

GENERAL CERTIFICATE OF SECONDARY EDUCATION

DESIGN AND TECHNOLOGY

1954/03

Food Technology

Paper 3 (Foundation Tier)

Candidates answer on the Question Paper

OCR Supplied Materials:

None

Other Materials Required:

None

Wednesday 23 June 2010

Afternoon

Duration: 1 hour



Candidate Forename		Candidate Surname	
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Centre Number						Candidate Number				
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INSTRUCTIONS TO CANDIDATES

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Answer **all** the questions.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your Candidate Number, Centre Number and question number(s).

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is **50**.
- The marks allocated and the spaces provided for your answers are a good indication of the length of answers required.
- Question 5, Product Analysis, is based on the theme **Fish and Fish Products**.
- This document consists of **12** pages. Any blank pages are indicated.

- 1 Hygiene is important in the kitchen. Fig.1 shows a worker in a kitchen.



Fig. 1

- (a) State **three** personal hygiene rules which should be followed in the kitchen.

Rule 1

Rule 2

Rule 3 **[3]**

(b) Fig. 2 shows a diagram of a refrigerator.

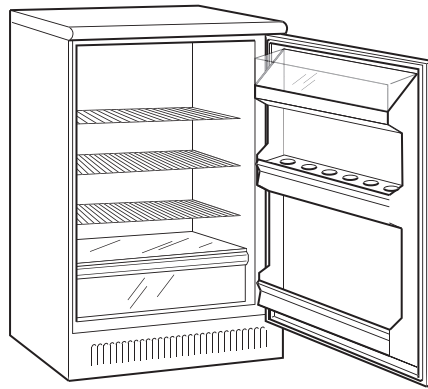


Fig. 2

Label the diagram to show where the following foods should be stored.

- (i) Raw chicken
- (ii) Cheesecake
- (iii) Salad

[3]

(c) The chart below shows a range of temperatures.

-18 °C	-2 °C	5 °C	15 °C
--------	-------	------	-------

From the chart choose the correct temperature for a:

- (i) Refrigerator
- (ii) Freezer

[2]

(d) State **two** ways to prevent cross-contamination in a kitchen.

1

2 **[2]**

[Total: 10]

- 2 A food manufacturer wants to develop a new cheesecake dessert. Fig. 3 shows a layered cheesecake desert.

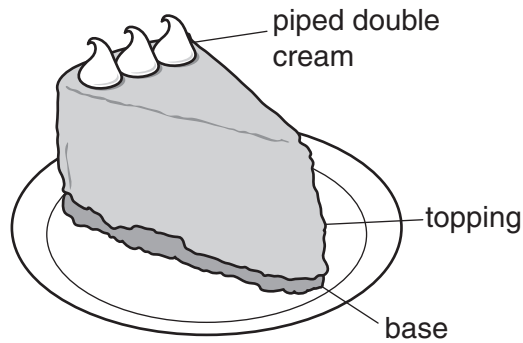


Fig. 3

- (a) State **two** ways the manufacturer could carry out market research.

1

.....

2

..... [2]

- (b) The ingredients for the new cheesecake shown in Fig. 3 are listed below:

Base

digestive biscuits
demerara sugar
melted butter

Topping

cottage cheese
single cream
gelatine
water
lemons
eggs separated
castor sugar

Decoration

double cream

- (i) State **one** ingredient that will set the topping.
..... [1]
- (ii) State **one** ingredient that is a high risk food.
..... [1]
- (iii) State **one** ingredient that is high in protein.
..... [1]
- (iv) State **one** ingredient that contains fibre.
..... [1]

(c) State **two** different ways to increase the fibre content of the cheesecake.

1

2 [2]

(d) Give **two** ways a supermarket could promote the new cheesecake.

1

.....

2

..... [2]

[Total: 10]

3 A bakery produces a range of biscuit products.

The basic ingredients for the biscuit dough are:

- plain flour
- baking powder
- milk
- margarine
- sugar

(a) State the function of baking powder in the biscuit dough.

..... [1]

(b) The bakery wants to develop a new biscuit product.

The specification for the new biscuit product is:

- appeal to young children
- new original flavour
- lower in sugar
- contribute to '5 a day'

With the aid of sketches and/or detailed notes as appropriate, produce a design idea for a new biscuit product that meets this specification.

Clearly label your sketch to explain how it meets the design specification.

Do not draw the packaging.

- (c) The biscuit product is packaged using cardboard.

Give **three** reasons why cardboard packaging material is suitable for the biscuits.

Reason 1

.....

Reason 2

.....

Reason 3

..... [3]

- (d) Packaging is labelled to give information to people who have special dietary requirements.

- (i) Name the sign below:



.....

- (ii) State **one** other piece of information that could be included to advise people with special dietary requirements.

.....

..... [2]

[Total: 10]

4 Fig. 4 shows a computer.



Fig. 4

(a) State **two** ways a manufacturer could use a computer in the development of a new ready meal product.

- 1
-
- 2
- [2]

(b) A manufacturer is planning the production of a new ready meal.

State **two** advantages to the manufacturer of using a Just in Time (JIT) production process for the ready meals.

- Advantage 1
-
- Advantage 2
- [2]

(c) Oven chips are a food product which can be manufactured using continuous flow production.

(i) State **one** advantage of continuous flow production to the manufacturer.

..... [1]

(ii) State **one** disadvantage of continuous flow production to the manufacturer.

..... [1]

(d) Sensors are used to control the quality of food products.

State **two** quality control checks that could be carried out by sensors.

1

.....

2

..... [2]

(e) Explain how the use of CAD and CAM has affected people employed in the food industry.

.....

.....

.....

..... [2]

[Total: 10]

- 5 Fish is an important part of a healthy diet.

Fig. 5 shows cod in batter portions.

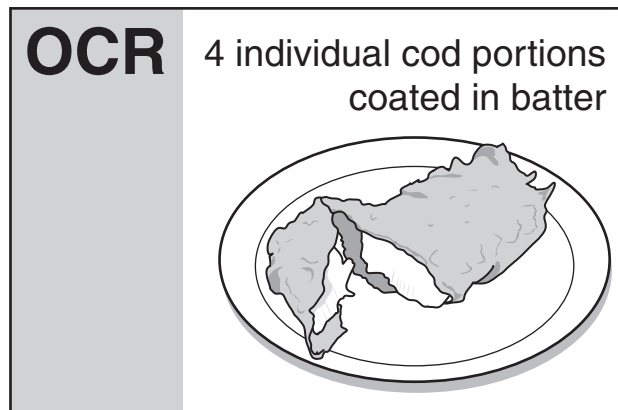


Fig. 5

- (a) Suggest a target group this product may be suitable for.

State **one** reason for your choice.

Target group

Reason for choice [1]

- (b) State **two** nutrients found in fish.

1

2 [2]

- (c) Cod in batter and chips is a popular meal.

Give **three** ways that you could modify this meal to make it healthier.

1

.....

2

.....

3

..... [3]

(d) Explain the function of batter on the cod.

.....

.....

.....

..... [2]

(e) Food manufacturers use a variety of techniques to freeze fish products.

Describe **one** commercial method of freezing fish products.

.....

.....

.....

..... [2]

[Total: 10]

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