



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE
NAME

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CENTRE
NUMBER

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FOOD AND NUTRITION

0648/12

Paper 1 Theory

October/November 2018

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 12(a) **or** 12(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 **12** printed pages.

Section A

Answer **all** questions.

1 Name **two** groups of people who have a greater need for protein in their diet.

1

2

[2]

[Total: 2]

2 State **three** characteristics of an unsaturated fat.

1

2

3

[3]

[Total: 3]

3 Give **two** functions of carbohydrates in the body.

1

2

[2]

[Total: 2]

4 Basal metabolic rate (BMR) is the rate at which the body uses energy when at rest.

Identify and explain **four** factors which affect BMR.

- 1
-
- 2
-
- 3
-
- 4
-

[4]

[Total: 4]

5 Calcium helps with the formation of bones and teeth.

(a) Name **three** different good sources of calcium.

- 1
- 2
- 3

[3]

(b) Name **two** other nutrients which work with calcium in the formation of bones and teeth.

- 1
- 2

[2]

(c) Name a deficiency disease associated with a lack of calcium.

..... [1]

[Total: 6]

6 (a) Name **three** different foods from animals which provide a good supply of B group vitamins.

1

2

3

[3]

(b) State **two** functions of B group vitamins.

1

2

[2]

(c) Give **two** health problems caused by a deficiency of nicotinic acid.

1

2

[2]

[Total: 7]

7 (a) State the role of enzymes in the digestive system.

..... [1]

(b) (i) Name the enzymes found in gastric juice.

1

2

[2]

(ii) Name the nutrient which the enzymes found in gastric juice act upon.

..... [1]

[Total: 4]

8 The most common result of overnutrition is obesity.

(a) Name **four** health issues which can result from obesity.

- 1
- 2
- 3
- 4

[4]

(b) Eating food that is high in fat contributes to obesity.

Suggest **eight** ways to adapt meals to reduce the amount of fat that they contain.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

[8]

[Total: 12]

Section B

Answer **all** questions.

9 (a) Give **four** reasons why some meat can be tough.

- 1
- 2
- 3
- 4 [4]

(b) Tough meat can be tenderised before cooking. Give **four** methods of tenderising tough meat.

- 1
- 2
- 3
- 4 [4]

(c) Suggest **two** methods of cooking tough meat.

- 1
- 2 [2]

(d) State **four** changes that happen to beef during cooking.

- 1
- 2
- 3
- 4 [4]

(e) Meat is a highly perishable food product. Give **three** guidelines that should be followed when storing fresh meat.

- 1
- 2
- 3 [3]

(f) State **five** reasons why some people choose **not** to eat meat.

- 1
- 2
- 3
- 4
- 5

[5]

[Total: 22]

10 The following ingredients can be used to make a batch of small cakes:

- 100 g self-raising flour
- 100 g margarine
- 100 g caster sugar
- 2 eggs

(a) Describe how to make the cake mixture using the creaming method.

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..... [5]

(b) Margarine and eggs add flavour to small cakes.

Complete the table to give **two** other functions of margarine, and **two** other **different** functions of eggs.

ingredient	function
margarine	1 adds flavour
	2
	3
egg	1 adds flavour
	2
	3

[4]

(c) Name **two** different ways of decorating the finished small cakes.

1

2

[2]

(d) During baking caramelisation and dextrinisation occur.

(i) Name the ingredient in the cakes which causes caramelisation.

..... [1]

(ii) State the effect of dextrinisation.

..... [1]

(e) Give **three** reasons why paper cases are useful when making small cakes.

1

2

3

[3]

[Total: 16]

11 Give **seven** well-explained points to consider when choosing kitchen flooring.

1

.....

2

.....

3

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4

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5

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6

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7

.....

[7]

[Total: 7]

Section C

Answer **either** Question 12(a) **or** 12(b).

12 (a) Nutritional needs are one factor to consider when planning meals.

Identify and discuss **other** factors to consider when planning meals for a pre-school child. [15]

OR

(b) There are many ways to slow down the process of food spoilage and improve the keeping qualities of food.

Discuss different processes where the use of a high temperature is the main factor preventing food spoilage. [15]

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A series of horizontal dotted lines spanning the width of the page, intended for writing answers.

