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Candidate number

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Forename(s)

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# GCSE FOOD PREPARATION AND NUTRITION

## Paper 1 Food Preparation and Nutrition

Thursday 14 June 2018

Afternoon

Time allowed: 1 hour 45 minutes

### Materials

For this paper you must have:

- a black pen
- a pencil.

### Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this answer book. Cross through any work you do not want to be marked.

### Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 100.
- You are reminded of the need for good English and clear presentation in your answers.

For Examiner's Use	
Question	Mark
1	
2	
3	
4	
5	
6	
<b>TOTAL</b>	



J U N 1 8 8 5 8 5 W 0 1

IB/G/Jun18/E19






**8585/W**


**Section A** consists of multiple choice questions.


Answer **all** questions in this section.  
There are 20 marks available.

Only **one** answer per question is allowed.

For each answer completely fill in the circle alongside the appropriate answer.

CORRECT METHOD  WRONG METHODS    

If you want to change your answer you must cross out your original answer as shown. 

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. 

For each question you should shade in one box.  
An example is shown below.

Which food is high in protein?

**A** cabbage

**B** cheese

**C** oranges

**D** cucumber

**0 1** . **0 1** Which one of the following is a micronutrient?

**[1 mark]**

**A** carbohydrate

**B** fat

**C** protein

**D** vitamin



0 1 . 0 2 Coeliac disease is an intolerance to

[1 mark]

A eggs

B meat

C milk

D wheat

0 1 . 0 3 Anaemia is caused by a diet deficient in which mineral?

[1 mark]

A calcium

B iodine

C iron

D sodium

0 1 . 0 4 The percentage of recommended energy from carbohydrates per day is

[1 mark]

A 15%

B 35%

C 50%

D 75%

Question 1 continues on the next page

Turn over ►



**0 1 . 0 5** Which one of the following shows the danger zone temperatures?

[1 mark]

**A** 0 °C to 35 °C

**B** 3 °C to 63 °C

**C** 4 °C to 75 °C

**D** 5 °C to 63 °C

**0 1 . 0 6** Which one of the following is the correct storage condition for bananas?

[1 mark]

**A** at room temperature

**B** in the chill cabinet

**C** in the freezer

**D** in the refrigerator

**0 1 . 0 7** Which of the following methods of cooking are all water based?

[1 mark]

**A** steaming, grilling, poaching

**B** boiling, frying, simmering

**C** baking, roasting, grilling

**D** simmering, boiling, poaching



0 1 . 0 8 Which one of the following is an example of bacterial contamination?

[1 mark]

A a food worker sneezing when preparing food

B a fish bone in a fishcake

C cleaning agents left on a work surface

D a piece of plastic in a cake mixture

0 1 . 0 9 Convection is the transfer of heat energy through

[1 mark]

A direct heat rays

B liquids

C metals

D solids

0 1 . 1 0 Which one of the following are water soluble vitamins?

[1 mark]

A vitamins A and C

B vitamins B and C

C vitamins B and D

D vitamins C and D

Question 1 continues on the next page

Turn over ►



**0 1** . **1 1** When heated, the colour of sugar changes from white to brown.  
This process is called

**[1 mark]**

**A** caramelisation

**B** enzymic browning

**C** gelatinisation

**D** oxidation

**0 1** . **1 2** Which vitamin helps the body absorb calcium?

**[1 mark]**

**A** vitamin A

**B** vitamin B

**C** vitamin C

**D** vitamin D

**0 1** . **1 3** Which one of the following is an example of a primary processed food?

**[1 mark]**

**A** bananas

**B** eggs

**C** flour

**D** tomatoes



**0 1 . 1 4** Which one of the following **can** be an example of a free range food?

**[1 mark]**

**A** bananas

**B** eggs

**C** flour

**D** tomatoes

**0 1 . 1 5** Identify one food that has an extraction rate during production

**[1 mark]**

**A** bananas

**B** eggs

**C** flour

**D** tomatoes

**0 1 . 1 6** Which fruit is affected by enzymic browning?

**[1 mark]**

**A** apples

**B** grapes

**C** oranges

**D** raspberries

**Question 1 continues on the next page**

**Turn over ►**



**0 1 . 1 7** Which one of the following describes the distance food is transported from producer to consumer?

**[1 mark]**

**A** air miles

**B** carbon footprint

**C** fair trade

**D** food miles

**0 1 . 1 8** Which of the vitamins listed below is an antioxidant?

**[1 mark]**

**A** vitamin A

**B** vitamin B

**C** vitamin D

**D** vitamin K

**0 1 . 1 9** Which one of the following is not a legal requirement for food labelling?

**[1 mark]**

**A** cooking instructions

**B** list of ingredients

**C** serving suggestions

**D** weight





0 1 . 2 0 What is added to foods when fortification takes place?

[1 mark]

A additives

B emulsifiers

C nutrients

D preservatives

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20

Turn over for Section B

Turn over ►



**Section B***Do not write  
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Answer **all** questions in this section.  
There are 80 marks available.

**Question 2 is about food safety.**

**0 2 . 1**

Give **four** personal hygiene rules that must be followed by people serving food.

**[4 marks]**

1 \_\_\_\_\_

\_\_\_\_\_

2 \_\_\_\_\_

\_\_\_\_\_

3 \_\_\_\_\_

\_\_\_\_\_

4 \_\_\_\_\_

\_\_\_\_\_



0 2 . 2

State **two** food safety rules that must be used for each of the following.  
Explain why each rule is needed.

[8 marks]

Storing fresh, cooked prawns.

Food safety rule	Explanation
1 _____ _____ _____ _____	1 _____ _____ _____ _____
2 _____ _____ _____ _____	2 _____ _____ _____ _____

Reheating cooked chicken.

Food safety rule	Explanation
1 _____ _____ _____ _____	1 _____ _____ _____ _____
2 _____ _____ _____ _____	2 _____ _____ _____ _____

12

Turn over ►



**Question 3 is about nutrition, health and food science.**

**0 3 . 1** Information about two meals is given below. You should use this information when answering the question that follows.

**Table 1**

	<b>Choice A: Fish pie with broccoli and carrots</b>		<b>Choice B: Meat pie with roast potatoes</b>	
Ingredients	potatoes, milk, carrot, salmon, cod, broccoli, peas, tomato, flour, cheese, vegetable fat.		beef steak, flour, onion, potatoes, butter, oil, gravy, salt.	
Nutrient	<b>per portion</b>	<b>RI</b> (Reference Intake)	<b>per portion</b>	<b>RI</b> (Reference Intake)
Energy	408.0 kcal	20 %	668.0 kcal	33 %
Protein	31.0 g	68 %	26.0 g	58 %
Carbohydrate	48.0 g	21 %	54.0 g	24 %
Total Sugars	11.0 g	13 %	4.1 g	5 %
Fat	11.0 g	16 %	39.0 g	56 %
Saturated fat	4.0 g	20 %	22.0 g	110 %
Salt	0.5 g	9 %	2.0 g	33 %
Vitamin A	1148.0 µg		398.0 µg	
Vitamin B12	2.5 µg		1.6 µg	
Vitamin C	64 mg		5.9 mg	
Vitamin D	2.6 µg		0.9 µg	
Calcium	266.0 mg		27.0 mg	
Iron	2.7 mg		2.0 mg	

With reference to the ingredients, nutrient content and reference intake for each of the dishes, assess the suitability of each meal for an elderly person.

Evaluate which meal is the healthier choice. Include justified reasons in your answer.

**[12 marks]**

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0 3 . 2

Explain why dietary fibre is important in the body. Suggest ways the meat pie and roast potatoes can be modified to include more dietary fibre.

[6 marks]

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0 3 . 3

Explain the function of the following ingredients when making shortcrust pastry.

[4 marks]

Plain flour

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Fats

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**Question 4 is about food science.**

**0 4 . 1** Complete Table 2 below to match the sauce with the correct sauce making method. **[3 marks]**

Sauce making methods:      Starch based      Emulsion      Reduction

**Table 2**

Type of sauce	Sauce making method
Hollandaise sauce	
Roux/all in one sauce	
Tomato pasta sauce	

**0 4 . 2** Give three reasons why it is important to stir a flour based sauce. **[3 marks]**

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**0 4 . 3** Explain how gelatinisation takes place when making a starch based sauce. **[6 marks]**

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**Turn over ►**



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0 4 . 4

Describe how the following raising agents work.  
Give an example of a recipe that uses each method.

Name a chemical raising agent

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Describe how it works

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Example of a recipe using this chemical raising agent

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**[4 marks]**

Name a biological raising agent

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Describe how it works

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Example of a recipe using this biological raising agent

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**[4 marks]**

20







0 5 . 2

Explain the advantages and disadvantages of Genetically Modified (GM) foods.

**[6 marks]**

Advantages

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Disadvantages

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Question 6.1 is about food processing and production.

0 6 . 1

**Table 3**

Heat treatment of milk	
<b>Pasteurisation</b>	heated at 72 °C for 15 seconds
<b>Sterilisation</b>	heated at 110–130 °C for 30 minutes
<b>Ultra heat treated (UHT)</b>	heated at 135 °C for 1 second

**[6 marks]**

Using **Table 3** above, explain how the different heat treatment methods:

allow milk to last longer

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affect the nutrition, taste and appearance of milk

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**Question 6 continues on the next page**

**Turn over ►**



**Question 6.2 is about food additives.**

**0 6 . 2**

Food additives are used in many processed foods.

**[6 marks]**

Explain why additives are used in food processing.

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Explain some of the concerns people have about their use.

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**12**

**END OF QUESTIONS**

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