

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS**  
**General Certificate of Secondary Education**

**D&T: FOOD TECHNOLOGY**  
**PAPER 4 (HIGHER TIER)**



**1954/4**

Friday                      **23 JUNE 2006**                      Afternoon                      1 hour 15 minutes

Candidates answer on the question paper  
No additional materials are required.

Candidate  
Name

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Centre  
Number

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Candidate  
Number

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**TIME**    1 hour 15 minutes

**INSTRUCTIONS TO CANDIDATES**

- Write your name, Centre number and candidate number in the boxes above.
- Answer **all** the questions.
- Write your answers in the spaces provided on the question paper.
- Do not write in the bar code. Do not write in the grey area between the pages.

**DO NOT WRITE IN THE AREA OUTSIDE THE BOX BORDERING EACH PAGE. ANY WRITING IN THIS AREA WILL NOT BE MARKED.**

**INFORMATION FOR CANDIDATES**

- The number of marks available is given in brackets [ ] at the end of each question or part question.
- The marks allocated and the spaces provided for your answers are a good indication of the length of answers required.
- The total number of marks for this paper is **50**.
- Question 2, Product Analysis, is based on the theme **vegetarian products**.

FOR EXAMINER'S USE	
Q1	
Q2	
Q3	
Q4	
Q5	
TOTAL	

**This question paper consists of 9 printed pages and 3 blank pages.**

- 1 Most food products can be made by batch production.

Fig. 1 shows an example of a batch production.



Fig. 1

- (a) State two benefits to the manufacturer of batch production.
- 1 \_\_\_\_\_ [1]
- 2 \_\_\_\_\_ [1]
- (b) Oven chips are a food product which can be manufactured using continuous flow.
- (i) State one advantage of continuous flow to the manufacturer.
- \_\_\_\_\_ [1]
- (ii) State one disadvantage of continuous flow to the manufacturer.
- \_\_\_\_\_ [1]
- (c) Sensors are used to control the quality and safety of food products.
- State two uses of sensors in the production of food products.
- 1 \_\_\_\_\_ [1]
- 2 \_\_\_\_\_ [1]

**3**

**(d)** Explain how CAD has improved the quality of packaging.

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[2]

**(e)** State **two** ways a new product could be promoted.

1 \_\_\_\_\_ [1]

2 \_\_\_\_\_ [1]

[Total: 10]

[Turn over

2 The list below shows the ingredients for a cheese, bacon and onion pastry.

**Pastry**

- wheat flour
- vegetable margarine
- lard
- water
- salt

**Filling**

- onion
- cheese
- bacon

**Sauce**

- milk
- wheat flour
- vegetable margarine
- pepper
- salt

(a) Name **one** ingredient in the pastry that would make it **unsuitable** for a lacto-vegetarian.

\_\_\_\_\_ [1]

(b) The manufacturer wants to change the filling of the pastry to meet the following specification:



Suggest **three** suitable ingredients for a pastry filling which would meet the specification.

1 \_\_\_\_\_ [1]

2 \_\_\_\_\_ [1]

3 \_\_\_\_\_ [1]

(c) State **two** ways packaging would indicate whether the contents are suitable for vegetarians.

1 \_\_\_\_\_ [1]

2 \_\_\_\_\_ [1]

(d) Explain why people become vegetarian.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ [4]

[Total: 10]

3 A manufacturer wants to produce Italian style bread for the summer.

The ingredients to be used for each loaf are:

- 250 g strong plain flour
- 5 g dried yeast
- 140ml water
- 15 ml olive oil
- 10 g olives
- 1 g salt

(a) Complete the table below giving the function of each ingredient.

Ingredient	Function of the ingredient
Yeast	
Oil	
Water	

[3]

(b) State **one** suitable ingredient to use, instead of olives in an Italian style bread.

\_\_\_\_\_ [1]

(c) The bread will be packaged in plastic.

Give **two** benefits of using this material.

Benefit 1 \_\_\_\_\_ [1]

Benefit 2 \_\_\_\_\_ [1]

(d) The transportation of food products is an important issue.

Explain **two** issues that must be considered when transporting food products.

Issue 1 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

Issue 2 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

[Total: 10]

4 (a) Explain what 'just in time' means and why it is used by food manufacturers and retailers.

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[4]

(b) Additives are widely used in food products.

(i) Explain why a manufacturer might use additives in food products.

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[2]

(ii) Explain why a consumer might avoid additives in food products.

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[2]

(c) Explain **one** moral **or** social issue a food manufacturer might need to consider when designing and making food products.

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[2]

[Total: 10]



5 Government guidelines aim to encourage people to eat more fruit and vegetables.

(a) Explain the health benefits of eating fruit and vegetables.

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[3]

(b) Explain why canning is a popular method of preserving fruit and vegetables.

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[3]

(c) Genetically engineered foods have become a controversial issue in recent years.

Explain the term genetically engineered foods, using examples.

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[4]

[Total: 10]

**10**  
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