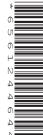


# **Cambridge IGCSE**<sup>™</sup>

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		



FOOD & NUTRITION

0648/13

Paper 1 Theory

May/June 2021

2 hours

You must answer on the question paper.

No additional materials are needed.

#### **INSTRUCTIONS**

- Section A: answer all questions.
- Section B: answer all questions.
- Section C: answer one question.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do not write on any bar codes.

#### **INFORMATION**

- The total mark for this paper is 100.
- The number of marks for each question or part question is shown in brackets [ ].

This document has 12 pages.

# **Section A**

# Answer all questions.

You are advised to spend no longer than 45 minutes on Section A.

1	(a)	Name the term used to describe the chemical process by which the body converts food into energy.
		[1]
	(b)	Explain <b>two</b> different ways in which occupation may affect an individual's need for energy.
		1
		2
	(c)	[2] Energy balance is taking in the correct amount of energy to meet the needs of the body.
	(0)	State <b>three</b> health effects of having an energy intake that is too low.
		1
		2
		3[3]
		[Total: 6]
2	(a)	Name <b>one</b> vitamin that can help blood to clot.
		[1]
	(b)	Name <b>one</b> vitamin that acts as an antioxidant.
		[1]
	(c)	Name <b>one</b> mineral that can help prevent anaemia.
	(d)	Name <b>one</b> mineral that can help prevent goitre.
		[1]
	(e)	Name <b>one</b> mineral that can help prevent tooth decay.
		[1]

3

(a)	Hydrogen is a chemical element in carbohydrates.	
	Name <b>two</b> other chemical elements in carbohydrates.	
	1	
	2	[2]
(b)	Cereals are starchy foods.	
	Name three other different foods that contain starch.	
	1	
	2	
	3	[3]
(c)	Name <b>two</b> types of cereal that should be avoided by people with coeliac disease.  1	
	2	
(d)	Name the substance in these cereals that cannot be digested by people with coeliac	
		[1]
		[Total: 8]

(a)	Describe three physical effects of heat on butter.	
	1	
	2	
	3	
(b)	State <b>three</b> characteristics of a saturated fat.	[3]
	1	
	2	
	3	 [3]
(c)	Name three food sources that are high in monounsaturated fat.	
	1	
	2	
	3	
(d)	Give <b>two</b> reasons why fat becomes rancid.	[3]
	1	
	2	 [2]

[Total: 11]

4

Add	Adding legumes and pulses to recipes can help a person suffering with constipation.				
(a)	Suggest <b>three</b> other different ways that the diet could be altered to help a person suffering with constipation.				
	1				
	2				
	3				
	[3]				
(b)	State <b>three</b> possible health effects if a person suffering with constipation does not alter their diet.				
	1				
	2				
	3				
	[3]				
	[Total: 6]				
Wa	ter is essential for the body to function effectively.				
lde	ntify <b>four</b> different ways in which water helps the body function effectively.				
1					
2					
۷					
3					
4					
4					
4	[4]				
4					

### **Section B**

# Answer all questions.

7 The following ingredients can be used to make shortcrust pastry.

200 g plain flour 50 g white fat 50 g butter pinch of salt cold water

(a)	Giv	e one reason for each of the following rules when making shortcrust pastry:
	(i)	sieve flour
		[1]
	(ii)	use fingertips for rubbing in
		[1]
	(iii)	use plain flour
		[1]
	(iv)	use butter
		[1]
	(v)	do not add too much water
		[1]
	(vi)	allow pastry to relax in a cool place before baking.
		[1]
(b)		shortcrust pastry can be used to make a fruit pie. The pie can be glazed with egg or milk ore baking to give it an attractive appearance.
		gest <b>four</b> other methods that can be used before baking to give the pie an attractive earance.
	1	
	2	
	3	
	4	
		[4]

(c)	Describe what happens to the pastry when the fruit pie is baked.	
		[Total: 14]
Stea	aming is a method of cooking which uses water vapour.	
Give	e <b>six</b> disadvantages of steaming as a method of cooking.	
1		
2		
3		
4		
5		
6		
		[6]

9	An important feature of kitchen design is the work triangle.
	State what is meant by the work triangle and explain why it is an important feature of kitchen design.
	[4]
10	Convenience foods have been partly or totally prepared by a food manufacturer.
	Suggest <b>seven</b> reasons why some people may not wish to use convenience foods.
	1
	2
	3
	4
	4
	5
	6
	7
	[7]

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11	Paperboard is a popular packaging material used for convenience food products.						
	Explain why paperboard is a suitable material for packaging convenience food.						
		[7]					
12	Some saucepans are made from stainless steel.						
	(a) Give four reasons why stainless steel is a suitable material for a saucepan.						
	1						
	2						
	3						
	4						
		[4]					
	(b) Suggest three other materials which can be used to make saucepans.						
	1						
	2						
	3	[3]					

# Section C

# Answer either Question 13 or 14.

13 Identify problems that may occur for people who follow a vegan diet. Discuss how careful meal planning can overcome these problems. [15]

r	7	o
ı	J	П

OIX		
14	Discuss nutritional reasons why milk and milk products are considered important foods for three-year-old child.  Suggest different ways of including milk and milk products in meals as part of a balanced diet for three-year-old child.	
	•	

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[Total: 15]

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