Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER			

9138201385

FOOD & NUTRITION **0648/13**

Paper 1 Theory **May/June 2024**

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 Undernutrition is when the body has an insufficient amount of nutrients.

(a) Identify **one** disease that results from an insufficient amount of iron.

..... [1]

(b) State **three** different symptoms of the disease named in **(a)**.

1 .....

2 .....

3 .....
[3]

[Total: 4]

2 **(a)** Name **three** different animal foods that are a good source of iron.

1 .....

2 .....

3 .....
[3]

(b) Name **three** different plant foods that are a good source of iron.

1 .....

2 .....

3 .....
[3]

[Total: 6]

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3 Vitamins are vital to life and help prevent many diseases.

(a) Name the vitamin that is important for the absorption of iron.

..... [1]

(b) Identify **one** disease that vitamin B_1 (thiamin) helps prevent.

..... [1]

(c) Name the vitamin that helps the blood to clot.

..... [1]

[Total: 3]

4 **(a)** State the function of rennin in the digestive system.

..... [1]

(b) State where in the digestive system rennin is found.

..... [1]

[Total: 2]

5 Name **three** foods that help to prevent the deficiency disease goitre.

1 .....

2 .....

3 .....

[3]

6 **(a)** Name the disease that causes an individual to avoid gluten in their diet.

..... [1]

(b) Name **one** food that a person with the disease named in **(a)** should avoid.

..... [1]

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(c) Allergy and intolerance to food are factors to consider when planning meals.

State **five** other factors to consider when planning meals.

1 .....

2 .....

3 .....

4 .....

5 .....

[5]

[Total: 7]

7 **(a)** Explain, with reasons, why it can be nutritionally valuable to include a mixture of low biological value (LBV) protein foods in family meals.

.....

.....

.....

.....

.....

..... [3]

(b) Beans on toast is an example of how to include a mixture of LBV protein foods in family meals.

Give **four** other different examples of how to include a mixture of LBV protein foods in family meals.

1 .....

2 .....

3 .....

4 .....

[4]

[Total: 7]

8 Current dietary advice is to reduce the intake of sodium chloride (salt) in the diet.

(a) State **three** reasons for reducing the intake of salt.

1 .....

2 .....

3 .....

[3]

(b) Suggest **five** ways to reduce the intake of salt when cooking meals.

1 .....

2 .....

3 .....

4 .....

5 .....

[5]

[Total: 8]

Section B

Answer **all** questions.

9 The ingredients for rough puff pastry include flour and fat.

(a) Name **two** other ingredients that are also used to make rough puff pastry.

1 .....

2 .....
[2]

(b) Name the raising agents in rough puff pastry.

1 .....

2 .....
[2]

(c) Instructions for making rough puff pastry state that the fat should be cut into small pieces and added to the flour.

(i) State what would happen if the pieces of fat were too large.

..... [1]

(ii) State what would happen if the pieces of fat were too small.

..... [1]

(d) State why it is important **not** to break up fat lumps when rolling out the dough.

..... [1]

(e) Give **two** reasons why a high temperature is needed when baking dishes made with rough puff pastry.

1 .....

2 .....
[2]

(f) State what will happen to a dish using rough puff pastry if the oven is too cool.

..... [1]

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(g) Many people prefer to use ready-made rough puff pastry.

Explain **four** benefits of buying ready-made rough puff pastry.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

[8]

[Total: 18]

10 Food additives are used in many convenience foods.

(a) Give **three** reasons why some convenience foods are fortified.

1 .....

2 .....

3 .....

[3]

(b) State **three** benefits of using flavourings in convenience foods.

1 .....

2 .....

3 .....

[3]

[Total: 6]

11 State **two** benefits to the consumer of each of the following pieces of information on a food label.

(a) use-by date

1 .....

2 .....
[2]

(b) kcal per 100 g

1 .....

2 .....
[2]

[Total: 4]

12 Fuel energy costs are increasing in many parts of the world.

(a) Give **two** ways that using a steamer can reduce energy consumption when cooking meals.

1 .....

2 .....
[2]

(b) Suggest **three** different foods that can be cooked in a steamer.

1 .....

2 .....

3 .....
[3]

(c) Suggest **six** ways, other than using a steamer, to reduce consumption of fuel energy when cooking meals.

1 .....

2 .....

3 .....

4 .....

5 .....

6.....
[6]

[Total: 11]

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13 Eggs are an almost perfect food but lack calcium and vitamin C.

Suggest **three** suitable different ingredients that could be added to provide each of these nutrients when cooking a savoury omelette.

(a) different ways to add calcium

1 .....

2 .....

3 .....

[3]

(b) different ways to add vitamin C

1 .....

2 .....

3 .....

[3]

[Total: 6]

Section C

Answer **either** Question 14 **or** 15.

14 Many households own a food processor.
Discuss safety rules that should be followed:
- before using a food processor
- when using a food processor
- after using a food processor.

[15]

OR

15 Changes in food that bring about spoilage are caused by the action of microorganisms.
Discuss:
- conditions that enable microorganisms to multiply
- methods that can be used to control these conditions and improve the keeping quality of food.

[15]

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[Turn over

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