OCR
RECOGNISING ACHIEVEMENT

Wednesday 16 May 2012 – Afternoon

GCSE DESIGN AND TECHNOLOGY
Food Technology

A524/01 Technical Aspects of Designing and Making

A526010612

Candidates answer on the Question Paper.

OCR supplied materials:
None

Other materials required:
None

Duration: 1 hour 15 minutes

A524012

Candidate forename		Candidate surname	

Centre number						Candidate number				

INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions in Section A **and** Section B.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. If additional space is required, you should use the lined page at the end of this booklet. The question number(s) must be clearly shown.
- Do **not** write in the bar codes.

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 (a) Table 1 shows a range of equipment that can be used for cooking food.

State **one** different food that can be cooked in each piece of equipment.

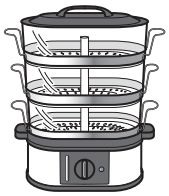
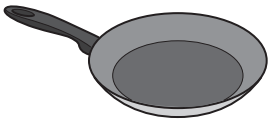
Cooking equipment	Food that can be cooked in this equipment
Oven 	
Microwave 	
Steamer 	
Frying Pan 	

Table 1

[4]

(b) State **two** ways of preventing cross contamination when preparing and storing meat.

1 .....

.....

2 .....

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

(c) Some meat can be tough when cooked.

State **two** processes that could be used to make tough meat tender.

1 .....

.....

2 .....

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

(d) Explain **two** factors that influence the way people choose to cook food.

1 .....

.....

.....

.....

2 .....

.....

.....

.....

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

[Total: 12]

2 Fig. 1 shows athletes.

Fig. 1

(a) Athletes need a good supply of energy in their diet.
Complex carbohydrates are a good source of energy.

(i) State **two** foods that provide complex carbohydrate in the diet.

1 .....

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

(ii) Explain why a complex carbohydrate is a good source of energy.

.....

.....

.....

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

(b) It is important for everyone to maintain the correct energy balance.

Describe what is meant by the term 'energy balance'.

.....

.....

.....

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

(c) Athletes need to drink plenty of water.

(i) Give **two** functions of water in the diet.

1 .....

.....

2 .....

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

(ii) State **two** ways that school children are encouraged to drink more water.

1 .....

.....

2 .....

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

(d) State **two** ways that a person's health can affect their choice of food.

1 .....

.....

2 .....

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

[Total: 12]

3 Fig. 2 shows a take away meal from a fast food outlet.

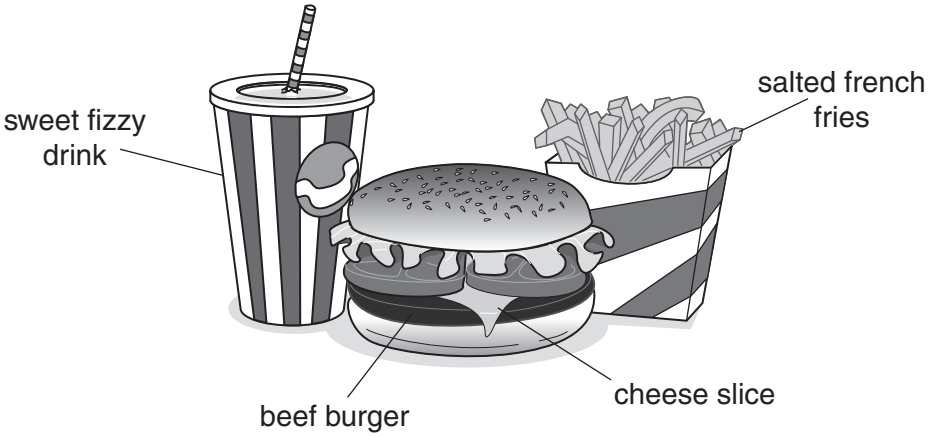


Fig. 2

(a) The take away meal shown in Fig. 2 does not meet current dietary guidelines.

Complete the table below to state changes that could be made to the fast food meal to meet current dietary guidelines.

Food that does not meet current dietary guidelines	Changes that could be made
Sweet fizzy drink	....
Beef burger	....
Cheese slice	....
Salted French fries	....

Table 2

[4]

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

.....

.....

.....

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

(c)* Describe the role of an Environmental Health Officer in making sure that foods bought from fast food outlets are safe to eat.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... **[6]**

[Total: 12]

Section B

Answer **all** questions.

4 Table 3 shows a range of orange drinks.

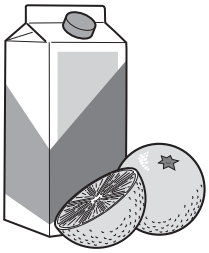
Orange Drinks	 Orange drink	 Orange and Mango Fruit Smoothie	 Freshly squeezed orange juice	 Fairtrade orange juice from concentrate
Typical Values	Per 100 ml	Per 100 ml	Per 100 ml	Per 100 ml
Energy	10 Kcal 42 kj	57 Kcal 257 kj	43 Kcal 185 kj	42 Kcal 177 kj
Protein	0.1 g	0.6 g	0.7 g	0.5 g
Carbohydrate	1.4 g	13.0 g	9 g	9.1 g
Fat	0.2 g	0.1 g	0 g	0.1 g
Vitamin C	30 mg	40 mg	30 mg	23.0 mg

Table 3

(a) (i) State the juice with the highest vitamin C level.

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

(ii) State the juice with the lowest energy level.

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

(b) State **two** functions of vitamin C in the diet.

1.....

.....

2.....

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

(c) State **one** sensory analysis test that could be carried out on the orange drinks.

Name of test .....

Give **one** reason for using this test .....

.....

.....

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

(d)* Explain how vitamin C can be retained when preparing and cooking fruits and vegetables.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... **[6]**

[Total: 12]

5 **(a)** A small bakery wants to produce a celebration cake.

The design specification for the cake must:

- appeal to a named target group
- be a creative new design
- be tasty
- be colourful

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

Do not draw any packaging.

[4]

(b) (i) State **two** advantages to the consumer of job/craft production.

1 .....

.....

2 .....

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

(ii) State **two** disadvantages to a manufacturer of job/craft production.

1 .....

.....

2 .....

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

(c) Give **four** control checks that could be carried out during the production of a cake to ensure a high quality finished product.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

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

[Total: 12]

Additional Page