

# Cambridge International Examinations

Cambridge International Advanced Level

FOOD STUDIES 9336/01

Paper 1 October/November 2016

3 hours

Additional Materials: Answer Booklet/Paper

#### **READ THESE INSTRUCTIONS FIRST**

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.

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.

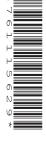
Do not use staples, paper clips, glue or correction fluid.

DO NOT WRITE IN ANY BARCODES.

Answer **four** questions, **two** from Section A and **two** from Section B. Write your answers on the separate Answer Booklet/Paper provided.

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 two questions.

1	(a)	Stat	te the functions of calcium, phosphorous and iodine in the body.	[6]
	(b)	Ехр	lain the main roles of the trace elements cobalt, copper, manganese and zinc.	[8]
	(c)	Ider	ntify locally available food sources of each of cobalt, copper, manganese and zinc.	[2]
	(d)		te the vitamin content of milk and explain why the vitamins available in milk may not ilable when consumed.	be [4]
	(e)	Exp	lain the importance of non-starch polysaccharide (NSP) / dietary fibre in a healthy of	diet. [5]
2	(a)	Stat	te the energy value of 1g of protein.	[1]
	(b)	Des	cribe the primary and secondary structures of protein.	[6]
	(c)		e an example of a globular protein. With the aid of a diagram, explain the characteris properties of globular proteins.	tics [5]
	(d)	Ехр	lain the terms protein quality and complementary proteins.	[6]
	(e)	Des	cribe the effects of cooking on fish.	[5]
	(f)	Des	cribe the deficiency disease kwashiorkor.	[2]
3	(a)	(i)	Describe the chemical structure of lactose.	[3]
		(ii)	With reference to lactose, explain the terms <i>enzymic hydrolysis</i> and <i>defective absorption</i> ).	tion [6]
	(b)	Give	e an account of:	
		(i)	the role of high-density lipoproteins and low-density lipoproteins in the body;	[3]
		(ii)	the structure and function of intestinal villi;	[5]
		(iii)	the digestion of carbohydrates;	[4]
		(iv)	transamination.	[4]
4	(a)	Exp	lain how:	
		(i)	the body uses energy;	[4]
		(ii)	energy is stored in the body;	[4]
		(iii)	Maillard browning occurs;	[5]
		(iv)	enzymic browning occurs.	[3]
© UC	• •		cuss the specific nutritional needs of adolescents. 9336/01/O/N/16	[9]

## **Section B**

## Answer two questions.

<b>၁</b>	(a)	(1)	Discuss why milk requires heat treatment.	[2]
		(ii)	Name and describe three methods of heat treating milk.	[9]
	(b)	Des	scribe the production of a hard cheese such as cheddar.	[7]
	(c)	Exp	plain the uses of additives in the production of fruit yoghurt.	[7]
6	(a)		ncakes are made from a pouring batter. Give the recipe and method for making a bat ncakes.	tch of [4]
	(b)		ve an example of a yeast product that can be baked at home. Explain how yeast works sing agent.	s as a [6]
	(c)	Giv	ve advice on choosing and storing fresh fish.	[7]
	(d)		plain how to achieve an efficient and safe working environment when planning a kitche home.	en for [8]
7	(a)	Exp	plain how Clostridium botulinum could contaminate canned tomatoes.	[3]
	(b)	-	plain why dehydration, freezing and addition of antioxidants are used as methods of eservation.	food [6]
	(c)		me foods contain naturally occurring toxins. Give <b>two</b> examples of such foods and exw these foods should be prepared to avoid food poisoning.	oplain [4]
	(d)	Dis	cuss how good kitchen and personal hygiene can reduce the incidence of food poisc	ning. [12]
8	(a)	Giv	ve advice on the choice of locally available nutritious foods for a family on a small bu	ıdget. [9]
	(b)	Giv	ve advice on choosing a domestic refrigerator.	[8]
	(c)	Giv	ve advice on the use of a microwave oven.	[8]

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