



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Advanced Level

FOOD STUDIES

9336/01

Paper 1

October/November 2012

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 **3** printed pages and **1** blank page.



Section A

Answer **two** questions.

- 1 (a) (i) Define the term *balanced diet*. [1]
(ii) Discuss situations that could prevent an individual from having a balanced diet. [8]
- (b) (i) Give reasons for limiting the intake of salt and sugar in the diet. [6]
(ii) Suggest ways to follow the advice. [4]
- (c) Explain the importance of Non-Starch Polysaccharide (NSP) in a healthy diet. [6]
- 2 (a) Carbohydrates can be classified as monosaccharides, disaccharides and polysaccharides.
For each group:
(i) describe the structure;
(ii) identify the properties;
(iii) give examples. [10]
- (b) Discuss problems that could occur if there is an excess of carbohydrate in the diet. [5]
- (c) Describe the digestion and absorption of carbohydrates. [7]
- (d) Explain the term *Basal Metabolic Rate (BMR)*. [3]
- 3 (a) Explain the term *Recommended Daily Intake (RDI)*. [3]
- (b) Identify and explain the different nutritional needs of a teenage girl and a moderately active elderly woman. [12]
- (c) Many elderly people suffer from malnutrition.
(i) Discuss this statement with reference to your country. [5]
(ii) Suggest ways in which the nutrition of elderly people in your country could be improved. [5]
- 4 (a) (i) Discuss the importance of the following nutrients in relation to the production and utilisation of energy in the body:
(a) iron;
(b) vitamin C;
(c) B vitamins;
(d) iodine. [8]
- (ii) Describe the effect of a deficiency of these nutrients in the diet. [4]
- (b) State the importance of achieving energy balance. [4]
- (c) (i) Discuss the possible causes of Protein-Energy Malnutrition (PEM). [3]
(ii) Describe the short-term and long-term effects of PEM. [3]
(iii) Suggest how this type of malnutrition might be overcome. [3]

Section B

Answer **two** questions.

- 5 Discuss the influence of the following factors on food choice:
- (a) economic circumstances;
 - (b) availability of food;
 - (c) nutritional knowledge;
 - (d) marketing methods;
 - (e) cultural and social habits;
 - (f) environment. [25]
- 6 (a) Describe different types of wheat flour and discuss their uses. [12]
- (b) Give advice on the choice of flour for achieving a successful rich cake. [3]
- (c) Describe and explain:
- (i) the reaction of the chemical raising agents during baking; [5]
 - (ii) other changes which take place when a rich cake is baked. [5]
- 7 (a) Define the term *enzymes*. [3]
- (b) Discuss the part played by enzymes in:
- (i) the digestion of protein; [5]
 - (ii) food spoilage; [5]
 - (iii) the destruction of vitamin C in green vegetables; [4]
 - (iv) tenderising meat; [4]
 - (v) making bread with yeast. [4]
- 8 (a) Colour is an important feature of food presentation.
- (i) Describe, with examples, how colour can be added to food during cooking and presentation. [10]
 - (ii) Evaluate methods of adding colour to food during manufacture. [5]
- (b) Explain:
- (i) the change from red to brown in fresh meat; [3]
 - (ii) non-enzymic browning; [3]
 - (iii) the causes and prevention of enzymic browning in fruits and vegetables. [4]

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