

# **Cambridge IGCSE**<sup>™</sup>

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		



**FOOD & NUTRITION** 

0648/12

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.

Name the term used to describe chemical processes, such as g place in the body.			ne term used to describe chemical processes, such as growth and cell renewal, that the body.	owth and cell renewal, that take		
				[1]		
2	(a)	Sim	ple sugars are molecules from which all carbohydrates are made.			
		(i)	State the chemical name for simple sugar.	[1]		
		(ii)	Name <b>two</b> examples of simple sugars.			
			2			
				[2]		
	(b)		te <b>two</b> ways the body uses carbohydrate foods.			
		1				
		2		 [2]		
			[Tota	l: 5]		
3	Fish	n is a	a good source of high biological value (HBV) protein.			
	(a)	Nar	me <b>four</b> different types of oily fish.			
		1				
		2				
		3				
		4				
				[4]		
	(b)		me <b>three</b> different foods that are good sources of HBV protein for a lacto-vegetarian.			
		2				
		3		 [3]		

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	(c)	(i)		
			1	
			2	[2]
		(ii)	Name the end-product of protein digestion.	
				[1]
	(d)	Nar	ame <b>one</b> deficiency disease caused by a lack of protein.	
				[1]
				[Total: 11]
4	One	e fun	nction of vitamin E (tocopherol) is to help prevent heart disease.	
	(a)	Sta	ate <b>three</b> other functions of vitamin E in the body.	
		1		
		2		
		3		
				[3]
	(b)		ame <b>three</b> different sources of vitamin E.	
		1		
		2		
		3		[3]
				[Total: 6]
				[Total. 0]
5	Sta	te <b>fo</b>	our functions of vitamin C.	
	1			
	2			
	3			
	4			
				[4]

(a)	Name the group of people who are most likely to suffer from rickets.	
		. [1]
(b)	Name one mineral and one vitamin that help to prevent rickets.	
	(i) mineral	. [1]
	(ii) vitamin	. [1]
(c)	Name two different foods that are good sources of the vitamin named in (b)(ii).	
	1	
	2	
	ITak	[2]
		ai. oj
(a)	State <b>four</b> factors that may increase the risk of a person developing type 2 diabetes.	
	1	
	2	
	3	
	4	
/b\	Identify form my tritional avoidalines a narrow about of fallow to halp magness type O diabates	[4]
(D)		
	4	[4]
	(b) (c)	(b) Name one mineral and one vitamin that help to prevent rickets.  (i) mineral

[Total: 8]

# **Section B**

Answer all questions.

**8** A recipe for a chocolate dessert uses the following ingredients.

double cream condensed milk dark chocolate

Pots of fresh double cream are on sale in different supermarkets on 28 June 2022.

supermarket A	supermarket B
double cream  use by 28 June 2022	double cream  use by 30 June 2022
Double cream kept in chill cabinet at temperature 5°C	Double cream kept in chill cabinet at temperature 12°C

(a)	Explain why the cream from supermarket B should <b>not</b> be purchased.
	[2]
(b)	The recipe for the dessert uses condensed milk.  Describe the process of manufacturing condensed milk.
	[4]

(c)	(i)	The dark chocolate in the dessert is a good source of iron.  Name <b>three</b> different animal foods that are good sources of iron.
		1
		2
		3[3]
	(ii)	State <b>one</b> function of iron in the body.
		[1]
(d)	Sta	te what is meant by <i>best-before</i> on a food label.
		[2]
		[Total: 12]

(a)		teria can be responsible for food spoilage. ne <b>two</b> other causes of food spoilage.	
	1		
	2		[2]
(b)	Sug	gest <b>five</b> reasons why a person may make their own jam.	
	1		
	2		
	3		
	4		
	5		
			[5]
(c)	Exp	lain how each of the following preservation methods prevent food spoilage:	
	(i)	use of salt	
			[2]
	(ii)	use of vinegar.	
			[2]
			[Total: 11]
			[]

9

(a)	Giv	re three different reasons for each of the following guidelines:	
	(i)	use fresh fish within 24 hours of purchase	
		1	
		2	
		3	
			[3]
	(ii)	wrap fish before storing.	
		1	
		2	
		3	[3]
(b)	Nar	me <b>two</b> suitable moist-heat methods of cooking fish.	
()			
			[2]
(c)	Sta	te <b>four</b> effects of cooking on fish.	
	1		
	2		
	3		
	4		
			[4]
(d)		h does not contain vitamin C. me <b>two</b> different sources of vitamin C that could be included as part of a fish dish.	
	1		
	2		
			[2]
		toT]	al: 14]

10

11	Sieving flour is one mechanical method of introducing air into a mixture.							
	(a)	State three other mechanical methods of introducing air into a mixture.						
		1						
		2						
		3	[3]					
			[၁]					
	(b)	Name <b>one</b> ingredient that is used as a raising agent.						
			[1]					
		Т	otal: 4]					
12	List	four personal safety precautions that should be followed before cooking.						
	1							
	2							
	3							
	4							
			[4]					

# **Section C**

# Answer either Question 13 or 14.

13 Eggs are used in a wide variety of dishes.

Explain, with examples, the following functions of eggs in the preparation and cooking of dishes:

- aeration
- · coagulation.

	٦١
- 1	IJΙ

### OR

- **14** Vegetarian diets are becoming increasingly popular.
  - Discuss reasons for the increasing popularity of vegetarian diets.
  - · Explain what is meant by a vegan diet.

•	Explain why protei	n complementation	on is important	to a vegan. Incl	lude examples.	[15]

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