



**GENERAL CERTIFICATE OF SECONDARY EDUCATION**

**DESIGN AND TECHNOLOGY**

**A524**

**Food Technology**

Technical Aspects of Designing and Making

Candidates answer on the Question Paper

**OCR Supplied Materials:**  
None

**Other Materials Required:**  
None

**Friday 29 January 2010**

**Afternoon**

**Duration: 1 hour 15 minutes**



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 in Section A **and** Section B.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided.

**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 **60**.
- Your Quality of Written Communication is assessed in questions marked with an asterisk (\*)
- This document consists of **12** pages. Any blank pages are indicated.

Section A

Answer **all** questions.

1 Fig. 1 shows a fruit and vegetable stall in a local market.



Fig. 1

- (a) (i) How many portions of fruit and vegetables are we advised to eat each day?  
..... [1]
- (ii) State **two** reasons why we are being encouraged to eat more fruit and vegetables.  
Reason 1 ..... [1]  
Reason 2 ..... [1]
- (b) Give **two** reasons why some people choose to buy fruit and vegetables from a market stall instead of a supermarket.  
Reason 1 ..... [1]  
Reason 2 ..... [1]
- (c) Sometimes young children do not want to eat fruit and vegetables.  
State **two** ways that parents/carers could encourage a young child to eat more fruit and vegetables.  
1..... [1]  
2..... [1]

(d) In September and October apples are plentiful and cheap to buy.

State **two** ways that a family could preserve some apples to use later in the year.

1..... [1]

2..... [1]

(e) When apples are peeled they will go brown.

(i) State **one** method used to prevent apples going brown when peeled.

..... [1]

(ii) Explain how this method prevents apples from going brown.

.....

.....

..... [2]

[Total: 12]

2 Fig. 2 shows a ready meal produced for children.

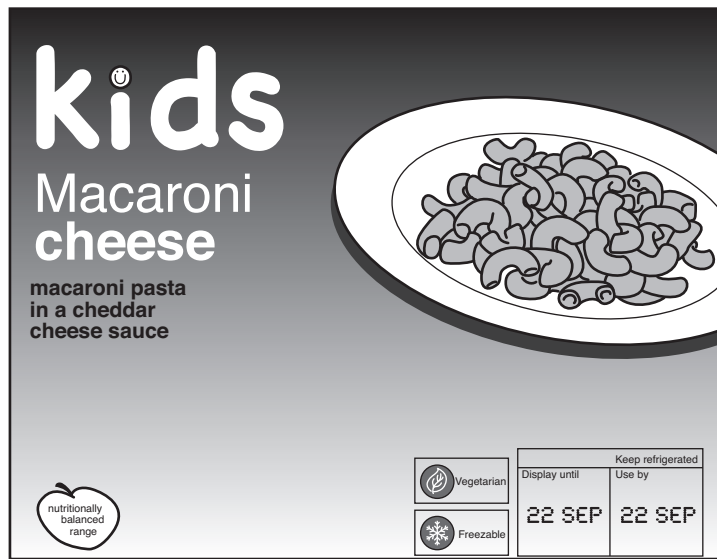


Fig. 2

(a) State the name of **two** nutrients found in macaroni cheese.

1..... [1]

2..... [1]

(b) Give **two** factors other than the nutritional value that might influence a parent/carer in choosing macaroni cheese for a child's meal.

Factor 1..... [1]

Factor 2..... [1]

(c) Macaroni cheese is not very colourful.

State **one** way of making macaroni cheese more colourful.

..... [1]

(d) (i) State the name of **one** ingredient that could be used to thicken the cheese sauce in macaroni cheese.

..... [1]

(ii) A cheese sauce is thickened by the process of gelatinisation.

Explain the process of gelatinisation.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
..... [4]

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

.....  
.....  
.....  
.....  
..... [2]

[Total: 12]

3 Fig. 3 shows the storage of a fresh cream cake in a refrigerator.

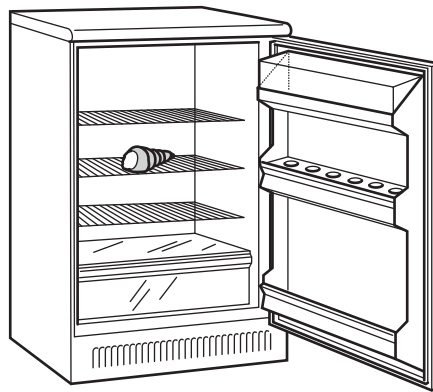


Fig. 3

(a) Where in the refrigerator shown in Fig. 3 would raw meat be stored?  
Tick the correct answer.

Above the fresh cream cake	<input type="checkbox"/>
Below the fresh cream cake	<input type="checkbox"/>
Next to the fresh cream cake	<input type="checkbox"/>
In the door	<input type="checkbox"/>

[1]

(b) Give **three** conditions that bacteria need to grow.

Condition 1

.....  
 ..... [1]

Condition 2

.....  
 ..... [1]

Condition 3

.....  
 ..... [1]

(c) Food poisoning can be caused by cross contamination.

State what is meant by cross contamination.

.....  
 ..... [1]



Section B

Answer **all** questions.

4 Fig. 4 shows the label from a cook chill meal.

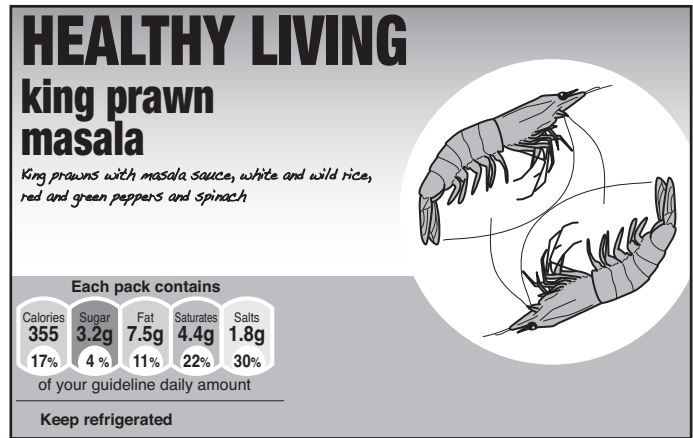


Fig. 4

(a) (i) State the amount of salt in the pack of King Prawn Masala.

..... [1]

(ii) Give **one** reason why we should reduce the amount of salt we eat.

.....  
 ..... [1]

(iii) Salt is used to improve the flavour of the King Prawn Masala.

State **two** flavourings that could be used instead of salt in the King Prawn Masala.

1 ..... [1]

2 ..... [1]

(b) Fish is an important part of a healthy balanced diet.  
 The different types of fish available can be divided into three groups.

Complete the table by naming the groups of fish.  
 Give **one** example of each.  
 The first one is done for you.

	Group of fish	Example
1	<i>Shellfish</i>	<i>Prawns</i>
2		
3		

[4]



(c) Describe **two** different sensory analysis tests that could be carried out during the development and production of the King Prawn Masala.

Sensory test one .....

.....

.....

.....

.....

..... [2]

Sensory test two .....

.....

.....

.....

..... [2]

**[Total: 12]**

5 (a) Milk is a rich source of calcium in the diet.

State **one** function of calcium in the diet.

..... [1]

(b) The elderly need a diet rich in calcium.

State **one** target group other than the elderly who need a diet rich in calcium.

..... [1]

(c) A catering company producing ready meals for elderly people wants to incorporate a new dessert product.

The specification for the dessert includes:

- use milk or milk products
- be easy to serve as single portions
- contain fibre
- appeal to an elderly person

Use sketches and/or detailed notes to design a new dessert which meets the specification.

**Do not draw any packaging.**

[4]



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