

Cambridge Assessment International Education

Cambridge International General Certificate of Secondary Education

Paper 1 Theory		Octobe	er/November 2019
FOOD AND NU	ITRITION		0648/13
CENTRE NUMBER		CANDIDATE NUMBER	
CANDIDATE NAME			

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 10(a) or 10(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.

This document consists of 12 printed pages.





2 hours



Section A

Answer all questions.

1	(a)	Define the term <i>overnutrition</i> .	
			[1]
	(b)	Suggest one common result of overnutrition.	
			[1]
			[Total: 2]
2	(a)	Proteins can prevent extreme conditions such as kwashiorkor.	
		Give four other functions of proteins in the body.	
		1	
		2	
		3	
		4	
	<i>a</i> . \		[4]
	(b)	Proteins are made up of amino acid molecules.	
		Explain why some proteins have a lower biological value (LBV) than others.	
			[2]
	(c)	Name three different foods which are a good source of low biological value protein.	
		1	
		2	
		3	
			[3]

	(d)	Name two enzymes which break down protein in the digestive system.	
		1	
		2	
			[2]
		[Tota	al: 11]
3	Mor	nosaccharides are used as a source of energy in the body.	
	(a)	Define the term monosaccharide.	
			[1]
	(b)	Galactose is an example of a monosaccharide.	
		Name two other monosaccharides.	
		1	
		2	
			[2]
		[To	tal: 3]
4	B gı	roup vitamins play an important part in the production of energy.	
	Cor	mplete the following sentences about B group vitamins:	
	(a)	Vitamin B ₁ is also known as	[1]
	(b)	A deficiency of vitamin B ₁ can lead to the disease	[1]
	(c)	Vitamin B ₂ is also known as riboflavin. Three good sources of riboflavin are yeast extra	ct,
		and	[2]
	(d)	Vitamin B ₃ is also known as	[1]
	(e)	Two effects on health of a prolonged deficiency of Vitamin B ₃ are	
		and	[2]
		[To	tal: 7]

5	Bod	dy size is one factor which can affect the energy needs of a person.	
	Give	e five other factors which affect the energy needs of a person.	
	1		
	2		
	3		
	4		
	5		
			[5]
6	Ider	ntify a different vitamin or mineral needed for each of the following functions:	
	(a)	formation of blood cells;	
			[1]
	(b)	production of visual purple;	
			[1]
	(c)	helping wounds heal;	
			[1]
	(d)	aiding the absorption of calcium;	
			[1]
	(e)	production of the hormone thyroxine;	
			[1]
	(f)	preventing megaloblastic anaemia.	
	()		[1]
			[Total: 6]
			[.0.00]

Most absorption of digested food takes place in the lieum.
Describe the structure of the ileum.

Section B

Answer all questions.

8	Cur	rrent dietary advice is to include fresh fruit in the diet each day.		
	(a)	lder	ntify and explain five nutritional reasons for this advice.	
		1		
		2		
		3		
		4		
		5		
				 [5]
	(b)	Frui	it can be preserved by making jam.	
		Ехр	lain how each of the following steps helps to prevent fruit spoiling when making jam:	
		(i)	boiling fruit;	
				.[1]
		(ii)	adding sugar;	
				[1]

(iii) sealing jars.

(c)	Complete the table t	o show different way	vs fruit can be	e included in fan	nily meals
\sim	Complete the table t	o oncorr annoronic ma	yo man oan o	o ii ioiaaca ii i iai	,

		use of fruit	ехаттріе
		hot dessert	apple pie
			[5]
(d)	Giv	e three points to consider when choose	osing fresh apples in a market.
	1		
	2		
	3		
/-\	F		[3]
(e)		it can be bought in various forms.	
	(i)	Give three advantages of using drie	
		advantage 1	
		advantage 2	
		advantage 3	
			[3]
	(::\	Circa Marca disadramata na africaina	
	(ii)	Give three disadvantages of using	
		disadvantage 1	
		disadvantage 2	
		disadvantage 3	
			[3]
			ای

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Δh	asic recipe for a chicken nie uses the following ingredients:	
A ba	asic recipe for a chicken pie uses the following ingredients:	
A ba	asic recipe for a chicken pie uses the following ingredients: shortcrust pastry 200 g plain flour	
A ba	shortcrust pastry 200 g plain flour 50 g butter	
A ba	shortcrust pastry 200 g plain flour 50 g butter 50 g white vegetable fat	
A ba	shortcrust pastry 200 g plain flour 50 g butter	
A ba	shortcrust pastry 200 g plain flour 50 g butter 50 g white vegetable fat pinch of salt 100 ml cold water filling	
A ba	shortcrust pastry 200 g plain flour 50 g butter 50 g white vegetable fat pinch of salt 100 ml cold water	
	shortcrust pastry 200 g plain flour 50 g butter 50 g white vegetable fat pinch of salt 100 ml cold water filling 200 g cooked chicken breast	
	shortcrust pastry 200 g plain flour 50 g butter 50 g white vegetable fat pinch of salt 100 ml cold water filling 200 g cooked chicken breast 100 ml white sauce	
	shortcrust pastry 200 g plain flour 50 g butter 50 g white vegetable fat pinch of salt 100 ml cold water filling 200 g cooked chicken breast 100 ml white sauce Give four steps for making the shortcrust pastry.	
	shortcrust pastry 200 g plain flour 50 g butter 50 g white vegetable fat pinch of salt 100 ml cold water filling 200 g cooked chicken breast 100 ml white sauce Give four steps for making the shortcrust pastry.	

(b)	Give one reason why the pastry should be left	C C
(c)	Name two herbs which could be added to var	
(d)		[2]
(d)		
(e)	Different types of vegetables can be added to	[4]
	(i) Name one suitable root vegetable to add	I to the pie filling.
	(ii) Name one suitable bulb vegetable to add	d to the pie filling.
(f)	Name the ingredient in the chicken pie which	causes dextrinisation.
(g)		s which would make the chicken pie suitable for
	change	replacement
	butter	vegetable margarine
		[4]

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[Total: 18]

Section C

Answer either Question 10(a) or 10(b).

10	(a)	Discuss ways to be economical when shopping for food and cooking family meals. [15]
OR	(b)	Many processed foods use additives. Explain the benefits of each of the following additives:
		• emulsifiers;
		• flavourings;
		• preservatives.
		[15]

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