

Cambridge IGCSE™

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FOOD & NUTRITION

0648/13

Paper 1 Theory

May/June 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.

Section A

Answer **all** questions.

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

- 1 Define the term *malnutrition*.

..... [1]

- 2 All B-group vitamins are water-soluble.

Name **two** B-group vitamins.

1

2 [2]

- 3 Complete the following sentences:

(a) The body needs iron to produce in red blood cells. [1]

(b) The red blood cells help carry around the body to muscles. [1]

(c) A deficiency of iron can lead to the medical condition [1]

[Total: 3]

- 4 Give **one** example of a process carried out by the body that uses electrical energy.

..... [1]

- 5 State the role of the mouth in digestion.

..... [1]

6 (a) State **three** functions of potassium in the body.

1

2

3 [3]

(b) List **three** different good sources of potassium.

1

2

3 [3]

[Total: 6]

7 (a) Name the vitamin that helps prevent night blindness.

..... [1]

(b) Name **three** different plant sources of the vitamin named in (a).

1

2

3 [3]

[Total: 4]

8 (a) State **four** reasons why proteins are essential to life.

- 1
- 2
- 3
- 4 [4]

(b) Name the enzyme in gastric juice that starts the digestion of proteins in meat.

..... [1]

(c) Describe **three** effects of dry heat on the proteins in meat.

- 1
- 2
- 3 [3]

[Total: 8]

9 (a) Name the type of fat that contains **only** one double bond.

..... [1]

(b) Name **one** food that is a good source of the type of fat in (a).

..... [1]

[Total: 2]

- 10** Eating too much sugar increases the risk of tooth decay, obesity and type 2 diabetes.

Identify **three** different health problems that could be caused by each of obesity and type 2 diabetes.

(a) obesity

- 1
- 2
- 3 [3]

(b) type 2 diabetes

- 1
- 2
- 3 [3]

[Total: 6]

- 11** It is important to plan nutritionally well-balanced meals.

Explain **six** points, other than nutrition, to consider when planning and preparing a packed lunch.

- 1
.....
- 2
.....
- 3
.....
- 4
.....
- 5
.....
- 6
..... [6]

Section B

Answer **all** questions.

12 A recipe for a batter includes the following ingredients.

egg
milk
plain flour
salt

(a) Name **two** ingredients in the recipe that contain high biological value (HBV) protein.

- 1
- 2 [2]

(b) State the main raising agent in a batter.

..... [1]

(c) Batter can be used to coat fish before deep-fat frying.

Name **three** different ingredients that could be used with egg to make a coating to be used when frying food.

- 1
- 2
- 3 [3]

(d) State **five** functions of the batter when frying fish.

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

- (e) Attractive presentation of food helps to stimulate appetite.

Name **three** different garnishes suitable for serving with fried fish in batter.

- 1
- 2
- 3 [3]

- (f) Many people use an electric deep-fat fryer.

State, with reasons, **four** safety points to consider when buying an electric deep-fat fryer.

- 1
.....
- 2
.....
- 3
.....
- 4
..... [8]

[Total: 22]

13 Drying is one method of treating cow's milk to prevent souring.

(a) Name **two** other methods of treating cow's milk to prevent souring.

- 1
- 2 [2]

(b) State **four** guidelines for the storage of fresh cow's milk in the home.

- 1
- 2
- 3
- 4 [4]

(c) Some people have an intolerance to the lactose in cow's milk.

Suggest **three** alternative milk products suitable for someone who is lactose intolerant.

- 1
- 2
- 3 [3]

[Total: 9]

14 Manufacturers often use preservatives in their products.

(a) Explain **four** ways the consumer benefits from the addition of preservatives.

- 1
- 2
- 3
- 4 [4]

(b) Name **two** ingredients that may be used to preserve food in the home.

- 1
- 2 [2]

[Total: 6]

15 Budget and type of material are two factors to consider when choosing kitchen work surfaces.

(a) State **five** other factors to consider when choosing kitchen work surfaces.

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

(b) Name **three** types of materials that could be used for kitchen work surfaces.

- 1
- 2
- 3 [3]

[Total: 8]

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