



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Advanced Level

FOOD STUDIES

9336/01

Paper 1

October/November 2013

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 a soft pencil for any diagrams, graphs or rough working.

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

Answer **four** questions, **two** from Section A and **two** from Section B.

Write your answers on the separate Answer Booklet/Paper provided.

You are reminded of the need for good English and clear presentation in your answers.

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 **4** printed pages.



Section A

Answer **two** questions.

- 1** Many people suffer from deficiency diseases at some stage of their life.

Discuss the causes, symptoms and remedies for the following deficiency diseases:

- (a) anaemia; [5]
- (b) osteoporosis; [5]
- (c) goitre; [5]
- (d) night-blindness; [5]
- (e) scurvy. [5]

- 2** Discuss:

- (a) the digestion of food in the small intestine; [12]
- (b) the absorption of nutrients in the ileum. [13]

- 3** Fats and oils have different characteristics and have many different uses in the preparation of dishes.

- (a) Discuss this statement, illustrating your answer with named examples of fats and oils. [10]
- (b) Explain the following terms relating to fats and oils:
 - (i) rancidity; [3]
 - (ii) smoke point; [3]
 - (iii) hydrogenation. [3]
- (c) Current nutritional advice is to reduce the amount of fat in the diet.
Give reasons for this advice. [6]

- 4** (a) Describe the primary and secondary structure of protein. [6]
- (b) Proteins can be classified as globular or fibrous.

Discuss the characteristics and properties of each type, illustrating your answer with named examples. [7]

- (c) Explain, with examples, the effects of the following on protein:
 - (i) heat;
 - (ii) agitation;
 - (iii) acids. [8]
- (d) Define *deamination* and discuss its importance in nutrition. [4]

[Section A Total: 50 marks]

Section B

Answer **two** questions.

- 5** (a) Discuss factors which influence the choice of food for individuals in your area. [15]
- (b) State your understanding of the term *Recommended Daily Intake (RDI)* and discuss its importance to the individual. [3]
- (c) Nutritional information, although not a legal requirement, can be found on many food packages.
- Discuss the importance of this information to the consumer. [7]
- 6** (a) Identify different reasons for including sauces when planning and preparing meals. Give examples to illustrate your answer. [6]
- (b) Describe and explain the following processes which may occur when making sauces:
- (i) gelatinisation; [5]
- (ii) emulsification; [5]
- (iii) coagulation. [5]
- (c) Explain the term *syneresis* and give examples to support your answer. [4]
- 7** (a) Discuss factors which may make food dangerous to consume. [10]
- (b) Many outbreaks of food poisoning can be traced to poor preparation, cooking and storage of chicken.
- Explain why it is important to:
- (i) thaw frozen chicken completely before cooking;
- (ii) cook chicken thoroughly;
- (iii) serve immediately. [10]
- (c) Freezing is a popular method of preserving food.
- (i) Explain the principles of deep freezing.
- (ii) Give advice on the use of a domestic freezer. [5]

8 Milk is often referred to as a perfect food.

- (a) Identify the nutrients in milk and explain the importance of each nutrient for the development of babies. [12]
- (b) Discuss problems associated with a diet which consists only of milk. [6]
- (c) Consider the advantages and disadvantages of breast-feeding and bottle-feeding using formula milk. [7]

[Section B Total: 50 marks]

[Total for Paper: 100 marks]

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