

| Please write clearly in block capitals. | |
|---|------------------|
| Centre number | Candidate number |
| Surname | |
| Forename(s) | |
| Candidate signature | |

GCSE FOOD PREPARATION AND NUTRITION

Paper 1 Food Preparation and Nutrition

Monday 10 June 2019 Morning 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 book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The total number of marks available 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 | | | | |
| TOTAL | | | | |



| Section A consists of multiple choice questions. | | | | |
|--|---------------------------------------|---|------------------------------|--|
| | Answer all questions in this section. | | | |
| There are 20 marks available. | | | | |
| | | | | |
| Only one answ | er p | per question is allowed. | | |
| For each answe | er c | ompletely fill in the circle alongside the ap | propriate answer. | |
| CORRECT METHO | DD | ● WRONG METHODS ② | | |
| If you want to ch | han | ge your answer you must cross out your c | riginal answer as shown. | |
| If you wish to re select as shown | | n to an answer previously crossed out, ring | g the answer you now wish to | |
| For each question | ı yo | u should shade in one box. | | |
| An example is sho | owr | below. | | |
| | Wh | ich food is high in protein? | | |
| | A | Cabbage | | |
| | В | Cheese | | |
| | С | Oranges | | |
| | D | Cucumber | | |
| 0 1.1 | Wh | ich food is a good source of energy from | carbohydrates? | |
| | Α | Pasta | | |
| | В | Fish | 0 | |
| | С | Broccoli | | |
| | D | Cheese | 0 | |
| | | | | |



| 0 1.2 | Am | nino acids are the components of | | [1 mark] |
|-------|-----|--|----------------|----------|
| | Α | fats. | 0 | [1 mark] |
| | В | vitamins. | 0 | |
| | С | carbohydrates. | 0 | |
| | D | proteins. | 0 | |
| | | | | |
| 0 1.3 | Wh | nich food is a good source of low biological | value protein? | [1 mark] |
| | A | Soya | 0 | |
| | В | Eggs | 0 | |
| | С | Nuts | 0 | |
| | D | Fish | 0 | |
| | | | | |
| 0 1.4 | Wh | nich one of the following sugars is found in | cow's milk? | [1 mark] |
| | A | Fructose | 0 | - |
| | В | Sucrose | 0 | |
| | С | Maltose | 0 | |
| | D | Lactose | 0 | |
| | | | | |
| 0 1.5 | The | e body needs dietary fibre for | | [1 mark] |
| | A | strong teeth and bones. | 0 | |
| | В | growth and repair. | 0 | |
| | С | removal of waste. | 0 | |
| | D | clear vision. | 0 | |
| | | | | |



| 0 1.6 | Wh | nich one of the following is a quick method | of cooking? [1 mark] |
|---------|-----|--|--|
| | A | Stir frying | |
| | В | Roasting | |
| | С | Braising | |
| | D | Baking | |
| 0 1 . 7 | Pro | oviding a reliable supply of safe, nutritious | and affordable food is a definition of [1 mark] |
| | A | organic food. | |
| | В | Fairtrade food. | |
| | С | food miles. | |
| | D | food security. | |
| 0 1.8 | Th | e effect of dry heat on starch is called | [4 mould |
| | Α | caramelisation. | [1 mark] |
| | В | dextrinisation. | |
| | С | shortening. | |
| | D | fermentation. | |
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| 0 1.9 | Wh | nich one of the following uses a biological r | raising agent? | [4 mouls] |
|-----------|----|--|--------------------------|-----------|
| | Α | Scones | 0 | [1 mark] |
| | В | Doughnuts | 0 | |
| | С | Gingerbread | 0 | |
| | D | Eclairs | 0 | |
| | | | | |
| 0 1 . 1 0 | Th | e term given to the softening, shaping or s | preading of fats is | |
| | Α | emulsification. | 0 | [1 mark] |
| | В | plasticity. | 0 | |
| | С | shortening. | 0 | |
| | D | oxidation. | 0 | |
| | | | | |
| 0 1 . 1 1 | Ca | mpylobacter is a type of food poisoning ba | cteria commonly found in | |
| | Α | raw chicken. | 0 | [1 mark] |
| | В | cooked vegetables. | 0 | |
| | С | boiled pasta. | 0 | |
| | D | baked apples. | 0 | |
| | | | | |
| | | Question 1 continues on the nex | xt page | |
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| 0 1 . 1 2 | Wh | nich one of the following can often show sig | | ? mark] |
|-----------|-----|---|----|------------|
| | A | Beef | | nai kj |
| | В | Fish | 0 | |
| | С | Biscuits | 0 | |
| | D | Tomatoes | | |
| | | | | |
| 0 1 . 1 3 | Mid | croorganisms are used in the production of | | nark] |
| | A | mayonnaise. | 0 | - |
| | В | jam. | | |
| | С | cheese. | 0 | |
| | D | pasta. | 0 | |
| | | | | |
| 0 1 - 1 4 | Ra | w fish should be prepared on a chopping b | [1 | mark] |
| | Α | Green | | |
| | В | Red | | |
| | С | Blue | | |
| | D | Yellow | | |
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| 0 1 . 1 5 | A | diet deficient in Vitamin D may lead to | | [1 mark] |
|-----------|----|--|------------------|----------|
| | Α | scurvy. | 0 | [1 mark] |
| | В | anaemia. | 0 | |
| | С | rickets. | 0 | |
| | D | night blindness. | 0 | |
| 0 1 . 1 6 | Wł | nich one of the following is the raising ager | nt in meringues? | [1 mark] |
| | Α | Yeast | 0 | [1 mark] |
| | В | Air | 0 | |
| | С | Baking powder | 0 | |
| | D | Bicarbonate of soda | 0 | |
| 0 1 . 1 7 | An | example of an emulsion is | | [1 mark] |
| | Α | tomato sauce. | 0 | |
| | В | hollandaise sauce. | 0 | |
| | С | roux sauce. | 0 | |
| | D | velouté sauce. | 0 | |
| | | Question 1 continues on the nex | xt page | |
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| 0 1 . 1 8 | Th | e process when starch granules swell and | thicken a sauce is | [d manual] |
|-----------|--------|--|--------------------|---------------------|
| | Α | caramelisation. | 0 | [1 mark] |
| | В | emulsification. | 0 | |
| | С | gelatinisation. | 0 | |
| | D | aeration. | 0 | |
| 0 1 . 1 9 | Th | e function of iodine in the body is to | | [1 mark] |
| | Α | enable iron to be absorbed. | 0 | [· ··············· |
| | В | strengthen bones and teeth. | 0 | |
| | С | help blood to clot. | 0 | |
| | D | control the metabolic rate. | 0 | |
| 0 1 2 0 | En | zymes are biological catalysts made from | | [1 mark] |
| | | | | [1 |
| | Α | proteins. | | |
| | A B | fats. | | |
| | В | | | |
| | В | fats. | | |
| | ВС | fats. carbohydrates. | | |
| | ВС | fats. carbohydrates. | | |
| | ВС | fats. carbohydrates. | | |
| | ВС | fats. carbohydrates. | | |
| | ВС | fats. carbohydrates. | | |



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Section B

| | Answer all questions in this section. |
|---------|---|
| | There are 80 marks available. |
| 0 2 . 1 | Give three different reasons why food is cooked. [3 marks] |
| | 1 |
| | 2 |
| | 3 |
| 0 2 . 2 | State four different factors that influence food choice when planning a meal. [4 marks] |
| | 1 |
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0 2 . 3

Potatoes can be cooked in different ways.

Explain how each cooking method in the table below affects the nutritional value and the colour, flavour and texture of potatoes.

[6 marks]

| Cooking method | Effect on nutritional value | Effects on colour, flavour and texture |
|----------------|-----------------------------|--|
| Boiling | | |
| Baking | | |
| Shallow frying | | |

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0 3 . 1

Bradley, a 25-year-old active male tries to make healthy choices using the Eatwell guide when planning meals.

Information about two meals is given below. Using this information and your knowledge of healthy eating, nutrition and energy balance:

- · assess the suitability of each meal for Bradley
- evaluate which is the healthier choice, justifying your reasons.

[12 marks]

Table 1: Ingredients and percentages of recommended intake of nutrients for Bradley

| | Choice A: Spaghetti bolognese | Choice B: Cheese and onion pasty and chips with tomato ketchup |
|-----------------|---|---|
| Ingredients | Wholewheat pasta, lean minced beef, tomatoes, onions, green peppers, mushrooms, parmesan cheese, celery, vegetable oil, basil, salt, pepper | Potato, wheat flour, lard, vegetable oil, Cheddar cheese, tomato ketchup, onion, salt, pepper |
| Nutrients | % Recommended Intake | % Recommended Intake |
| Energy (kcal) | 33 | 52 |
| Fibre (g) | 54 | 22 |
| Vitamin B1 (mg) | 89 | 116 |
| Vitamin C (mg) | 80 | 48 |
| Calcium (mg) | 61 | 72 |
| Salt (g) | 32 | 161 |

Table 2: Percentage of energy provided by each nutrient

| | Spaghetti bolognese | Cheese and onion pasty and chips with tomato ketchup |
|--------------------------------------|---------------------|--|
| Nutrients (g) | % Energy Breakdown | % Energy Breakdown |
| Total carbohydrate (of which sugar) | 51 (6) | 38 (11) |
| Total fat (of which saturated) | 29 (9) | 55 (20) |
| Protein | 20 | 7 |





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| 0 3 - 2 | Give three functions of water in the body. | |
|---------|---|-----------|
| 0 0 1 | cive tines iditations of water in the body. | [3 marks] |
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| B1 (thiamin) C (ascorbic acid) K Calcium Fluoride Denaturation and coagulation are processes that occur when some food heated. Describe the process of denaturation and coagulation when cooking egg. You may use diagrams to support your answer. | Micronutrient | Function |
|--|--------------------------------------|--|
| C (ascorbic acid) K Calcium Fluoride Denaturation and coagulation are processes that occur when some foodheated. Describe the process of denaturation and coagulation when cooking egg. You may use diagrams to support your answer. | A | |
| Calcium Fluoride Denaturation and coagulation are processes that occur when some foodheated. Describe the process of denaturation and coagulation when cooking egg You may use diagrams to support your answer. | B1 (thiamin) | |
| Calcium Fluoride Denaturation and coagulation are processes that occur when some food heated. Describe the process of denaturation and coagulation when cooking egg You may use diagrams to support your answer. | C (ascorbic acid) | |
| Pluoride Denaturation and coagulation are processes that occur when some food heated. Describe the process of denaturation and coagulation when cooking egg You may use diagrams to support your answer. | К | |
| Denaturation and coagulation are processes that occur when some food heated. Describe the process of denaturation and coagulation when cooking egg. You may use diagrams to support your answer. | Calcium | |
| heated. Describe the process of denaturation and coagulation when cooking ego You may use diagrams to support your answer. | Fluoride | |
| | heated. Describe the process of der | naturation and coagulation when cooking eg |
| | You may use diagrams to s | |
| | | |
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| 0 3 . 5 | Describe the controlled conditions when carrying out sensory testing. | |
|---------|---|-----------|
| | 2 common the controlled controlled when carrying car concery techniq. | |
| | | [4 marks] |



| 0 3 . 6 | Explain how the process of enzymic browning occurs on raw apple slie | ces. |
|---------|--|-----------|
| | How can this be prevented? | [C manka] |
| | | [6 marks] |
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| 0 3.7 | Explain why nutritional information is included on a food label. | [6 marks] |
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0 4 . 1

The table below shows some problems seen when food is prepared.

Complete the table to explain **two** different causes of each problem and **two** ways to prevent this occurring.

[8 marks]

| Problem | Causes of problem | Prevention |
|---|-------------------|------------|
| Fresh pasta dough has a crumbly texture and could not be shaped | 1 | 1 |
| | 2 | 2 |
| An all-in-one Victoria sandwich cake has a dense texture | 1 | 1 |
| | 2 | 2 |



12

| 0 4 . 2 | Suggest four ways supermarkets and shops could reduce food waste. | [4 marks] |
|---------|--|-----------|
| | 1 | |
| | 2 | |
| | 3 | |
| | | |
| | 4 | |

Turn over for the next question



| 0 5 . 1 | Explain the nutritional and health benefits of fortified foods. Give examp your answer. | oles in |
|---------|---|-----------|
| | | [4 marks] |
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| 0 5 2 | Type 2 diabetes is associated with lifestyle factors and is on the increas | e. |
| | Analyse and evaluate the reasons for this increase and the impact on he | |
| | | [8 marks] |
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| END OF QUESTIONS | |

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