

# **Cambridge IGCSE**<sup>™</sup>

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		

**FOOD & NUTRITION** 

0648/13

Paper 1 Theory

October/November 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 [ ].

### Section A

## Answer all questions.

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

1	(a)	Def	ine the term <i>diet</i> .	
	(b)	Ider	ntify <b>one</b> food that is avoided in each of the following special diets:	. [1]
		(i)	coeliac	
				. [1]
		(ii)	lactose intolerant.	
				. [1]
			[Tota	al: 3]
2	(a)	Nar	me <b>two</b> elements from which carbohydrate is formed.	
		1		
		2		[2]
	(b)	Sta	rchy foods such as breakfast cereals contain carbohydrate.	L <del>-</del> .
	( )		ne <b>three</b> other different foods that contain starch.	
		J		[3]
	(c)	Nar	ne the substance produced by the action of the enzyme amylase on carbohydrate.	
				. [1]
	(d)	Nar	ne <b>two</b> other enzymes involved in the digestion of carbohydrate.	
		1		
		2		
				[2]

[Total: 8]

3	Gre	en leafy vegetables such as cabbage are a good source of vitamin C.	
	(a)	State <b>three</b> effects on the body of vitamin C deficiency.	
		1	
		2	
		3	[3]
	(b)	Name <b>four</b> other green leafy vegetables that are a good source of vitamin C.	اِن]
	(D)		
		1	
		2	
		3	
		4	[4]
	(c)	State and explain <b>four</b> guidelines to conserve vitamin C when preparing cabbage	for cooking.
		1	
		2	
		3	
		4	
			[4]
			[Total: 11]
4	Vec	getables are a good source of non-starch polysaccharide (NSP) / dietary fibre.	
•		State <b>five</b> health benefits for adults of eating a variety of foods rich in NSP.	
	(a)		
		1	
		2	
		3	
		4	
		5	[5]

	(b)	Pulse vegetables include beans, lentils and peas.	
		Name <b>four</b> types of beans that could be added to a curry to increase NSP.	
		1	
		2	
		3	
		4	
	(0)	State three effects on the hady of entire too much NSD	[4]
	(C)	State <b>three</b> effects on the body of eating too much NSP.	
		1	
		2	
		3	[3]
			[Total: 12]
5	The	disease associated with a deficiency of iron is anaemia.	
	(a)	State <b>four</b> effects of anaemia on the body.	
		1	
		2	
		3	
		4	
	<i>(</i> 1.)		[4]
	(b)	Explain why an anaemic person needs a daily supply of vitamin C.	
			[Total: 6]

#### **Section B**

Answer all questions.

**6** The following ingredients can be used to make rough puff pastry.

200 g strong plain flour 150 g butter 1 tsp salt 2 tsp lemon juice 125 ml cold water

		125 m cold water	
(a)	(i)	Give <b>two</b> reasons why strong plain flour is used to make rough puff pastry.	
		1	
		2	 [2]
	(ii)	Give <b>two</b> reasons why butter is used to make rough puff pastry.	. <del>-</del>
	(")	1	
		2	
			[2]
	(iii)	Give <b>one</b> reason why lemon juice is used to make rough puff pastry.	
		[	[1]
(b)	Cor	nplete the instructions for making rough puff pastry.	
	1	sieve flour and salt	
	2		
	3		
	4		
	5		
	6		
	7		 [6]

	(c)	When baked, the pastry does not rise well.	
		Identify and explain three reasons why rough puff pastry may not rise well.	
		reason 1	
		explanation	
		reason 2	
		explanation	
		reason 3	
		explanation	[6]
	(d)	Suggest <b>five</b> reasons why some people use ready-made pastry rather than making their	r own.
		1	
		2	
		3	
		4	
		5	
		ITot.	[5]
			al: 22]
7	(a)	State <b>four</b> reasons for using raising agents in cake mixtures.	
		1	
		2	
		3	
		4	
	/b\	Chata there a good that are access a calca misture to vice rule on it is halved	[4]
	(D)	State <b>three</b> gases that can cause a cake mixture to rise when it is baked.  1	
		2	
		3	[3]
	(c)	Name one ingredient that can be added to cake mixtures as a raising agent.	
			[1]

8

Frying is a popular method of cooking fish.				
(a)	Name three different methods of frying that could be used to cook fish.			
	1			
	2			
	3			
(b)	Name <b>one</b> method of heat transfer used when frying fish.	[3]		
		[1]		
(c)	Give three advantages of frying as a method of cooking fish.			
	1			
	2			
	3	[3]		
(d)				
	1			
	2	[2]		
		[Total: 9]		

State <b>six</b> guidelines, with reasons, for choosing kitchen knives.
1
2
3
4
5
6
[6]

9

#### **Section C**

#### Answer either Question 10 or 11.

- **10** Eggs are a very useful commodity to include in the preparation of meals. Discuss:
  - the nutritional benefits of including eggs in the diet
  - guidelines that should be followed when buying and storing eggs.

[15]

#### OR

- 11 Milk is a very useful commodity to include in the preparation of meals.
  - the nutritional benefits of including milk in the diet
  - processing of milk by pasteurisation and the effect it has on the sensory quality of the milk
  - processing of milk by ultra-heat treatment (UHT) and the effect it has on the sensory quality
    of the milk.

[15]

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