



# Cambridge IGCSE™

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## FOOD & NUTRITION

0648/13

Paper 1 Theory

May/June 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.

**Section A**

Answer **all** questions.

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

- 1 (a) Name the term used to describe a diet which contains all the nutrients in the correct proportion.

..... [1]

- (b) Age is one factor to consider when planning meals.  
List **three** other factors to consider when planning meals.

1 .....

2 .....

3 .....

[3]

- (c) Disaccharides are a form of carbohydrate.

- (i) Give **two** examples of a disaccharide.

1 .....

2 .....

[2]

- (ii) Name **three** enzymes involved in the digestion of carbohydrates.

1 .....

2 .....

3 .....

[3]

- (iii) Describe **three** effects of dry heat on carbohydrate.

1 .....

2 .....

3 .....

[3]

[Total: 12]

2 Fats and oils have many functions in cooking.

(a) Name **four** polyunsaturated oils which are suitable for shallow frying.

1 .....

2 .....

3 .....

4 .....

[4]

(b) Complete the table to show the **different** uses and examples of fats and oils.

use of fat or oil	example
improving keeping quality	rich cake
adding flavour	
basting	
decorating	
adding colour	
	greasing tins
	when used in creaming method
	mayonnaise
	when making pastry

[8]

[Total: 12]

3 Minerals are important in the diet.

(a) Name **two** different animal foods and **two** different plant foods that are good sources of iron.

animal food .....

animal food .....

plant food .....

plant food .....

[4]

(b) Name **two** different animal foods and **two** different plant foods that are good sources of calcium.

animal food .....

animal food .....

plant food .....

plant food .....

[4]

(c) For better absorption, iron should be eaten with vitamin C.

Name **one** savoury and **one** sweet dish which provide these two nutrients together. Identify the ingredient in each dish that provides iron and vitamin C.

(i) name of savoury dish .....

ingredient that contains iron .....

ingredient that contains vitamin C .....

[2]

(ii) name of sweet dish .....

ingredient that contains iron .....

ingredient that contains vitamin C .....

[2]

(d) For better absorption, calcium should be eaten with vitamin D.

Name **one** savoury and **one** sweet dish which provide these two nutrients together. Identify the ingredient in each dish that provides calcium and vitamin D.

(i) name of savoury dish .....  
ingredient that contains calcium.....  
ingredient that contains vitamin D ..... [2]

(ii) name of sweet dish .....  
ingredient that contains calcium.....  
ingredient that contains vitamin D ..... [2]

[Total: 16]

**Section B**

Answer **all** questions.

4 The following ingredients can be used to make a pineapple upside-down cake:

- 100 g self-raising flour
- 1 level tsp baking powder
- 100 g polyunsaturated margarine
- 100 g caster sugar
- 2 eggs
- 4 pineapple rings

(a) Describe how to make the cake mixture using the one-stage method.

.....

.....

.....

.....

.....

.....

..... [3]

(b) The finished cake has not risen well and has a heavy texture. Give **four** possible reasons for this.

1 .....

2 .....

3 .....

4 ..... [4]

(c) (i) Suggest **two** different ways to improve the visual appeal of the cake mixture.

1 .....

2 ..... [2]

(ii) Suggest **two** different ways to improve the visual appeal of the pineapple layer of the cake.

1 .....

2 ..... [2]

[Total: 11]

5 Making cheese is a method of preserving milk.

(a) Name **three** other dairy food products which can be made from milk.

- 1 .....
- 2 .....
- 3 ..... [3]

(b) In the production of cheese a bacterial culture is added to milk to convert lactose into lactic acid.

State **one** function of lactic acid in the production of cheese.

..... [1]

(c) Rennet is used in the production of cheese.

Name the enzyme found in rennet.

..... [1]

(d) State the function of rennet in the production of cheese.

..... [1]

(e) Cheese can be difficult to digest.

Suggest **two** ways to make cheese more digestible when using it in cooking.

- 1 .....
- 2 ..... [2]

(f) Explain why pregnant women are advised not to eat soft cheese.

.....  
.....  
..... [2]

[Total: 10]

6 An oven is an important piece of equipment in a kitchen.

(a) Explain the function of the following features of an oven:

(i) the thermostat

..... [1]

(ii) the glass part of the oven door.

..... [1]

(b) Give **two** advantages of using a fan-assisted oven.

1 .....

2 .....

[2]

(c) An oven can be used to bake or roast food.

(i) Explain the difference between baking and roasting.

.....

.....

..... [2]

(ii) State **four** advantages of roasting as a method of cooking.

1 .....

2 .....

3 .....

4 .....

[4]

(iii) Describe how conduction transfers heat to food during roasting.

.....

.....

.....

..... [2]

[Total: 12]



7 Good lighting in a kitchen reduces the risk of accidents.

(a) State **two** ways a kitchen can be lit by natural light.

1 .....

2 .....

[2]

(b) Identify **two** areas in a kitchen which may need additional lighting.

1 .....

2 .....

[2]

[Total: 4]

8 Give **four** rules, with an appropriate reason, on the safe use and care of knives in the kitchen.

rule 1 .....

reason .....

rule 2 .....

reason .....

rule 3 .....

reason .....

rule 4 .....

reason .....

[8]





