

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**  
**Joint Examination for the Higher School Certificate**  
**and General Certificate of Education Advanced Level**

**FOOD STUDIES**

PAPER 1 Theory

**9336/1**

**OCTOBER/NOVEMBER SESSION 2002**

3 hours

Additional materials:  
Answer paper

**TIME** 3 hours

**INSTRUCTIONS TO CANDIDATES**

Write your name, Centre number and candidate number in the spaces provided on the answer paper/ answer booklet.

Answer **four** questions.

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

Write your answers on the separate answer paper provided.

If you use more than one sheet of paper, fasten the sheets together.

**INFORMATION FOR CANDIDATES**

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

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

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**This question paper consists of 3 printed pages and 1 blank page.**



**Section A**

Answer **two** questions from this section.

- 1** An adequate supply of iron and calcium is necessary in a balanced diet.
- (a)** For each of these minerals:
- (i)** describe its absorption and use in the body;
  - (ii)** discuss the effects of a deficiency;
  - (iii)** identify groups of the population who might suffer from a deficiency. [22]
- (b)** Suggest how adequate amounts of iron and calcium could be obtained from foods available locally. [3]
- 2** **(a)** Discuss dietary advice recommending the reduction of fat, sugar and salt and the increased intake of fresh fruit and vegetables. [20]
- (b)** Explain why people who consume convenience foods regularly could have difficulty following this advice. [5]
- 3** **(a)** What do you understand by Recommended Daily Intakes (RDIs)? [3]
- (b)** Explain the different nutritional needs of a teenage girl and a moderately active elderly woman. [12]
- (c)** Discuss factors which influence an individual's choice of food. [10]
- 4** **(a)** Explain the structure and characteristics of different groups of carbohydrates and give examples of where each can be found. [14]
- (b)** Describe the digestion of carbohydrates. [5]
- (c)** Explain and identify factors which affect BMR. [6]

**Section B**

Answer **two** questions from this section.

- 5 (a) Explain the importance of each of the following for achieving successful flaky pastry:
- (i) ingredients;
  - (ii) method;
  - (iii) baking.
- [20]
- (b) Discuss the use of frozen, ready-made puff pastry. [5]
- 6 (a) Discuss the relationship between temperature control and food preservation. [13]
- (b) Explain and give examples of the following methods of preservation:
- (i) Accelerated Freeze Dried (AFD);
  - (ii) pickling;
  - (iii) irradiation.
- [12]
- 7 (a) Define the term *enzymes*. [3]
- (b) Discuss the part played by enzymes in:
- (i) tenderising meat;
  - (ii) making bread with yeast;
  - (iii) food spoilage;
  - (iv) the destruction of vitamin C in green vegetables;
  - (v) the digestion of protein.
- [22]
- 8 Eggs are an excellent source of High Biological Value (HBV) protein.
- (a) Discuss the different uses of eggs in food preparation, giving scientific explanations for the processes involved in each of the uses mentioned. [15]
- (b) State and explain the effect of temperature and cooking time on eggs. [5]
- (c) Explain the changes which take place in eggs during storage. [5]

