

Monday 1 June 2015 – Afternoon

GCSE DESIGN AND TECHNOLOGY Food Technology

A525/01 Sustainability and Technical Aspects of Designing and Making

Candidates answer on the Question Paper.

OCR supplied materials:

None

Other materials required:

None

Duration: 1 hour 30 minutes



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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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 pages 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 **80**.
- Your quality of written communication is assessed in the questions marked with an asterisk (*).
- This document consists of **16** pages. Any blank pages are indicated.

SECTION A

Answer **all** the questions.

You are advised to spend about 40 minutes on this section.

On questions 1 – 5 **circle** your answer.

- 1 Which material is biodegradable?
(a) Metal
(b) Glass
(c) Paper
(d) Polystyrene [1]
- 2 The function of iron in the diet is to:
(a) Repair bones
(b) Prevent anaemia
(c) Prevent constipation
(d) Prevent high blood pressure [1]
- 3 Using a plastic carrier bag as a bin liner is an example of:
(a) Primary recycling
(b) Secondary recycling
(c) Tertiary recycling
(d) Chemical recycling [1]
- 4 Many people need to rethink their diet to eat:
(a) More fibre
(b) Less fruit and vegetables
(c) More processed foods
(d) More salt [1]
- 5 ETI stands for:
(a) Ethical trading initiative
(b) Ethical trading institute
(c) Environmental trading institute
(d) Ethical transport initiative [1]

6 The symbol shown stands for:



..... [1]

7 State **one** way manufacturers encourage consumers to recycle packaging.

..... [1]

8 Give **one** reason why consumers are concerned about genetically modified foods.

..... [1]

9 Name **one** autumn seasonal vegetable.

..... [1]

10 State why some consumers do not buy foods containing artificial additives.

..... [1]

Decide whether the statements below are **True** or **False**.

Tick (✓) the box to show your answer.

11 Paper can be recycled

True	False	
<input type="checkbox"/>	<input type="checkbox"/>	[1]

12 Raw vegetables cannot be composted

<input type="checkbox"/>	<input type="checkbox"/>	[1]
--------------------------	--------------------------	-----

13 Animal fats contain cholesterol

<input type="checkbox"/>	<input type="checkbox"/>	[1]
--------------------------	--------------------------	-----

14 Organic foods are usually more expensive than economy varieties

<input type="checkbox"/>	<input type="checkbox"/>	[1]
--------------------------	--------------------------	-----

15 We should buy foods with a lot of packaging

<input type="checkbox"/>	<input type="checkbox"/>	[1]
--------------------------	--------------------------	-----

16 Consumers are trying to reduce the amount of leftover food they throw away.

(a) Complete the chart below to show how the leftover food should be stored.

Leftover food	How it should be stored
Cooked meat	
Scones	

[2]

(b) Fig. 1 shows a list of leftover ingredients.

grated carrots cooked potato half a tub of cream cheese filo pastry grated cheese lemon half an onion stale sponge cake chopped strawberries cooked chicken stale bread cooked pasta

Fig. 1

Complete the table below to show how some of the ingredients could be used in **one** sweet and **one** savoury dish.

State any additional ingredients needed.

	Sweet dish	Savoury dish
Name of product		
Ingredient(s) used from the list		
Additional ingredient(s) needed to make the dish		

[6]

(d) Give **two** reasons why consumers purchase locally produced food.

1

.....

2

.....

[2]

(e) Give **two** ways a person's culture can affect their choice of food.

1

.....

2

.....

[2]

(f) Give **two** reasons why consumers choose to purchase Fairtrade products.

1

.....

2

.....

[2]

7
SECTION B

Answer **all** the questions.

You are advised to spend 50 minutes on this section.

17 (a) Fig. 2 shows the nutritional value per 100g of three types of milk.

Nutrient	Whole milk	Semi-skimmed milk	Skimmed milk
Energy KJ/KCAL	275 KJ	195 KJ	140 KJ
	66 KCAL	46 KCAL	33 KCAL
Carbohydrate	4.8 g	5.0 g	5.0 g
Fat of which: Saturated fat	3.9 g	2.7 g	0.1 g
	2.5 g	1.0 g	0.1 g
Protein	3.2 g	3.3 g	3.3 g
Calcium	115 mg	120 mg	120 mg
Vitamin D	0.3 µg	0.1 µg	Trace

Fig. 2

- (i) State the milk which contains the most fat.
..... [1]
- (ii) State **one** function of fat in the diet.
..... [1]
- (iii) Give **one** reason why the vitamin D content is reduced in the semi-skimmed and skimmed milk.
..... [1]
- (iv) State the amount of calcium found in skimmed milk.
..... [1]
- (v) Milk is a good source of calcium.
State **one** function of calcium in the diet.
..... [1]

(b) Some people are allergic to cows' milk.

State **two** foods containing calcium that a person with an allergy to cows' milk could eat.

1

2

[2]

(c) State **two** ways the shelf life of milk can be extended.

1

2

[2]

(d) A local dairy wants to develop a new food product.

The design specification points for the product are:

- include a dairy ingredient
- suitable for a dessert
- attractive to children
- contain a variety of textures

Use labelled sketches and/or notes to design a new product that meets the specification.

State clearly how your design meets the specification points.

Do not draw any packaging.

Name of product

[6]

18 Fig. 3 shows the Eatwell Plate.



Fig. 3

(a) State which **two** food groups from the Eatwell Plate should be eaten in the largest quantity.

1

2

[2]

(b) Give **two** reasons why we should eat less fat.

1

2

[2]

(e) Give **three** hygiene rules which should be followed when preparing food.

1

.....

2

.....

3

.....

[3]

19 Fig. 4 shows the ingredients used in a pasta bake.

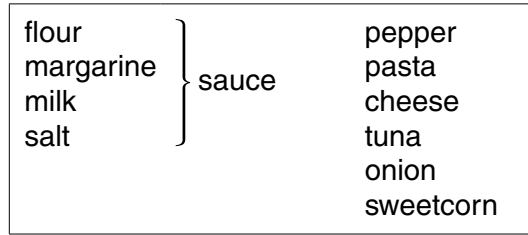


Fig. 4

(a) State **two** methods of sauce making.

1

2 [2]

(b) Explain the process of gelatinisation which occurs when making a sauce.

.....

.....

.....

..... [2]

(c) State why a sauce should be stirred while it is being made.

..... [1]

- (d) During the development of a pasta bake, sensory analysis testing takes place.
Give **four** procedures that should be followed when completing a sensory analysis test.

One example has been given.

1	<i>Have a quiet area so people are not disturbed.</i>
2
3
4
5

[4]

- (e) A product specification will be produced before the pasta bake is manufactured.
Explain what is meant by the term product specification.

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

- (f) A pasta bake can be reheated in a microwave oven. Describe how a microwave oven works.

.....

.....

.....

.....

.....

.....

..... [3]

- (g) State where a cook-chill pasta bake should be stored.

..... [1]

END OF QUESTION PAPER

ADDITIONAL ANSWER SPACE

If additional answer space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margins.

A large area of lined paper for writing answers. It features a vertical margin line on the left side and horizontal dotted lines for writing. The lines are evenly spaced and extend across the width of the page.

A large area of the page is reserved for writing, featuring a vertical solid line on the left side and horizontal dotted lines extending across the page.



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