

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

Monday 22 May 2017 – 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.
- **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 **one** suitable size reduction process for each of the following:

(i) meat

(1)

(ii) cereals.

(1)

(b) Describe the process of lye peeling.

(2)

(c) Describe how a manufacturer can successfully blend a dried soup mix.

(2)

(Total for Question 1 = 6 marks)

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2 Quality control checks are important throughout food manufacturing.

(a) Explain how temperature can be successfully monitored during the following stages of food manufacturing:

(i) automated production (2)

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(ii) distribution. (2)

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(b) Identify **three** other quality checks that should be carried out on raw materials upon arrival at a food processing factory. (3)

1

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2

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3

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(c) Discuss the benefits of being able to trace a food product from field to fork.

(4)

Area with horizontal dotted lines for writing the answer.

(Total for Question 2 = 11 marks)

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3 (a) Describe **two** sensory effects of the Maillard reaction on food.

(4)

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(b) Explain the different roles of xanthan gum in the following food products:

(i) salad dressing

(3)

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(ii) ice cream.

(3)

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(Total for Question 3 = 10 marks)



(c) Explain how the addition of an antioxidant can extend shelf-life.

(4)

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(Total for Question 4 = 11 marks)



5 (a) Outline the powers given to environmental health officers under the Food Safety Act 1990.

(4)

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(b) Yeast, mould and bacteria are micro-organisms.

Discuss how the following **three** factors influence their growth.

(i) pH

(3)

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(ii) oxygen

(3)

(iii) water activity.

(3)

(Total for Question 5 = 13 marks)



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6 Describe the following processes:

(i) gelatinisation

(3)

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(ii) caramelisation

(3)

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(iii) coagulation.

(3)

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(Total for Question 6 = 9 marks)



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*7 Evaluate the choice of packaging materials with reference to frozen food products.

(10)

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Handwriting practice area with 20 horizontal dotted lines.

(Total for Question 7 = 10 marks)

TOTAL FOR PAPER = 70 MARKS



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