

Cambridge Assessment International Education

Cambridge International General Certificate of Secondary Education

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		

FOOD AND NUTRITION

0648/13

Paper 1 Theory May/June 2019

2 hours

Candidates answer on the Question Paper.

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

Write your centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams or graphs.

Do not use staples, paper clips, glue or correction fluid.

DO NOT WRITE IN ANY BARCODES.

Section A

Answer all questions.

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

Section B

Answer all questions.

Section C

Answer either Question 8(a) or 8(b).

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.

Section A

Answer all questions.

1	(a)	Define the term <i>undernutrition</i> .					
	(b)	Name one disease which is caused by protein–energy undernutrition.					
				[1] [Total: 2]			
2	(a)	Cor	mplete the following sentences about protein.				
		(i)	Protein is the only nutrient which contains the elements				
			and	[2]			
		(ii)	Proteins are made up of molecules.	[1]			
	((iii)	Two enzymes which break down proteins are and and	[2]			
	((iv)	Absorption of protein takes place in the	[1]			
	(b)	Diff	erent protein foods 'complement' each other.				
		(i)	Explain the term protein complementation.				
				[1]			
		(ii)	Explain the benefit of protein complementation.				
				[1]			
	((iii)	Give four examples of protein complementation to illustrate your answer in (ii).				
			1				
			2				
			3				
			4				
				[4]			

© UCLES 2019 0648/13/M/J/19

3	(a)	Describe the composition of polysaccharides.
		[1]
	(b)	Starch is a polysaccharide.
		Give four different dietary sources of starch.
		1
		2
		3
		4
		[4]
	(c)	Describe three effects of moist heat on starch.
		1
		2
		3
	(ما/	[3]
	(d)	Describe four ways in which non-starch polysaccharide (NSP) / dietary fibre is used by the body.
		1
		2
		3
		4
		[4]
	(e)	Give four health problems which may be caused by an excess of NSP in the diet.
		1
		2
		3
		4
		[4]

(f	Describe the digestion of cooked starch in the mouth.	
		[2]
		[Total: 18]
! C	rent dietary advice is to drink plenty of water.	
(a	Explain what is meant by the term water balance.	
(k	State three effects of an inadequate intake of water.	
	1	
	2	
	3	[3]
(0	Suggest four groups of people who have an increased need for water. Give a each group's need.	reason for
	group 1	
	reason	
	group 2	
	reason	
	group 3	
	reason	
	reason	
		[4]

[Total: 8]

Section B

Answer all questions.

5	A basic	racina	for	making	12	ainaer	hiscuite	Hebe.
o .	A Dasic	recipe	IUI	making	12	giriger	DISCUILS	uses.

100 g plain four
50 g margarine
50 g syrup
50 g sugar
1 tsp ground ginger

1 tsp bicarbonate of soda

	½ tsp bicarbonate of soda
(a)	These biscuits are made using the melting method.
	Name two other methods which could be used to make biscuits.
	1
	2
	[2]
(b)	Complete the steps required to make these biscuits using the melting method.
	1. Grease and flour baking tray
	[5]
(c)	Name the ingredient in the basic recipe that produces carbon dioxide.
	[1]
	[Total: 8]

	6	There are	many	different ty	vpes of	vegetables
--	---	-----------	------	--------------	---------	------------

(a) Complete the table to give **one** example of each of the following types of vegetables.

type of vegetable	example
root	
tuber	
fruit	
pod	
bulb	

		bulb		
				[5]
(b)	Veg	etables can be bo	ought in many forms.	
	Give	e two disadvanta	ges of buying vegetables in the following forms:	
	(i)	fresh vegetables	;	
		disadvantage 1		
		disadvantage 2		
	/::\	conned vegetebl		[2]
	(ii)	canned vegetabl	es.	
		disadvantage 1		
		disadvantage 2		
				[2]
(c)	Stat	te four points to c	onsider when buying fresh vegetables.	
	1			
	2			
	3			
	4			[4]

© UCLES 2019 0648/13/M/J/19

(d)	It is	important to prepare and cook green vegetables correctly.	
	(i)	Give three ways to conserve nutritional value when preparing cabbage.	
		1	
		2	
		3	[3]
	(ii)	Give three ways to conserve nutritional value when cooking cabbage.	[၁]
	()	1	
		2	
		3	
			[3]

[Total: 19]

7	Many	modern	households	own a	freezer.
	IVICTITY	111000111	110000110100	OWIII CA	1100201

(a)	Suggest six factors for a family to consider before choosing a new freezer. Give a reason for each factor.
	factor 1
	reason
	factor 2
	reason
	factor 3
	reason
	factor 4
	reason
	factor 5
	reason
	factor 6
	reason[6]
(b)	Frozen food must be stored at the correct temperature.
	State the correct temperature for a home freezer.
	[1]
(c)	Give two reasons why freezing prevents food spoilage.
	1
	2
	[2]

(d)		me foods are blanched before freezing.	
		re one benefit of blanching peas before freezing. [1]
(e)	Giv	re a reason for each of the following:	
	(i)	thaw frozen chicken joints completely before cooking;[1	1
	(ii)	fast freezing of fresh fish is essential for best quality;	,
		[1]
	(iii)	food placed in a freezer must be well wrapped;	
	(iv)	do not place hot or warm foods in a freezer;]
	(v)	never refreeze defrosted food.]
(f)		olain each of the following star ratings which can be seen on the packaging of frozen fooderstar *	
		z stai	
	two	stars **	
	thre	ee stars ***	
			}]

[Total: 18]

Section C

Answer either Question 8(a) or 8(b).

8	(a)	Discuss reasons why more people are choosing to follow a vegetarian diet.	[15]
OR			
	(b)	Discuss and explain the specific nutritional needs of a manual worker. Explain was a manual worker can be economical with fuel when cooking meals.	ys in which [15]

© UCLES 2019 0648/13/M/J/19

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which itself is a department of the University of Cambridge.