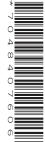


# **Cambridge IGCSE**<sup>™</sup>

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		



**FOOD & NUTRITION** 

0648/13

Paper 1 Theory May/June 2022

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.

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[Turn over

## **Section A**

# Answer all questions.

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

1	Nar	ne the term used to describe a diet that contains all nutrients in the correct proportion.	
		[	1]
2	B-g	roup vitamins are important for good health.	
	(a)	Name <b>three</b> different plant sources of vitamin B <sub>1</sub> (thiamin).	
		1	
		2	
		3[3	 3]
	(b)	A deficiency of vitamin B <sub>3</sub> (nicotinic acid) can lead to pellagra.	
		Identify <b>one</b> symptom of pellagra.	
		[	1]
	(c)	State <b>two</b> functions of vitamin B <sub>12</sub> (cobalamin) in the body.	
		1	
		2	
		Į <sup>z</sup>	2]

[Total: 6]

3	Fats are	e used to provide the body with a source of energy.	
	(a) Giv	ve one example of how the body uses each of the following types of energy:	
	(i)	mechanical energy	
			[1]
	(ii)	chemical energy	
			[1]
	(iii)	electrical energy.	
	(1) 01		[1]
		ate <b>four</b> health reasons to reduce the intake of saturated fat.	
			[4]
		ggest <b>five</b> ways that the intake of saturated fat could be reduced in meals.	
	0		[5]
	(d) (i)	Name the part of the digestive system where fats are digested.	
			[1]
	(ii)	Name the end-products of fat digestion.	
		1	
		2	[2]
			[Total: 15]

4	Che	eese contains calcium.
	(a)	Name <b>one</b> disease in children caused by a deficiency of calcium.
		[1]
	(b)	Name <b>one</b> disease in adults caused by a deficiency of calcium.
		[1]
	(c)	State why someone with high blood pressure should reduce the amount of cheese in their diet.
		[1]
		[Total: 3]
5	Egg	s are a high-risk food.
	(a)	State <b>three</b> reasons why eggs are a high-risk food.
		1
		2
		3
		[3]
	(b)	Name <b>four</b> other different high-risk foods.
		1
		2
		3
		4
		[4]

[Total: 7]

Identify and explain eight nutritional requirements for a 25-year-old female athlete.
1
2
3
4
5
6
7
8
[8]

6

## Section B

Answer all questions.

7 A recipe for a pizza base uses the following ingredients:

strong plain white flour salt sugar yeast hand-hot water oil

(a)	State three reasons why using strong plain flour is important when making the pizza base	<del>)</del> .
	1	
	2	
	3	[3]
(b)	To increase the non-starch polysaccharide (NSP) / dietary fibre content of the pizza bawholemeal flour could be used.	
	Name three different ingredients which could be added to the pizza base to increase NSF	٥.
	1	
	2	
	3	
		[3]
(c)	State <b>two</b> functions of the salt in the pizza base recipe.	
	1	
	2	[2]
(d)	Name the gas produced by the yeast.	
		[1]

	(e)	Suggest <b>five</b> reasons why the baked pizza base may not have risen.	
		1	
		2	
		3	
		4	
		5	
			[5]
		[Total: 1	4]
8	Des	scribe first-aid treatment for a scald to the hand.	
		ı	[2]

A slow cooker is a useful piece of kitchen equipment for cooking tough cuts of beef.

(a)	State <b>five</b> other advantages of using a slow cooker.
	1
	2
	3
	4
	5[5]
(b)	State <b>five</b> reasons why some cuts of beef may be tough.
	1
	2
	3
	4
	5
	[5]
(c)	Describe <b>four</b> changes which take place when a tough cut of beef is cooked in a slow cooker.
	1
	2
	3
	4
	[4]
(d)	State why a recipe for a vegetable casserole advises dried kidney beans should <b>not</b> be used in a slow cooker.
	[1]
(e)	State <b>three</b> steps to follow to make dried kidney beans safe to use in the vegetable casserole.
(6)	
	1
	2
	3[3]
	[Total: 18]

9

10 The following ingredients can be used to make a thin (pouring) batter:

100 g plain flour ½ tsp salt 250 ml milk 1 egg

(a)	Describe how to make the batter mixture.
	[5]
(b)	Explain what happens to the batter mixture when it is being cooked.
	[3]
(c)	Name <b>two</b> dishes that can be made from the thin batter.
	1
	2
	[2]

### **Section C**

### Answer either Question 11 or 12.

- 11 It is important that protein is included in the diet of a two-year-old child.
  - Discuss the importance of high biological value (HBV) protein in the diet of a two-year-old child.
  - Describe the possible consequences to their health if protein intake is too low.
  - Discuss ways to ensure that HBV foods are safe for a two-year-old child to eat.

[15]

7	ப
.,	г.

12	It is important to plan meals that suit the nutritional needs of individuals.  Discuss aspects, other than nutrition, that should be considered when planning and cooking family meals.  [15]

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