Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER			

7048407606

FOOD & NUTRITION **0648/13**

Paper 1 Theory **May/June 2022**

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.

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Section A

Answer **all** questions.

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

1 Name the term used to describe a diet that contains all nutrients in the correct proportion.

..... [1]

2 B-group vitamins are important for good health.

(a) Name **three** different plant sources of vitamin B_1 (thiamin).

1 .....

2 .....

3 .....

[3]

(b) A deficiency of vitamin B_3 (nicotinic acid) can lead to pellagra.

Identify **one** symptom of pellagra.

..... [1]

(c) State **two** functions of vitamin B_{12} (cobalamin) in the body.

1 .....

2 .....

[2]

[Total: 6]

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3 Fats are used to provide the body with a source of energy.

(a) Give **one** example of how the body uses each of the following types of energy:

(i) mechanical energy

..... [1]

(ii) chemical energy

..... [1]

(iii) electrical energy.

..... [1]

(b) State **four** health reasons to reduce the intake of saturated fat.

1 .....

2 .....

3 .....

4 .....

[4]

(c) Suggest **five** ways that the intake of saturated fat could be reduced in meals.

1 .....

2 .....

3 .....

4 .....

5 .....

[5]

(d) **(i)** Name the part of the digestive system where fats are digested.

..... [1]

(ii) Name the end-products of fat digestion.

1 .....

2 .....

[2]

[Total: 15]

4 Cheese contains calcium.

(a) Name **one** disease in children caused by a deficiency of calcium.

..... [1]

(b) Name **one** disease in adults caused by a deficiency of calcium.

..... [1]

(c) State why someone with high blood pressure should reduce the amount of cheese in their diet.

..... [1]

[Total: 3]

5 Eggs are a high-risk food.

(a) State **three** reasons why eggs are a high-risk food.

1 .....

2 .....

3 .....

[3]

(b) Name **four** other different high-risk foods.

1 .....

2 .....

3 .....

4 .....

[4]

[Total: 7]

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6 Identify and explain **eight** nutritional requirements for a 25-year-old female athlete.

1 .....

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2 .....

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3 .....

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4 .....

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5 .....

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6 .....

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7 .....

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8 .....

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[8]

Section B

Answer **all** questions.

7 A recipe for a pizza base uses the following ingredients:

strong plain white flour
salt
sugar
yeast
hand-hot water
oil

(a) State **three** reasons why using strong plain flour is important when making the pizza base.

1 .....

2 .....

3 .....
[3]

(b) To increase the non-starch polysaccharide (NSP) / dietary fibre content of the pizza base wholemeal flour could be used.

Name **three** different ingredients which could be added to the pizza base to increase NSP.

1 .....

2 .....

3 .....
[3]

(c) State **two** functions of the salt in the pizza base recipe.

1 .....

2 .....
[2]

(d) Name the gas produced by the yeast.

..... [1]

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(e) Suggest **five** reasons why the baked pizza base may not have risen.

1 .....

2 .....

3 .....

4 .....

5 .....

[5]

[Total: 14]

8 Describe first-aid treatment for a scald to the hand.

.....

.....

.....

.....

..... [3]

9 A slow cooker is a useful piece of kitchen equipment for cooking tough cuts of beef.

(a) State **five** other advantages of using a slow cooker.

1 .....

2 .....

3 .....

4 .....

5 .....

[5]

(b) State **five** reasons why some cuts of beef may be tough.

1 .....

2 .....

3 .....

4 .....

5 .....

[5]

(c) Describe **four** changes which take place when a tough cut of beef is cooked in a slow cooker.

1 .....

2 .....

3 .....

4 .....

[4]

(d) State why a recipe for a vegetable casserole advises dried kidney beans should **not** be used in a slow cooker.

..... [1]

(e) State **three** steps to follow to make dried kidney beans safe to use in the vegetable casserole.

1 .....

2 .....

3 .....

[3]

[Total: 18]

10 The following ingredients can be used to make a thin (pouring) batter:

100 g plain flour
½ tsp salt
250 ml milk
1 egg

(a) Describe how to make the batter mixture.

.....

.....

.....

.....

.....

.....

.....

..... [5]

(b) Explain what happens to the batter mixture when it is being cooked.

.....

.....

.....

.....

..... [3]

(c) Name **two** dishes that can be made from the thin batter.

1 .....

2 .....
[2]

[Total: 10]

Section C

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

11 It is important that protein is included in the diet of a two-year-old child.

- Discuss the importance of high biological value (HBV) protein in the diet of a two-year-old child.
- Describe the possible consequences to their health if protein intake is too low.
- Discuss ways to ensure that HBV foods are safe for a two-year-old child to eat.

[15]

OR

12 It is important to plan meals that suit the nutritional needs of individuals.
Discuss aspects, other than nutrition, that should be considered when planning and cooking family meals. [15]

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