangular area containing approximately 25 horizontal dotted lines for writing.

**(Total for Question 7 = 10 marks)**

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**TOTAL FOR PAPER = 70 MARKS**

