Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER				

7167100024

FOOD & NUTRITION **0648/12**

Paper 1 Theory **October/November 2020**

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. 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 **(a)** Name the type of molecules which combine to form protein.

..... [1]

(b) State how many of this type of molecule are essential for children.

..... [1]

(c) Name **three** different foods which are good sources of plant protein.

1 .....

2 .....

3 .....

[3]

(d) Protein can provide energy which is used to maintain body temperature.
State **three** other different reasons the body needs energy.

1 .....

2 .....

3 .....

[3]

(e) State **one** effect on the body when energy intake is continually greater than energy output.

..... [1]

(f) Describe what happens to protein when it is heated.

.....

.....

.....

.....

.....

..... [3]

[Total: 12]

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2 Name **one** different nutrient which would be needed to help prevent each of the following health conditions:

(a) night blindness ..... [1]

(b) osteoporosis ..... [1]

(c) spina bifida ..... [1]

(d) beri-beri ..... [1]

(e) goitre ..... [1]

(f) pellagra. ..... [1]

[Total: 6]

3 **(a)** Name the organ in the body which produces bile.

..... [1]

(b) Name **two** enzymes found in the stomach.

1 .....

2 .....
[2]

(c) State **two** places in the digestive system where starch is digested.

1 .....

2 .....
[2]

(d) Name **one** enzyme involved in the digestion of starch.

..... [1]

[Total: 6]

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4 **(a)** State why it is important to have a daily supply of vitamin C (ascorbic acid).

..... [1]

(b) One of the functions of vitamin C is to prevent scurvy.
Identify **five** other reasons why vitamin C is important in the diet.

1 .....

2 .....

3 .....

4 .....

5 .....
[5]

(c) Vegetables are a source of vitamin C.
List **four** vegetables which are good sources of vitamin C.

1 .....

2 .....

3 .....

4 .....
[4]

[Total: 10]

5 A recipe for sweet kebabs uses peach, apple, strawberry, and kiwi.

(a) Suggest **two** other fruits which would be suitable for making the kebabs.

1 .....

2 .....
[2]

(b) The apples in the kebabs have turned brown.

(i) Name this type of browning.

..... [1]

(ii) State **one** reason why this may have happened.

..... [1]

(iii) Suggest **two** ways to prevent this type of browning happening.

1 .....

2 .....
[2]

[Total: 6]

Section B

Answer **all** questions.

6 The following ingredients can be used to make a cheese sauce:

25 g butter
25 g plain white flour
250 ml whole milk
75 g grated Cheddar cheese

(a) The cheese sauce contains ingredients which are high in energy.

(i) State **one** unit of measurement for energy.

..... [1]

(ii) Name **one** group of people who need food which is high in energy.

..... [1]

(b) The cheese sauce is high in cholesterol.
Identify **four** ways to reduce the amount of cholesterol in the cheese sauce.

1 .....

2 .....

3 .....

4 .....
[4]

(c) Flour is used to thicken the sauce.
Name this thickening process.

..... [1]

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(d) Give **four** guidelines, with reasons, for how to store flour in the home.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

[4]

(e) Give step-by-step instructions for making the cheese sauce by the roux method.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [7]

(f) Name **three** dishes which include a cheese sauce.

1 .....

2 .....

3.....

[3]

[Total: 21]

7 **(a)** Name **two** moist methods of cooking.

1 .....

2 .....
[2]

(b) Name **two** dry methods of cooking.

1 .....

2 .....
[2]

(c) Conduction and radiation are two methods of heat transference used in cooking.
Explain the difference between conduction and radiation.

.....

.....

.....

.....

.....

..... [3]

(d) Name **one** material used in the kitchen which is a poor conductor of heat.

..... [1]

(e) Name **two** methods of cooking which use convection.

1 .....

2 .....
[2]

(f) State **three** advantages and **three** disadvantages of grilling as a method of cooking.

advantage 1 .....

advantage 2 .....

advantage 3 .....

disadvantage 1 .....

disadvantage 2 .....

disadvantage 3 .....
[6]

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(g) Food can be marinated before grilling.
State **three** benefits of marinating foods before grilling.

1 .....

2 .....

3 .....
[3]

[Total: 19]

8 Identify and explain **five** reasons why a laminate worktop is a suitable material for a kitchen work surface.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

.....
[5]

Section C

Answer **either** Question 9 **or** 10.

9 Many food items are packaged.

- Identify and discuss reasons for packaging.
- Assess the suitability of glass as a packaging material.

[15]

OR

10 Discuss and explain the uses and benefits to a family of:

- a food processor when preparing food
- a microwave when cooking family meals.

[15]

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