Name

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

FOOD AND NUTRITION

0648/01

Paper 1 Theory

October/November 2004

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 a soft pencil for any diagrams or rough working.

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

Answer **all** questions in the spaces provided on the Question Paper.

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

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

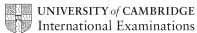
The number of marks is given in brackets [] at the end of each question or part question.

If you have been given a label, look at the details. If any details are incorrect or missing, please fill in your correct details in the space given at the top of this page.

Stick your personal label here, if provided.

For Examiner's Use		
1		
2		
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7		
Total		

This document consists of **12** printed pages.



Section A

Answer all questions

1	(a)	Sta	te three functions of protein.
			[3]
	(b)	Nar	me the elements which combine to form protein.
			[2]
	(c)	(i)	Define the term 'High Biological Value (HBV) protein'.
			[1]
		(ii)	Name four foods which are good sources of HBV protein.
			[2]
	(d)	(i)	Define the term 'Low Biological Value (LBV) protein'.
			[1]
		(ii)	Name four foods which are good sources of LBV protein.
			[2]
	(e)	(i)	What are complementary proteins?
			[2]
		(ii)	Give two examples of protein complementation.
			[1]

	(1)	Describe the digestion and absorption of protein.
		To.)
		[6]
	(g)	What is meant by 'deamination of protein'?
		[2]
•	۸	adaminta augusta at Naga Otagah Dahasa ah agida (NOD) is an accontial is a haalthuudist
2		adequate supply of Non-Starch Polysaccharide (NSP) is an essential in a healthy diet.
	(a)	Explain how NSP is used by the body.
		[4]
	(b)	Name four good sources of NSP.
		[2]
		[4]

3

(a)	State three reasons for including sodium chloride (salt) in the diet.
	[3]
(b)	Name two situations in which individuals will require additional salt. Give a reason for each of your answers.
	[2]
(c)	What would be the result if a diet is lacking in salt?
	[1]
(d)	Give advice, with explanations, on the choice or preparation of foods for those who wish to reduce their intake of salt.
	[6]

[TOTAL for Section A: 40]

Section B

Answer all questions

1	(a)	Name six of the nutrients in red meat.		
		1		2
		3		4
		5		6[3]
	(b)	Sug	ggest four methods of tenderising tough m	neat before cooking
		1		
		2		
		3		
		4		[2]
	(c)	(i)	Give two moist methods of cooking mea	t.
			1	2[1]
		(ii)	Describe the changes which take place methods.	e when meat is cooked by one of these
				[4]

	(d)	Current nutritional advice is to reduce the intake of red meat.	
		(i)	Give reasons for this statement.
			[3]
		(ii)	Suggest four alternatives to red meat.
			[2]
5	(a)		five methods of introducing air into mixtures. Give a named example of where each hod is used.
		Met	hod 1
		Exa	mple
		Met	hod 2
		Exa	mple
		Met	hod 3
		Exa	mple
		Met	hod 4
		Exa	mple
			hod 5
		Exa	mple[5]

(b) The following list of ingredients can be used to make plain scones.

200g (8 oz) plain flour 4 level teasp. baking powder 1/2 level teasp. salt 50g (2 oz) margarine, lard or other hard fat 125 ml (1/4 pt) milk

De	scribe, with reasons, the method for making and baking scones.
••••	
••••	
••••	
	[6]
) Na	me two ingredients which could be used to vary the mixture.
1.	[1]
i) (i)	Name the gas used as the raising agent in scones.
	[1]
(ii)	Explain:
	(a) how it is produced in the mixture
	(b) its raising action in the scones.
	[2]

6	(a)	(i)	List four causes of food spoilage.	
			1 2	
			3[2]	
		(ii)	Identify four conditions which promote food spoilage.	
			1 2	
			3[2]	
	(b)	Free	eezing is often used to preserve food. Explain:	
		(i)	how freezing prevents food spoilage;	
			[2]	
		(ii)	the reason for 'fast freezing' food.	
			[2]	
	(c)	(i)	Give the temperature at which a domestic refrigerator should operate.	
			[1]	
		(ii)	What would happen if the temperature in the refrigerator was:	
			(a) too high;	
			(b) too low?	
			[1]	

[TOTAL for Section B: 45]

(iii)	State and explain five rules to observe when storing food in a refrigerator.
	[5]

Section C

Answer either 7(a) or 7(b).

7	(a)	Discuss reasons for cooking food Suggest ways of saving money when buying and cooking food.
or	(b)	Discuss the information which could be found on a food label and state why the information is important.

[15]

[TOTAL for Section C: 15]

[Total for Paper: 100]

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