Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME

CENTRE NUMBER | | | | | |

CANDIDATE NUMBER | | | | |

8123062476

FOOD & NUTRITION **0648/13**

Paper 1 Theory **October/November 2021**

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.

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[Turn over

Section A

Answer **all** questions.

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

1 Malnutrition occurs when there is an insufficient or excessive intake of nutrients.

(a) Name **one** disease that may occur when there is an insufficient intake of:

(i) protein ..... [1]

(ii) vitamin B_3 ..... [1]

(iii) vitamin A. ..... [1]

(b) Name **one** effect on health that may occur when there is an excessive intake of:

(i) sodium chloride ..... [1]

(ii) saturated fat. ..... [1]

[Total: 5]

2 **(a)** One function of carbohydrate is to act as a protein sparer.

State **one** other function of carbohydrate in the body.

..... [1]

(b) Name **two** monosaccharides.

1 .....

2 .....
[2]

(c) Eating too much sugar increases the risk of tooth decay.

Suggest **six** ways to reduce the intake of sugar to help prevent tooth decay.

1 .....

2 .....

3 .....

4 .....

5 .....

6 .....
[6]

[Total: 9]

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3 Digestion begins in the mouth.

(a) Name the digestive juice produced in the mouth.

..... [1]

(b) Name the enzyme present in this digestive juice.

..... [1]

(c) Name the substance that the enzyme in **(b)** acts upon.

..... [1]

(d) Name the substance produced as a result of the action of the enzyme in **(b)**.

..... [1]

[Total: 4]

4 Saturated fats have single carbon–carbon bonds. Monounsaturated fats also have one double carbon–carbon bond.

(a) Describe **three** other differences between saturated fat and monounsaturated fat.

.....

.....

.....

.....

.....

..... [3]

(b) Name **three** different foods that are examples of saturated fat.

1 .....

2 .....

3 .....

[3]

(c) Name **three** different foods that are examples of monounsaturated fat.

1 .....

2 .....

3 .....

[3]

[Total: 9]

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5 **(a)** Explain why a person with anaemia would need a good supply of vitamin C in their diet.

.....

.....

.....

..... [2]

(b) Explain how to store green vegetables in order to retain their vitamin C content.

.....

.....

.....

.....

.....

.....

.....

..... [4]

(c) The deficiency disease caused by a lack of vitamin C is scurvy.

State **four** effects of scurvy on the body.

1 .....

2 .....

3 .....

4 .....

[4]

[Total: 10]

6 Coeliac disease damages the lining of the small intestine.

Name **three** different flours that could be used in recipes for a person with coeliac disease.

1 .....

2 .....

3 .....

[3]

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Section B

Answer **all** questions.

7 The following ingredients can be used to make bread rolls.

200 g strong white flour
7 g dried yeast
1 tsp salt
1 tsp sugar
125 ml warm water

(a) Explain how yeast works as a raising agent when making bread rolls.

.....

.....

.....

.....

.....

.....

.....

..... [4]

(b) Name **two** other raising agents that could be used for making bread products.

1 .....

2 .....
[2]

(c) Describe **three** ways that using strong wholemeal flour would affect the baked bread rolls.

1 .....

2 .....

3 .....
[3]

(d) Give **two** reasons for kneading when making bread rolls.

1 .....

2 .....
[2]

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[Turn over

(e) Name **two** chemical reactions that cause bread to change colour during baking.

1 .....

2 .....
[2]

(f) Suggest **six** reasons why a packet bread mix can be useful.

1 .....

2 .....

3 .....

4 .....

5 .....

6 .....
[6]

[Total: 19]

8 Food irradiation is a safe method of preservation that exposes food to ionising radiation.

Give **four** benefits of irradiating food.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....
[4]

9 Ventilation makes working in the kitchen more pleasant by removing excess heat and steam.

Identify and describe **four** different ways to ventilate a kitchen.

1 .....

.....

2 .....

.....

3 .....

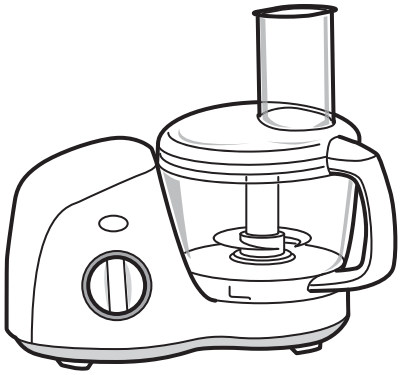
.....

4 .....

.....

[8]

10 A food processor is a versatile piece of kitchen equipment which can save time and effort in the preparation of dishes.



(a) State and explain **five** factors to consider when buying a new food processor.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

.....

[10]

(b) Although a food processor is a useful piece of equipment it can have disadvantages.

State **four** disadvantages of using a food processor.

1 .....

2 .....

3 .....

4 .....

[4]

[Total: 14]

Section C

Answer **either** Question 11 **or** 12.

11 Slips, trips and falls are common causes of accidents in the kitchen.
Explain ways to reduce the risk of a slip, trip or fall in the kitchen.

[15]

OR

12 During pregnancy it is important to ensure the mother has good dietary health.

- Explain the importance of increasing the intake of iron, folate and calcium during pregnancy.
- Suggest, with reasons, types of food that should be avoided during pregnancy.

[15]

[Total: 15]

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