

Write your name here

Surname

Other names

Centre Number

Candidate Number

Edexcel GCE

Design and Technology

**Food Technology
Advanced Subsidiary**

Unit 2: Design and Technology in Practice

Tuesday 22 May 2012 – Afternoon

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.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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PEARSON

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

1 (a) Name **two** types of micro-organisms which are significant in food technology. (2)

1

2

(b) Give **two** reasons why there is an increase in cases of food poisoning. (2)

1

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2

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(c) State **four** principles of good kitchen hygiene. (4)

1

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2

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3

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4

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(Total for Question 1 = 8 marks)



2 (a) Name **two** industrial mixing methods used for food products.

(2)

1

2

(b) Give **two** factors that have to be considered in order to obtain a good mix of dried ingredients.

(2)

1

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2

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(c) Outline the benefits of the homogenisation of liquids.

(4)

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(Total for Question 2 = 8 marks)



3 (a) Outline, using notes and/or sketches, how an emulsifier can prevent the separation of oil and water.

(2)

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(b) Describe the function of a stabiliser in ice cream.

(4)

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(c) State why the following **four** additives are used in food processing.

(4)

Anti-caking agents

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Solvents

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Sequestrants

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Nutrients

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(Total for Question 3 = 10 marks)



4 (a) Explain what is meant by the following **two** terms.

(4)

Quality control

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Quality assurance

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(b) Outline the impact that the Food Safety Act 1990 has had on the food industry.

(6)

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(Total for Question 4 = 10 marks)



5 (a) Give **one** property and **one** food use of the following two complex polysaccharides.

(i) Carrageen

(2)

Property

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Food use

(ii) Pectins

(2)

Property

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Food use

(b) State **three** features of retrogradation.

(3)

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(c) State **three** factors that affect the thickening of starch in a food product.

(3)

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(Total for Question 5 = 10 marks)



6 (a) Describe the effects of slow freezing on food products.

(4)

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*(b) Discuss the process **and** effects on food of the following two freezing methods.

(i) Cryogenic freezing

(4)

Process

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Effects

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(ii) Plate freezing

(4)

Process

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Effects

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(Total for Question 6 = 12 marks)



7 (a) Discuss the importance of amino acids in the diet.

(6)

A series of horizontal dotted lines provided for writing the answer to question 7(a).



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