

Cambridge International Examinations

Cambridge International General Certificate of Secondary Education

FOOD AND NU	TRITION		0648/12
CENTRE NUMBER		CANDIDATE NUMBER	
CANDIDATE NAME			

Paper 1 Theory

October/November 2016

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 12(a) or 12(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	Def	Define the term <i>balanced diet</i> .			
		[Total			
2	(a)	Name four elements from which proteins are formed.			
		1 2			
		3 4	[2]		
	(b)	Explain what is meant by complementary proteins. Give two examples of dishes contain complementary proteins.	ing		
		example 1			
		example 2	 [4]		
	(c)	State three functions of protein in the body.			
		1			
		2			
		3	 [3]		
	(d)	Name two deficiency diseases caused by a lack of protein.			
		1			
		2	[2]		

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(f) Describe what happens to protein when it is heated. (g) (i) Name the enzyme found in the stomach which converts protein to peptides. (ii) Name the enzyme which clots milk. (iii) Name the enzyme produced by the pancreas which converts proteins to peptide (iv) Name the enzyme which converts peptides to amino acids. (iv) Name the enzyme which converts peptides to amino acids. (b) chloride; (c) iodine; (d) phosphorus.	
(f) Describe what happens to protein when it is heated. (g) (i) Name the enzyme found in the stomach which converts protein to peptides. (ii) Name the enzyme which clots milk. (iii) Name the enzyme produced by the pancreas which converts proteins to peptide (iv) Name the enzyme which converts peptides to amino acids. [Total cone function in the body of the following minerals: (a) iron; (b) chloride; (c) iodine;	
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(iii) Name the enzyme which clots milk. (iii) Name the enzyme produced by the pancreas which converts proteins to peptide (iv) Name the enzyme which converts peptides to amino acids. (Iv) Name the enzyme which converts peptides to amino acids. (Iv) State one function in the body of the following minerals: (a) iron; (b) chloride; (c) iodine;	
(iii) Name the enzyme produced by the pancreas which converts proteins to peptide (iv) Name the enzyme which converts peptides to amino acids. [Total content of the following minerals: (a) iron; (b) chloride; (c) iodine;	
(iv) Name the enzyme which converts peptides to amino acids. [7] State one function in the body of the following minerals: (a) iron; (b) chloride; (c) iodine;	eptides.
State one function in the body of the following minerals: (a) iron; (b) chloride; (c) iodine;	
(a) iron; (b) chloride; (c) iodine;	[Total
(b) chloride;	
(c) iodine;	
(d) phosphorus.	

4	(a)	State two functions of vitamin A.
		1
		2
		[2]
	(b)	Name two sources of vitamin A.
		1
		[1]
		[Total: 3]
5	(a)	Non-starch polysaccharide (NSP)/dietary fibre is essential for a healthy diet.
		Name four good sources of NSP.
		1 2
		3 4
		[2]
	(b)	Give reasons for the importance of NSP in the diet.
		[5]
		[Total: 7]

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6	Give guidance for planning and serving meals for an elderly convalescent person. Include reasons for your advice.
	[5]
	[Total: 5]

Section B

Answer all questions.

7	Raising agents are important to give mixtures a light texture.	
	State three different methods of using carbon dioxide to raise mixtures. Give a different exact of a dish for each method.	ample
	method 1	
	example	
	method 2	
	example	
	method 3	
	example	
		[6]
	[To	otal: 6]
8	State, with examples, five reasons for cooking food.	
	reason 1	
	example	
	reason 2	
	example	
	reason 3	
	example	
	reason 4	
	example	
	reason 5	
	example	
		[10]

9

	Explain how convection and radiation transfer heat when cooking food. Give an example of a dish for each method.
(convection
(example
ı	radiation
(example[8]
	[Total: 8]

10 A basic recipe for shortbread biscuits uses the following ingredients	10	A basic recip	e for shortbread	biscuits uses	the following	ingredients
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50 g caster sugar 100 g butter 150 g plain flour

			2. 3 F			
(a)			method which could be used to make the biscuits.			
(b)			different functions of each of the named ingredients used in the biscuits.	נין		
i	ngredi	ient	function			
	suga	ar	1			
	butte	er	1			
(c)			w the basic recipe ingredients could be adapted for the following special diets: on with coeliac disease;	 [4]		
	(ii)		on with diabetes;	[1]		
	(iii)	a pers	on with coronary heart disease (CHD).	[1]		
(d)	Give	advic	e, with a reason, for the storage of these biscuits.			
(e)	Sugg	gest tw	vo ways to vary the flavour of the basic recipe.	[2]		
				 [2]		
				r—1		

11	Disc	cuss, with reasons, factors to consider when:
	(a)	choosing kitchen knives;
		[3]
	(b)	caring for kitchen knives;
		[2]
	(c)	disposing of kitchen waste.
		[4]
		[Total: 9]

Section C

Answer either Question 12(a) or 12(b).

12	(a)	Discuss the nutritive value, storage and uses of eggs in the preparation of family meals. [15]
OR		
	(b)	Identify and give examples of different types of convenience foods. Explain the reasons for packaging convenience foods. Suggest why some people prefer not to use these types of food. [15]

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[Total: 15]

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