

# **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.

### Section A

## Answer all questions.

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

1		Name the term used to describe chemical processes, such as growth and cell renewal, that take place in the body.						
			[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.					
			1					
	(b)		te <b>two</b> ways the body uses carbohydrate foods.					
			[2]					
			[Total: 5]					
3	Fisl	h is a	good source of high biological value (HBV) protein.					
	(a)	Naı	me <b>four</b> different types of oily fish.					
		1						
		2						
		4	[4]					
	(b)	Naı	me three different foods that are good sources of HBV protein for a lacto-vegetarian.					
		1						
		3						

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

6	(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	
			[2]
		[Total	ıl: 5]
7	(a)	State <b>four</b> factors that may increase the risk of a person developing type 2 diabetes.	
		1	
		2	
		3	
		4	
			[4]
	(b)	Identify four nutritional guidelines a person should follow to help manage type 2 diabetes	i.
		1	
		2	
		3	
		4	
			[4]

[Total: 8]

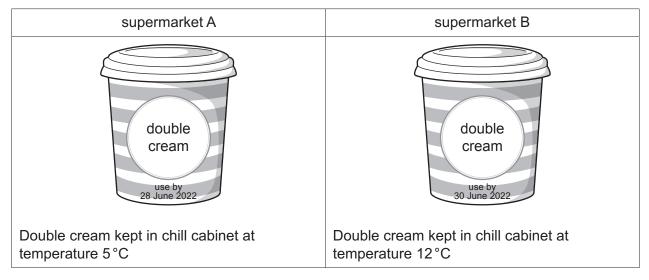
### **Section B**

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.



(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 best-before on a food label.
		[2]
		[Total: 12]

9

(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]

10	(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.	
		1		
		2		
	(-)	04-	to form offerte of analysis on field	[2]
	(C)		te <b>four</b> effects of cooking on fish.	
		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]
			-	
			l	Total: 14]

11	Sie	ving 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]
	/l <sub>=</sub> \	Name and in the district that is used as a maining a mont	[ب]
	(D)	Name <b>one</b> ingredient that is used as a raising agent.	
			[1]
		ТЈ	otal: 4]
12	List	t <b>four</b> 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.

[15]

### 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

<ul> <li>Explain what is meant by a vegan diet.</li> <li>Explain why protein complementation is important to a vegan. Include examples.</li> <li>[15]</li> </ul>

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