



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

CANDIDATE
NAME

CENTRE
NUMBER

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CANDIDATE
NUMBER

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FOOD AND NUTRITION

0648/12

Paper 1 Theory

October/November 2013

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 ink.

You may use a soft pencil for any diagrams or graphs.

Do not use staples, paper clips, highlighters, 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 10(a) **or** 10(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.

This document consists of **15** printed pages and **1** blank page.



Section A

Answer **all** questions.

For
Examiner's
Use

1 Define the following terms:

(a) *balanced diet*;

.....
..... [1]

(b) *malnutrition*.

.....
..... [1]

2 Sugars and starches are examples of carbohydrates.

(a) Sugars are found in the form of monosaccharides or disaccharides.

(i) Name **one** example of a monosaccharide.

..... [1]

(ii) Name **one** example of a disaccharide.

..... [1]

(b) Starch is an example of a polysaccharide and is found in many foods.

Describe the digestion of starch in:

(i) the duodenum;

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..... [3]

(ii) the ileum.

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..... [3]

(c) Explain how the end products of the digestion of starch are used to release energy.

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..... [3]

3 Fat is a concentrated source of energy.

(a) State **four** other functions of fat.

- 1
- 2
- 3
- 4 [4]

(b) Discuss reasons for the advice to reduce the amount of fat in the diet.

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- [4]

(c) Suggest **two** ways to reduce the amount of fat in the diet.

- 1
- 2 [2]

4 (a) Discuss the importance of Non Starch Polysaccharides (NSP)/dietary fibre in the body.

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..... [3]

(b) Name **two** good sources of NSP.

1
2 [2]

5 (a) List **three** functions of salt (sodium chloride/NaCl) in the body.

1
2
3 [3]

(b) Name **one** food which contains a high amount of salt.

..... [1]

(c) Current nutritional advice is to limit salt intake to 6g per day.
Explain the problems which could occur if the diet contains a high level of salt.

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..... [2]

6 Discuss points to consider when planning and serving meals for the elderly.

*For
Examiner's
Use*

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[6]

[Section A Total: 40]

Section B

Answer **all** questions.

For
Examiner's
Use

7 Write an informative paragraph on each of the following:

(a) saving time when preparing and cooking food;

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..... [5]

(b) saving money when choosing food;

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..... [5]

(c) the changes which take place when a loaf of bread is baked.

*For
Examiner's
Use*

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[5]

8 (a) Name and explain **three** types of vegetarian diet.

type 1

explanation

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type 2

explanation

.....

type 3

explanation

..... [3]

(b) Discuss reasons for following a vegetarian diet.

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..... [4]

(c) Explain ways of ensuring that a vegetarian diet has sufficient High Biological Value (HBV) protein.

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..... [4]

(d) Discuss problems, other than insufficient HBV protein, which may occur for those following a vegetarian diet.

*For
Examiner's
Use*

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..... [4]

9 (a) List **two** causes of food spoilage.

- 1
- 2 [2]

(b) State **two** conditions which favour food spoilage.

- 1
- 2 [2]

(c) Explain the principles of the following methods of preserving food:

(i) freezing;

-
-
-
-

(ii) drying.

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-
-
- [4]

(d) Food contamination must be prevented when preparing and cooking food.
Discuss this statement under the following headings:

(i) personal hygiene;

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- [3]

(ii) kitchen hygiene.

*For
Examiner's
Use*

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..... [4]

[Section B Total: 45]

Section C

Answer **either** 10(a) **or** 10(b).

*For
Examiner's
Use*

Either

10 (a) Discuss the importance of vegetables in the diet and suggest ways in which they could be used in the preparation of family meals. [15]

Or

10 (b) Discuss the information which could be found on a food label and state why the information is important. [15]

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[Section C Total: 15]

[Total for Paper: 100]

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