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Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

5214609228

FOOD & NUTRITION **0648/12**

Paper 1 Theory **October/November 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. 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 **(a)** Name **two** elements that occur in protein molecules.

1 .....

2 .....
[2]

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

(i) Name **one** disease that results from an insufficient amount of protein.

..... [1]

(ii) Name **three** different animal foods that help prevent the disease named in **(b)(i)**.

1 .....

2 .....

3 .....
[3]

(c) State where in the digestive system the absorption of protein takes place.

..... [1]

(d) Name the end product of protein digestion.

..... [1]

(e) Name the term that describes the effect of heat on protein.

..... [1]

[Total: 9]

2 Sufficient calcium in the diet helps to prevent diseases such as rickets and osteoporosis.

Other than prevention of disease, state **four** functions of calcium in the body.

1 .....

2 .....

3 .....

4 .....
[4]

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3 **(a)** Name **three** different foods that are a good source of polyunsaturated fats.

1 .....

2 .....

3 .....

[3]

(b) Before fat can be digested, it must be emulsified.

Name the substance that emulsifies fat.

..... [1]

[Total: 4]

4 State **two** functions of vitamin E (tocopherol).

1 .....

2 .....

[2]

5 Garnishing is used for savoury dishes.

(a) State **three** reasons for garnishing savoury food.

1 .....

2 .....

3 .....

[3]

(b) Name **three** different examples of garnishes.

1 .....

2 .....

3 .....

[3]

[Total: 6]

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6 **(a)** Name **one** monosaccharide.

..... [1]

(b) Name **one** disaccharide.

..... [1]

(c) One function of sugar in food products is to help preserve them by preventing bacterial growth.

State **three** other functions of sugar in food products.

1 .....

2 .....

3 .....

[3]

[Total: 5]

7 It is recommended that some people increase the amount of non-starch polysaccharide (NSP) / dietary fibre in their diet.

(a) State **four** different problems that may be associated with a lack of NSP in the diet.

1 .....

2 .....

3 .....

4 .....

[4]

(b) Suggest **six** different ways to increase the intake of NSP in family meals.

1 .....

2 .....

3 .....

4 .....

5 .....

6 .....

[6]

[Total: 10]

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Section B

Answer **all** questions.

8 The following ingredients can be used to make cupcakes using the creaming method.

50 g self-raising flour
50 g butter
50 g sugar
1 egg

(a) Name the chemical raising agent found in self-raising flour.

..... [1]

(b) State **two** mechanical methods that cause the cupcake mixture to rise.

1 .....

2 .....
[2]

(c) **(i)** State **one** reason why the flour is 'folded' into the mixture when making the cupcakes.

..... [1]

(ii) Name **one** piece of equipment that is used to fold the flour into the mixture.

..... [1]

(d) State **one** reason why cupcakes may **not** be successful when made with a low-fat spread instead of butter.

..... [1]

(e) Name **two** types of sugar that can be used to make successful cupcakes.

1 .....

2 .....
[2]

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(f) If too much sugar is added to the mixture, the baked cupcakes may have crisp edges.

(i) Describe **three** other possible effects on the baked cupcakes if too much sugar is added to the mixture.

1 .....

2 .....

3 .....

[3]

(ii) State **three** other reasons why the baked cupcakes may be too crisp around the edges.

1 .....

2 .....

3 .....

[3]

(g) State **three** functions of the egg in the recipe.

1 .....

2 .....

3 .....

[3]

[Total: 17]

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

(a) weight or volume

1 .....

2 .....

[2]

(b) storage instructions

1 .....

2 .....

[2]

[Total: 4]

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10 State and explain **six** reasons for cooking food.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

.....

5 .....

.....

6 .....

.....

[6]

11 Additives are used in many convenience foods.

(a) State **two** advantages to the consumer of using antioxidants in convenience foods.

1 .....

2 .....

[2]

(b) Name **two** other types of additives that may be found in convenience foods.

1 .....

2 .....

[2]

[Total: 4]

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12 Soya beans are a type of legume and are high in protein.

(a) State **five** other different nutrients found in soya beans.

1 .....

2 .....

3 .....

4 .....

5 .....

[5]

(b) Soya beans can be processed to produce Textured Vegetable Protein (TVP).

Name **four** other products that can be made from soya beans.

1 .....

2 .....

3 .....

4 .....

[4]

(c) TVP has many nutritional benefits in the diet.

State **five** other benefits of using TVP.

1 .....

2 .....

3 .....

4 .....

5 .....

[5]

[Total: 14]

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Section C

Answer **either** Question 13 **or** 14.

13 Discuss ways to be economical when shopping for food to prepare balanced meals.

[15]

OR

14 Discuss factors that may influence a person to follow a vegetarian lifestyle.

[15]

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