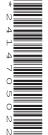


Cambridge International Examinations

Cambridge International General Certificate of Secondary Education

CANDIDATE NAME		
CENTRE NUMBER	CANDIDATE NUMBER	



FOOD AND NUTRITION

0648/01

Paper 1 Theory May/June 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 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.



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Section A

Answer all questions.

1	(a)	Define the term <i>metabolism</i> .
	(b)	State three different uses of energy in the body.
		1
		2
		3[3
	(c)	Fats provide the body with energy.
		State four other functions of fats in the body.
		1
		2
		3
		4[4
	(d)	Starches and sugars are carbohydrates.
		Explain four health problems that may occur when a person eats too much carbohydrate.
		1
		2
		3
		4[4]

	(e)	(i)	Name four sources of high biological value (HBV)	protein.
			1 2	
			3 4	
				[2]
		(ii)	Name four sources of low biological value (LBV) p	rotein.
			1 2	
			3 4	
				[2]
				[Total: 16]
•	(5)	Das	acuited the aboveigal disposition of acaleed atouch in the	, ma a utila
2	(a)	Des	scribe the chemical digestion of cooked starch in the	e mouin.
				[2]
	(b)	Nar	me the part of the digestive system where fats are d	igested.
				[1]
	(c)	Nar	me the substance which emulsifies fats.	
	(-)			[41
				[1]
	(d)	Nar	me an enzyme which breaks down proteins.	
				[1]
	(e)	Nar	me the end product of protein digestion.	
				[1]
				[Total: 6]

3	Comple	ete the following	g sentence	s about B	group	vitamir	ıs.				
	Vitamin	B ₁ is also	known as	thiamin.	Three	good	sources	of thiami	n are	yeast	extract,
			and								
	A deficie	ency of thiamir	n can lead t	o the dise	ease						
	Vitamin	B ₂ is also	known as	·			It is	destroye	d by	the a	action of
	A defici	ency of vitamir	n B ₃ can lea	ad to the o	disease	pellag	ra. One of	the sympt	toms of this disease is		
											[6]
											[Total: 6]
4	(a) Sta	ate three functi	ions of vita	min A.							
	1										
	3										[3]
	(b) (i)	Vitamin A is	found in an	imal food	s in the	form o	f retinol.				
		Name four s	sources of r	etinol.							
		1				2					
		3									
		0		• • • • • • • • • • • • • • • • • • • •		т			•••••		[2]
	(ii)	State the for	m of vitami	n A found	l in plan	t foods	S.				
											[1]
											[Total: 6]
											-

5

Teenagers need energy-rich foods and B group vitamins in their diet.	
State, with reasons, three other nutritional needs of teenage girls.	
	[Total: 6]

6

Section B

Answer all questions.

6	(a)	Wheat is a cereal. Name four other cereals.
		1
		3 4
	(b)	Give four reasons for the importance of cereals.
		1
		2
		3
		4[4]
		[Total: 6]
7	A ba	asic recipe for making bread uses the following ingredients:
		200 g strong plain flour 12 g fresh yeast or 1 tsp dried yeast 1 tsp sugar 1 tsp salt 125 ml warm water
	(a)	State four different ingredients which could be added to the recipe to increase non-starch polysaccharide (NSP)/dietary fibre.
		1
		2
		3
		4[4]
	(b)	Give one reason why strong plain flour is used.
		[1]
	(c)	Give one reason why a person with coeliac disease should not eat this bread.
		[1]

(d)	Give one reason why the temperature of the water for making the bread is important.
	[1]
(e)	Give one function of the salt.
	[1]
(f)	Describe and explain the changes which take place when bread is baked.
	[5]
(g)	Mould is a microorganism which can grow on bread if it is stored in damp conditions.
	Name two other conditions which are needed for microorganisms to grow.
	1
	2[2]
	رے] [Total: 15]
	[rotal: 10]

(a)	Name three different methods of frying.	
	1	
	2	
	3	[3]
(b)	Give three advantages of frying.	
	1	
	2	
	3	[3]
(c)	State and explain five safety points to follow when frying.	
	1	
	2	
	3	
	4	
	5	
		[5]
(d)	Describe the basic first aid treatment for a burn caused by hot fat.	
		וסו
		[2]

[Total: 13]

8

9

(a)	Suggest four factors to consider when buying a new microwave oven.	
	1	
	2	
	3	
	4	
		[4]
(b)	Give four disadvantages of using a microwave oven.	
	1	
	2	
	3	
	4	
		[4]
(c)	Describe how heat is transferred when cooking food in a microwave oven.	
		[3]
		[Total: 11]

Section C

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

10	(a)	Discuss the importance and functions of food packaging and labelling.	15]
OR			
	(b)	Discuss reasons for preserving food. Explain, with examples, how food spoilage is prevent by removing moisture, reducing temperature and using sugar.	ed 15]
			••••
			••••
			••••
			••••
			••••
			••••
			••••

[Total: 15]

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