

Candidate Name	Centre Number	Candidate Number



OXFORD CAMBRIDGE AND RSA EXAMINATIONS
General Certificate of Secondary Education

D&T: FOOD TECHNOLOGY
PAPER 3 (FOUNDATION TIER)

1954/3

Friday **24 JUNE 2005** Afternoon 1 hour

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

TIME 1 hour

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided on the question paper.

INFORMATION FOR CANDIDATES

The number of marks 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 5, Product Analysis, is based on the theme **cook-chill/microwave meals**.

FOR EXAMINER'S USE	
Q1	
Q2	
Q3	
Q4	
Q5	
TOTAL	

This question paper consists of 11 printed pages and 1 blank page.

1 Most food is packaged.

(a) Fig. 1 shows that ready-made soup is packaged using different materials.



Fig. 1

Complete the table below to show one different advantage of each material.

Material	Advantage
plastic	_____
metal	_____
paperboard	_____

[3]

(b) Give two reasons why food is packaged.

1. _____
_____ [1]

2. _____
_____ [1]

(c) Complete the table below to show one different method of packaging for each product.

The first one has been done for you.

Product	Pa ck a ging
yogurt	Plastic pot
eggs	
oranges	
fruit juice	

[3]

(d) Name the following symbols found on packaging.

(i)

**An image has been removed
due to third party copyright
restrictions**

Details: An image of a barcode

_____ [1]

(ii)

**An image has been
removed due to third party
copyright restrictions**

Details: An image of a person
putting rubbish into a bin

_____ [1]

[Total: 10]

2 Sauces can be used to make food products more interesting.

(a) The ingredients for a savoury white sauce are shown below.

250 ml milk 25 g margarine 25 g plain flour Salt and pepper
--

(i) State one reason why flour is used in this sauce.

_____ [1]

(ii) Give one reason why salt and pepper are added to the sauce.

_____ [1]

(iii) State two ingredients that could be added to this savoury sauce to add colour.

1. _____ [1]

2. _____ [1]

(b) Sauces can be bought ready to use in a variety of food products as shown in Fig. 2.



Fig. 2

(i) State two products that could be made using a tomato based sauce.

1. _____ [1]

2. _____ [1]

(ii) Give **three** advantages of using a ready-made sauce.

1. _____ [1]

2. _____ [1]

3. _____ [1]

(c) State where a ready-made sauce should be stored once opened.

_____ [1]

[Total: 10]

- 3** A food manufacturer wants to develop a range of cereal bars.
The first stage in the development is market research.

(a) State **two** methods of carrying out market research.

1. _____ [1]

2. _____ [1]

(b) Give **two** reasons for carrying out market research.

1. _____
_____ [1]

2. _____
_____ [1]

(c) State **two** ways of recording the results of market research.

1. _____ [1]

2. _____ [1]

Cereal bars are becoming increasingly popular.

(d) Give **one** reason for this increase.

_____ [1]

(e) Fig. 3 shows a design specification for a new cereal bar.

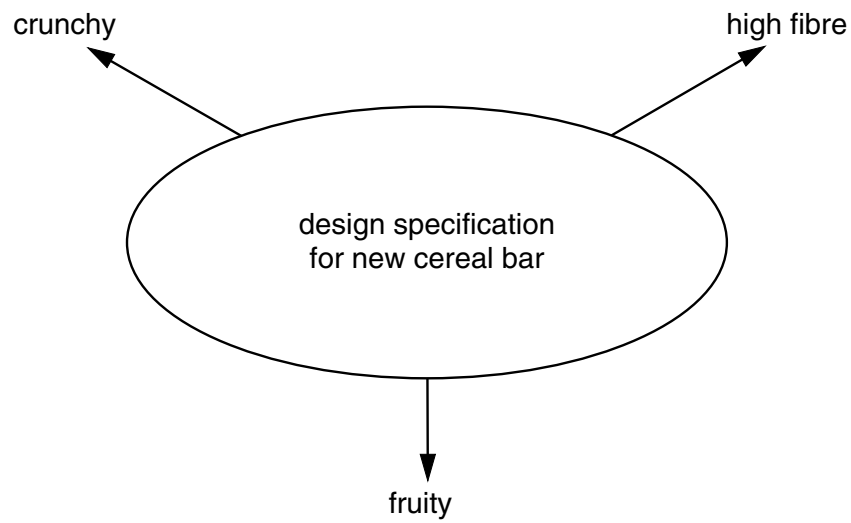


Fig. 3

In the space below sketch a new idea for a cereal bar.

Name **one** suitable ingredient for each specification point.

[3]

[Total: 10]

4 HACCP is a standard procedure used in the food industry.

(a) (i) State what the letters HACCP stand for.

_____ [1]

(ii) Give **two** ways HACCP is used in the food industry.

1. _____

_____ [1]

2. _____

_____ [1]

(b) Computers and automated manufacture (CAM) are used to control processes during the production of food products, for example chocolate biscuits.

Complete the table below to show **one** different reason for using CAM in each process.

Manufacture of chocolate covered biscuits	
Process	Reason for using CAM
Weighing	
Baking	
Coating	

[3]

(c) Manufacturers need to ensure that biscuits are a consistent size and shape.

Give **two** methods that a manufacturer could use to ensure consistency when shaping biscuits.

1. _____ [1]

2. _____ [1]

(d) Fig. 4 shows two sliced fruit loaves.

Fig. 4 (a) shows a perfect loaf.

Fig. 4 (b) shows a loaf with several faults.



Fig. 4

Identify two faults in the loaf shown in Fig. 4 (b) that makes it unsuitable for sale.

Fault 1 _____ [1]

Fault 2 _____ [1]

[Total: 10]

5 A test kitchen is trialling a new cook-chill microwave product.

The ingredients for the new product are shown below.

Spicy Potato Curry

450 g potatoes, peeled and diced
 1 onion, peeled and chopped
 2–3 tablespoons vegetable oil
 2 teaspoons curry powder
 400 g tinned tomatoes
 100 g green peas
 1 green pepper, sliced
 200 ml water

Fig. 5 shows the results of a sensory test.

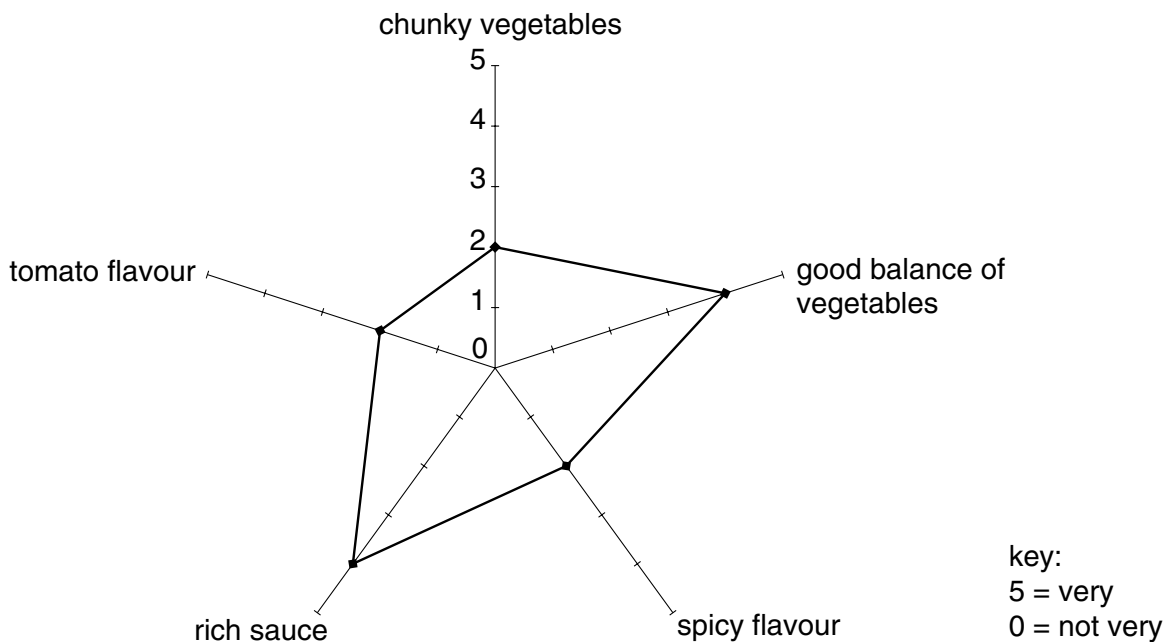


Fig. 5

(a) Using the ingredients list and star profile complete the table below:

Area for improvement	How to improve
Chunky vegetables	
Spicy flavour	
Tomato flavour	

[3]

(b) Sensory analysis tests are used to obtain information about a product.

State **two** ways a food manufacturer could use this information when developing a product.

1. _____ [1]

2. _____ [1]

(c) The manufacturer needs to give serving suggestions for the new curry product.

Name **one** suitable serving suggestion.

_____ [1]

(d) Give **three** benefits to the consumer of cook-chill products.

1. _____ [1]

2. _____ [1]

3. _____ [1]

(e) State the method of heat transfer when microwaving a ready-meal.

_____ [1]

[Total: 10]

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