

**FOOD STUDIES**

**9336/01**

Paper 1

**October/November 2014**

**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.

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)** Discuss the functions, sources and symptoms of deficiency of the following vitamins:
- (i)** thiamine – vitamin B1; [7]
  - (ii)** niacin (nicotinic acid) – vitamin B3; [4]
  - (iii)** folate; [6]
  - (iv)** cobalamin – vitamin B12. [4]
- (b)** Explain the effect of storage and cooking on the B vitamins. [4]
- 2 (a)** Discuss the factors which affect a person's energy needs. [7]
- (b)** List **three** macro-nutrients which provide the body with energy and state how much energy is available from 1 g of each nutrient. [3]
- (c)** Describe how energy is released from each nutrient. [12]
- (d)** Explain the term 'energy balance' and describe the effects on the body when there is an imbalance. [3]
- 3 (a)** Discuss the functions of water in the body. [10]
- (b)** Explain the importance of Non-Starch Polysaccharide (NSP/dietary fibre). Include information on the functions, good sources and symptoms of a deficiency of NSP. [12]
- (c)** Describe the problems which may occur with a diet which is very high in NSP. [3]
- 4 (a)** Discuss the nutritional value of eggs. [10]
- (b)** Describe the effect of heat on eggs. [5]
- (c)** Explain the uses of eggs in cookery. [6]
- (d)** Give an account of the digestion of protein in the body. [4]

**Section B**

Answer **two** questions.

- 5 (a) Explain the reasons for following a vegetarian diet. [7]
- (b) Discuss the nutritional problems, other than those connected with protein, which may occur in the diet of a vegan and suggest ways of overcoming these problems. [12]
- (c) Describe how HBV protein can be obtained in vegetarian diets. [6]
- 6 (a) Discuss the reasons for preserving food. [4]
- (b) Explain, with examples, the principles and methods of preservation. [10]
- (c) Describe how food should be stored to slow down food spoilage. [6]
- (d) Explain the term *cross contamination* and suggest how it can be avoided. [2]
- (e) Name **three** food poisoning bacteria and give a different example for each of a high risk food in which the bacteria may be found. [3]
- 7 (a) Outline the role of additives in processed food. [10]
- (b) Discuss the importance of food labelling. [8]
- (c) Identify the problems of supplying foodstuffs in your local environment. [7]
- 8 (a) Explain the reasons for cooking food. [8]
- (b) Describe, in detail, the methods of heat transference. Give an example of a cooking method for each. [14]
- (c) List ways in which energy can be conserved when using only the hob (top of the stove). [3]

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