Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER			

5785107660

FOOD & NUTRITION **0648/12**

Paper 1 Theory **May/June 2021**

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.

© UCLES 2021

Section A

Answer **all** questions.

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

1 **(a)** Energy balance is taking in the right amount of energy to meet the needs of the body.

State **three** effects in the body of taking in too much energy.

1 .....

2 .....

3 .....
[3]

(b) Explain **two** ways in which each of the following factors affect an individual's need for energy:

(i) age

1 .....

2 .....
[2]

(ii) gender.

1 .....

2 .....
[2]

[Total: 7]

2 **(a)** State **three** characteristics of an unsaturated fat.

1 .....

2 .....

3 .....
[3]

(b) Name **three** different foods that are a good source of polyunsaturated fat.

1 .....

2 .....

3 .....
[3]

[Total: 6]

© UCLES 2021

3 **(a)** Name **three** vitamins that have antioxidant functions.

1 .....

2 .....

3 .....
[3]

(b) **(i)** Name **three** different animal food sources of vitamin B_1 (thiamin).

1 .....

2 .....

3 .....
[3]

(ii) Name the disease that may occur when there is an insufficient intake of vitamin B_1.

..... [1]

[Total: 7]

4 **(a)** State **two** functions of iodide in the body.

1 .....

2 .....
[2]

(b) Give **one** symptom of the deficiency disease associated with a lack of iodide.

..... [1]

(c) Name **three** different sources of iodide.

1 .....

2 .....

3 .....
[3]

[Total: 6]

5 State the location and role of the villi in the digestive system.

location .....

role .....
[2]

6 It is important that a convalescent has a good supply of nutrients.

(a) Suggest **one** reason why each of the following may be needed in the diet of a convalescent:

(i) iron ..... [1]

(ii) vitamin C ..... [1]

(iii) protein ..... [1]

(iv) water ..... [1]

(v) calcium ..... [1]

(vi) vitamin D. ..... [1]

(b) Explain why the following meal would not be suitable for a convalescent.

creamy chicken curry and rice
jam doughnut

.....

.....

.....

.....

.....

..... [6]

[Total: 12]

© UCLES 2021

Section B

Answer **all** questions.

7 A vegetarian lasagne contains the following vegetables:

1 carrot
1 courgette
1 onion
1 small tin of tomatoes
100 g spinach
2 cloves of garlic
2 sticks of celery

(a) Name **two** other root-type vegetables that could be used in the lasagne.

1 .....

2 .....
[2]

(b) Name **two** other fruit-type vegetables that could be used in the lasagne.

1 .....

2 .....
[2]

(c) Identify and explain **six** different nutritional reasons for increasing the amount of vegetables in the diet.

reason 1 .....

explanation .....

reason 2 .....

explanation .....

reason 3 .....

explanation .....

reason 4 .....

explanation .....

reason 5 .....

explanation .....

reason 6 .....

explanation .....
[12]

[Total: 16]

8 The following ingredients can be used to make a white sauce:

25 g butter
25 g plain white flour
250 ml full fat milk

(a) Name **one** method that can be used to make the sauce.

..... [1]

(b) Identify **one** ingredient that thickens the sauce.

..... [1]

(c) Name the thickening process that happens as the sauce cooks.

..... [1]

(d) Identify **one** ingredient that makes the sauce glossy.

..... [1]

(e) **(i)** Identify **one** ingredient in the sauce that is unsuitable for a vegan.

..... [1]

(ii) Suggest an alternative ingredient that could be used to replace the ingredient in **(e)(i)**.

..... [1]

(f) Give **two** reasons why there may be lumps in the finished sauce.

1 .....

2 .....
[2]

(g) Give **three** reasons why the sauce may be thin and runny.

1 .....

2 .....

3 .....
[3]

[Total: 11]

© UCLES 2021

9 Fire safety is very important in the kitchen.

(a) List **two** items of fire safety equipment that would be useful in the kitchen.

1 .....

2 .....
[2]

(b) Describe how to safely manage a fire in a pan of oil.

.....

..... [2]

(c) Describe the first aid treatment for a minor burn caused by hot oil.

.....

..... [2]

[Total: 6]

10 **(a)** Identify **six** factors to consider when choosing a new electric cooker.

1 .....

2 .....

3 .....

4 .....

5 .....

6 .....
[6]

(b) Suggest **six** ways of reducing energy costs when cooking on the hob.

1 .....

2 .....

3 .....

4 .....

5 .....

6 .....
[6]

[Total: 12]

© UCLES 2021

[Turn over

Section C

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

11 If food prices increase but the family budget remains the same then food choices may be more limited.
Identify and discuss strategies for saving money when shopping for food. [15]

OR

12 A food label shows useful information about a product.
Identify the information that may appear on a food label and discuss the purpose of each piece of information. [15]

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

© UCLES 2021

© UCLES 2021

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

[Total: 15]

BLANK PAGE

© UCLES 2021

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which itself is a department of the University of Cambridge.

© UCLES 2021