

Cambridge International Examinations

Cambridge International General Certificate of Secondary Education

| CANDIDATE NAME | | | | | |
|-------------------|--|--|---------------------|--|--|
| CENTRE NUMBER | | | CANDIDATE NUMBER | | |



FOOD AND NUTRITION

0648/01

Paper 1 Theory May/June 2015

2 hours

Candidates answer on the Question Paper.

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

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.

Section A

Answer all questions.

You are advised to spend no longer than 45 minutes on Section A.

Section B

Answer all questions.

Section C

Answer either Question 7(a) or 7(b).

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 all questions.

| 1 | Puls | ses a | are a good source of low biological value (LBV) protein. | |
|---|------|-------|--|----|
| | (a) | Exp | plain the term low biological value protein. | |
| | | | | |
| | (b) | Nar | me four foods that are pulses. | IJ |
| | | 1 | | |
| | | 2 | | |
| | | 3 | | |
| | | 4 | [| 2] |
| | (c) | Pul | ses are also a good source of non-starch polysaccharide (NSP). | |
| | | (i) | Explain why NSP is important in the diet. | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | [| 3] |
| | | (ii) | Explain the effects of too much NSP in the diet. | |
| | | | | |
| | | | | |
| | | | | |
| | | | [| 2] |
| | | | [Total: | 8] |

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2

| ivie | at is | a source of high biological value (HBV) protein. |
|------|-------|---|
| (a) | Nar | me four other good food sources of HBV protein. |
| | 1 | |
| | 2 | |
| | 3 | |
| | 4 | [2] |
| (b) | Exp | plain the term complementary proteins. Give an example. |
| | | |
| | | |
| | | |
| | | [3] |
| (c) | (i) | Meat is also a good source of the mineral iron. |
| | | Name three other minerals needed by the body and give one different function of each. |
| | | source 1 |
| | | function |
| | | source 2 |
| | | function |
| | | source 3 |
| | | function[3] |
| | (ii) | Name the disease caused by a lack of iron in the diet. Give two symptoms of this disease |
| | | disease |
| | | symptoms |
| | | |
| | | [3] |
| (d) | Nar | ne the vitamin required for the absorption of iron. |
| | | [1] |

| (e) | Meat is usually cooked before being eaten. Give four reasons for cooking meat. |
|-----|--|
| | 1 |
| | 2 |
| | 3 |
| | 4[4] |
| (f) | Name the method of heat transfer in frying meat in a pan. Describe how the heat is transferred |
| | method |
| | description |
| | |
| | [3] |
| (g) | Suggest four ways of tenderising tough cuts of meat. |
| | |
| | |
| | |
| | |
| | |
| | [4] |
| | • |

[Total: 23]

3

| But | ter and margarine are fats th | nat can be used to make pastry | <i>/</i> . | |
|-----|------------------------------------|--------------------------------|---------------|-------------|
| (a) | Name the three chemical e | elements which make up fats. | | |
| | 1 | | | |
| | 2 | | | |
| | 3 | | | [1] |
| (b) | Give three functions of fat | in the body. | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | [3] |
| (c) | Complete the following tabl | e to show how much fat is need | | |
| Γ | · · | | | |
| - | type of pastry | amount of plain flour | amount of fat | |
| | flaky pastry | 200 g | | |
| | shortcrust pastry | 200 g | | |
| | | | | [2] |
| | | | | <u>.</u> —. |
| (d) | Describe what causes fats | to spoil. | | <u>(</u> -, |
| (d) | Describe what causes fats | to spoil. | | |
| (d) | Describe what causes fats | | | |
| (d) | | | | |
| (d) | | | | |
| (d) | | | | |
| | | | | [2] |
| | | stored in the home. | | [2] |

Section B

Answer all questions.

| 4 | (a) | Complete the | following table to | show the causes | and types of | browning in certain foods. |
|---|-----|--------------|--------------------|-----------------|--------------|----------------------------|
|---|-----|--------------|--------------------|-----------------|--------------|----------------------------|

| food | type of browning | cause of browning |
|---------------|------------------|--------------------|
| biscuit | | dry heat on starch |
| roast chicken | maillard | |
| apple pieces | | |
| fried onions | | |

| [O] |
|-----|
|-----|

(b) Complete the following table to show suitable methods of making different types of baked products.

| type of baked product | method of making |
|-----------------------|------------------|
| scone | |
| gingerbread | |
| Victoria sponge | |
| Swiss roll | |

| I | 4 | 4 | ı |
|---|---|---|---|
| | | | |

| (c) | Suggest suitable raising agents for use in the Victoria sponge and the gingerbread mixture | re. |
|-----|--|-----|
| | Victoria sponge | |
| | gingerbread | [2] |
| (d) | Suggest how to store a Victoria sponge. | |
| | | |
| | | [1] |
| (e) | Describe what would happen to a Victoria sponge if it were not stored correctly. | |
| | | |
| | | |
| | | |
| | | [2] |

[Total: 15]

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| 5 | (a) | Describe the effect of heat on cheese. |
|---|-----|--|
| | | |
| | | |
| | | |
| | (b) | Discuss the advantages of including yoghurt in the diet. |
| | | |
| | | |
| | | |
| | (0) | Describe and explain and method of preserving fish |
| | (6) | Describe and explain one method of preserving fish. |
| | | |
| | | |
| | | [3] |
| | (d) | State the information that must be included on a food label. |
| | | |
| | | |
| | | [3] |
| | (e) | Explain what is meant by the term <i>convenience foods</i> . |
| | | |
| | | |

| 6 | (a) | It is recommended that people should eat less fat. | | | | |
|---|-----|--|--|-----|--|--|
| | | (i) | Explain the risks of a diet high in saturated fat. | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | [3] | | |
| | | (ii) | Explain how the diet could be changed to reduce the risks linked to fat. | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | (b) | Egg | gs are a versatile food. | ၂၁ | | |
| | (6) | (i) | State the nutritive value of the yolk. | | | |
| | | (-) | | | | |
| | | | | | | |
| | | (ii) | Give four different uses of eggs in cooking with examples. | | | |
| | | | | | | |
| | | | | | | |
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| | | | | | | |
| | | | | | | |
| | | | | [4] | | |
| | | (iii) | Describe the effect of heat on eggs. | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | [0] | | |

| Describe and explain one method of testing the freshness of an egg. | | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| [2] | | | | | | | | |
| | | | | | | | | |
| [Total: 16] | | | | | | | | |

Section C

Answer either Question 7(a) or 7(b).

| 7 | (a) | Discuss the importance of hygiene in the storing, preparation and cooking of foods. Explain the term <i>contamination</i> and suggest ways to avoid food contamination. | |
|----|-----|---|----|
| OR | | | |
| | (b) | Discuss the factors affecting the choice of foods for convalescents and athletes. [15] | 5] |
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[Total: 15]

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