



Cambridge IGCSE™

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FOOD & NUTRITION

0648/11

Paper 1 Theory

October/November 2023

2 hours

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS

- Section A: answer **all** questions.
- Section B: answer **all** questions.
- Section C: answer **one** question.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.

INFORMATION

- The total mark for this paper is 100.
- The number of marks for each question or part question is shown in brackets [].

This document has **12** pages. Any blank pages are indicated.

Section A

Answer **all** questions.

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

1 (a) Define the term *metabolism*.

..... [1]

(b) Name the mineral that helps control the rate of metabolism.

..... [1]

[Total: 2]

2 Water is an important part of a healthy diet.

(a) State approximately how much water an adult is advised to drink each day.

..... [1]

(b) State **two** different ways water is lost from the body.

1

2

[2]

(c) Name **four** different foods with a high water content.

1

2

3

4

[4]

[Total: 7]

3 One way to reduce salt intake is to replace salt with spices to flavour savoury food.

Name **three** different spices that could be used to flavour a curry sauce.

1

2

3

[3]

4 Potatoes are a source of starch.

(a) Name **four** other different food sources that provide starch in meals.

- 1
 - 2
 - 3
 - 4
- [4]

(b) Describe **four** effects of moist heat on the starch in potatoes.

- 1
 - 2
 - 3
 - 4
- [4]

[Total: 8]

5 Excess calorie intake causes obesity.

(a) Name **five** health issues that could be caused by obesity.

- 1
 - 2
 - 3
 - 4
 - 5
- [5]

(b) A diet that is high in saturated fat has been linked to obesity.

Name **three** different dairy foods that contain a high proportion of saturated fat.

- 1
 - 2
 - 3
- [3]

(c) Name **two** different plant-based products that contain a high proportion of saturated fat.

1

2

[2]

[Total: 10]

6 (a) Name the basic building blocks of proteins.

..... [1]

(b) Name **four** different foods that are good sources of high biological value (HBV) protein.

1

2

3

4

[4]

(c) Name the enzyme in the stomach that helps digest proteins.

..... [1]

(d) Explain why some proteins have a higher biological value than others.

.....

.....

.....

.....

.....

.....

.....

..... [4]

[Total: 10]

Section B

Answer **all** questions.

7 The following ingredients can be used to make rough puff pastry.

- strong plain flour
- butter
- salt
- lemon juice
- cold water

(a) State the proportion of fat to flour for making rough puff pastry.

..... [1]

(b) State **two** reasons for each of the following instructions when making rough puff pastry.

(i) Sieve flour and salt.

1

2 [2]

(ii) Seal edges well after rolling and folding.

1

2 [2]

(iii) Relax pastry in the fridge after rolling and folding.

1

2 [2]

(iv) Keep pastry covered in the fridge.

1

2 [2]

(c) Describe what happens to the rough puff pastry when cooked in a hot oven.

.....
.....
.....
.....
.....
.....
.....
.....
..... [6]

(d) Explain why a person with coeliac disease should **not** eat rough puff pastry.

.....
.....
.....
..... [3]

(e) The pastry can be used to make a beef steak pie.

(i) State how the ingredients for the beef steak pie could be made suitable for a Muslim.

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

(ii) State **three** different ways the recipe for the beef steak pie could be adapted to increase non-starch polysaccharide (NSP) / dietary fibre.

1
2
3 [3]

[Total: 22]

8 Grilling is a popular method of cooking meat.

(a) Describe the principles of heat transference by radiation when grilling meat.

.....
.....
.....
.....
.....
.....
.....
..... [6]

(b) State **three** guidelines to follow when storing fresh meat in the refrigerator.

1
2
3 [3]

(c) Offal is a term used to describe edible internal organs of animals.

Name **one** example of offal that is suitable for grilling.

..... [1]

(d) Name **one** cut of beef suitable for grilling.

..... [1]

(e) Name **one** cut of lamb suitable for grilling.

..... [1]

(f) Name **two** vegetables suitable for grilling.

1
2 [2]

[Total: 14]

9 State **four** reasons why a manufacturer may use antioxidants when manufacturing a food product.

- 1
- 2
- 3
- 4 [4]

10 A pressure cooker is one piece of kitchen equipment that can save fuel energy.

(a) Name **two** other pieces of kitchen equipment that can save fuel energy.

- 1
- 2 [2]

(b) Give advice on each of the following factors when buying a new stovetop pressure cooker.

(i) weight
..... [1]

(ii) size
..... [1]

(iii) manufacturer
..... [1]

[Total: 5]

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