Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER			

9114779859

FOOD & NUTRITION **0648/13**

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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Section A

Answer **all** questions.

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

1 A deficiency disease occurs if a nutrient is lacking in the body.
Name **one** nutrient which is lacking if the body has the following diseases:

(a) goitre ..... [1]

(b) pellagra ..... [1]

(c) marasmus ..... [1]

(d) anaemia ..... [1]

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

[Total: 5]

2 Strawberries can be used in smoothies to provide a source of vitamin C.

(a) Name **four** other different sources of vitamin C which could be used in a fruit smoothie.

1 .....

2 .....

3 .....

4 .....

[4]

(b) State **four** reasons why the body requires vitamin C.

1 .....

2 .....

3 .....

4 .....

[4]

[Total: 8]

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3 Study the label below from a pre-packed chicken sandwich.

<table>
<tr><td>Use by:
20 November 2020</td><td>Keep refrigerated</td></tr>
<tr><td>Ingredients:
white bread (contains wheat flour, water, salt, yeast)
chicken
blended dairy-free spread (contains rapeseed oil, palm oil, sunflower oil, salt)</td><td>Nutritional information
<table><tr><th></th><th>each pack contains</th></tr><tr><td>energy</td><td>301 kcal
1291 kJ</td></tr><tr><td>protein</td><td>17.6 g</td></tr><tr><td>carbohydrates
of which sugars</td><td>36.5 g
1.5 g</td></tr><tr><td>fats
of which saturates</td><td>10.4 g
1.6 g</td></tr><tr><td>fibre</td><td>1.2 g</td></tr><tr><td>sodium</td><td>1.1 mg</td></tr></table></td></tr>
</table>

(a) The sandwich contains 17.6 g of protein.
State the main protein source.

..... [1]

(b) Identify **three** different alternative protein foods which could be used so a vegan could eat the sandwich.

1 .....

2 .....

3 .....
[3]

(c) The fibre content of the sandwich is low at 1.2 g.
Identify **two** different changes which could be made to increase the fibre content of the sandwich.

1 .....

2 .....
[2]

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(d) State **five** benefits of increasing fibre in the diet.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

.....

[5]

(e) Name **two** enzymes involved in the digestion of the bread in the sandwich.

1 .....

2 .....

[2]

(f) Name **two** enzymes involved in the digestion of the chicken in the sandwich.

1 .....

2 .....

[2]

(g) A person with coeliac disease could not eat this sandwich as it contains wheat flour in the bread.
List **four** starchy foods that a person with coeliac disease could eat.

1 .....

2 .....

3 .....

4 .....

[4]

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(h) Explain why there is a use-by date on the packaging for this sandwich.

.....

.....

..... [2]

(i) The sandwich is packaged in a plastic sleeve.
Give **six** reasons why foods are packaged.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

.....

6 .....

.....

[6]

[Total: 27]

Section B

Answer **all** questions.

4 Nutritionists advise eating at least two portions of fish every week.

(a) Justify the nutritional benefits of including fish in the diet.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [6]

(b) List **four** points to look for when buying fresh white fish from the fish market.

1 .....

2 .....

3 .....

4 .....

[4]

(c) A basic recipe for making fish cakes uses cod.

(i) Name **two** different white fish which could also be used to make the fish cakes.

1 .....

2 .....

[2]

(ii) Suggest **three** herbs which could be used to add flavour to the fish cakes.

1 .....

2 .....

3 .....

[3]

(d) The fish cakes can be shallow fried.

(i) State **four** advantages of shallow frying as a method of cooking.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

[4]

(ii) State **five** guidelines to follow when shallow frying.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

.....

[5]

(e) Identify **five** different points to consider when choosing a pan for shallow frying.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

.....

[5]

[Total: 29]

5 Sauces may be used to add nutrients to a dish such as cheese sauce with cauliflower.

Identify **three** other reasons why a sauce may be served with a meal and suggest a different example to illustrate each reason.

reason 1 .....

example .....

reason 2 .....

example .....

reason 3 .....

example .....

[6]

6 **(a)** Name **two** bacteria which can cause food poisoning.

1 .....

2 .....
[2]

(b) List **three** symptoms of food poisoning.

1 .....

2 .....

3 .....
[3]

[Total: 5]

7 State **five** food safety rules which help delay food spoilage when using a refrigerator.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

.....
[5]

Section C

Answer **either** Question 8 **or** 9.

8 Discuss the importance and uses of soya beans and their products in the preparation of meals. [15]

OR

9 Discuss the factors which need to be considered when planning and preparing meals to minimise the risk of family members suffering from obesity. [15]

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