

FOR OFFICIAL USE



National
Qualifications
2014

Mark

X736/75/01

**Health and Food
Technology**

FRIDAY, 2 MAY

1:00 PM – 2:30 PM



* X 7 3 6 7 5 0 1 *

Fill in these boxes and read what is printed below.

Full name of centre

Town

Forename(s)

Surname

Number of seat

Date of birth

Day

Month

Year

Scottish candidate number

Total marks — 50

Attempt ALL questions.

Write your answers clearly in the spaces provided in this booklet. Additional space for answers is provided at the end of this booklet. If you use this space you must clearly identify the question number you are attempting.

Use **blue** or **black** ink.

Before leaving the examination room you must give this booklet to the Invigilator; if you do not, you may lose all the marks for this paper.



* X 7 3 6 7 5 0 1 0 1 *

Question 1

A restaurant is extending its range of fish dishes.

- (a) Identify **two** nutrients found in oily fish.

Give **one** function of each of the nutrients identified.

4

Nutrient 1 _____

Function _____

Nutrient 2 _____

Function _____

- (b) State **two** practical ways to increase consumption of fish.

2

Practical Way 1 _____

Practical Way 2 _____

- (c) The restaurant has the following dish on its menu.

Baked Cod with a Herb Breadcrumbs Crust

Explain how this dish could contribute to healthier eating.

2



Question 1 (continued)

(d) An Environmental Health Officer inspects the restaurant and finds the following.

- The fridge is operating at 10°C
- Desserts are stored in the same fridge as raw meat

Describe how this could cause food poisoning.

2

Total marks 10

[Turn over



* X 7 3 6 7 5 0 1 0 3 *

Question 2

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An active three year old boy is starting nursery school.

The table below shows the daily reference values for 1 to 3 year olds.

| Dietary Reference Values for 1 – 3 year olds | | | | | |
|--|----------------------------|----------------|-----------|----------------|--------------|
| Estimated average requirements | Reference Nutrient Intakes | | | | |
| Energy (MJ) | Protein (g) | Vitamin B (mg) | Iron (mg) | Vitamin C (mg) | Calcium (mg) |
| 5.2 | 14.5 | 0.6 | 6.9 | 30 | 350 |

The table below shows the daily analysis of this 3 year old boy's meals.

| Dietary analysis of his typical day's meals | | | | | |
|---|-------------|----------------|-----------|----------------|--------------|
| Energy (MJ) | Protein (g) | Vitamin B (mg) | Iron (mg) | Vitamin C (mg) | Calcium (mg) |
| 4.8 | 16.0 | 0.5 | 7.4 | 27 | 370 |

- (a) Taking account of the Dietary Reference Values (DRVs) for 1 – 3 year olds, evaluate the suitability of his typical day's meals.

6

Evaluation _____



MARKS

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Question 2 (continued)

- (b) Identify and explain **two different** ways in which food manufacturers could develop products that encourage healthier eating for children.

4

Way 1 _____

Explanation _____

Way 2 _____

Explanation _____

Total marks 10

[Turn over



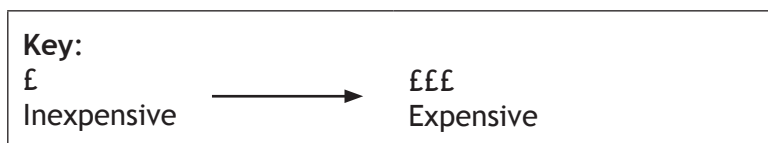
* X 7 3 6 7 5 0 1 0 5 *

Question 3

A local tourist attraction wants to sell a healthy picnic bag option for families. Each picnic bag must serve four people.

- (a) (i) Consider all the information shown in the table below.

| Features | Picnic Bag A | Picnic Bag B | Picnic Bag C |
|-----------------------------|---|---|--|
| Choice of sandwich fillings | 3 options | 4 options | 2 options |
| Type of Bread | Wholemeal sliced bread | Tortilla wrap | White crusty rolls |
| Drinks | <ul style="list-style-type: none"> • 2 litre bottle of flavoured water • 4 cups | <ul style="list-style-type: none"> • 1 litre bottle of vanilla milkshake • 2 cups | <ul style="list-style-type: none"> • 2 litre of fizzy pineapple juice • 6 cups |
| Packaging | Reusable insulated bag | Reusable plastic bag | Brown paper bag |
| Additional items included | Paper plates and napkins 4 fruit salad tubs | Hand wipes Family size bag of crisps | Money off voucher for next purchase Family size chocolate bar |
| Cost | ££ | £££ | ££ |



Identify the most suitable picnic bag for the tourist attraction to sell.

1

Picnic Bag _____



Question 3 (a) (continued)

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(ii) Give **three** reasons for your choice of picnic bag.

3

Reason 1 _____

Reason 2 _____

Reason 3 _____

(b) State **two** functions of dietary fibre.

2

Function 1 _____

Function 2 _____

[Turn over



* X 7 3 6 7 5 0 1 0 7 *

Question 3 (continued)

- (c) The choice of packaging is considered carefully by food manufacturers. Evaluate the use of aluminium cans for the drinks industry.

2



Evaluation _____

- (d) (i) Identify the following symbol.

1



Symbol _____

- (ii) Explain how this symbol may influence consumer choice of foods.

1

Explanation _____

Total marks 10



* X 7 3 6 7 5 0 1 0 8 *

Question 4

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A Scottish bakery chain wants to extend its range of scones.

- (a) Explain the following **two** stages in the product development process. **2**

Concept generation _____

First production run _____

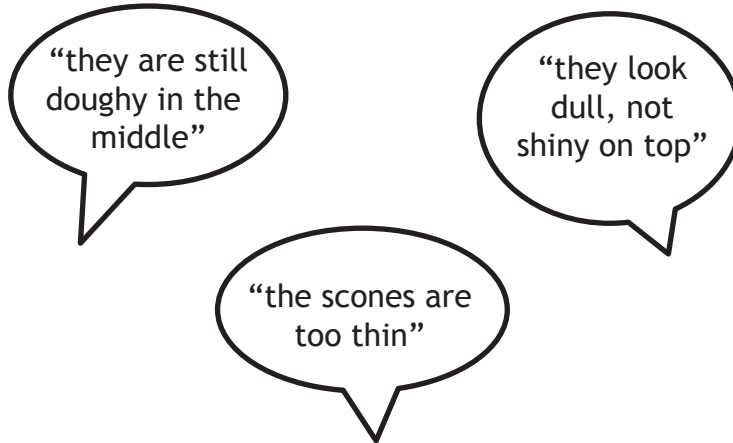
[Turn over



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Question 4 (continued)

- (b) The bakery chain carried out sensory testing with a group of consumers. They received the following comments about the scones.



Explain why these faults could have happened when producing the scones.

4

Question 4 (continued)

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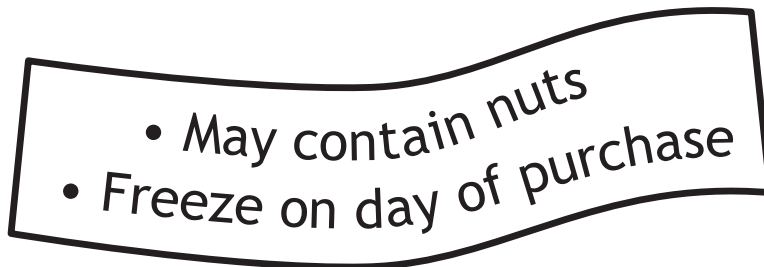
- (c) Describe **two** rules that must be followed when carrying out sensory testing.

2

Rule 1 _____

Rule 2 _____

- (d) The label on the scone packaging includes the following information.



Explain **one** benefit to the consumer of each of the above points of information.

2

Total marks 10



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Question 5

- (a) A couple want to reduce the cost of their weekly food shopping, and would like to buy ethically produced food, with low food miles.

Make **four** evaluative comments about the suitability of the following method of shopping for the couple.

4



Sunnytown Weekly Farmers Market

- *Locally grown organic fruit and vegetables at low prices*
- *Free range eggs available*
- *Over 30 stalls of food produce*
- *All fish and meat vacuum packed*
- *Fairtrade group selling a range of coffee, tea and chocolate*

Evaluation

Point 1 _____

Point 2 _____

Point 3 _____



* X 7 3 6 7 5 0 1 1 2 *

Question 5 (a) (continued)

Point 4 _____

(b) Explain how the following factors may affect consumer choice of food. **2**

Budget _____

Advertising _____

(c) Give **two** reasons why Trading Standards officers would inspect the food stalls at a Farmers Market. **2**

Reason 1 _____

Reason 2 _____

[Turn over for Question 5 (d) on *Page fourteen*



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Question 5 (continued)

- (d) Evaluate the suitability of Ultra Heat Treated (UHT) products for the consumer.

2

Total marks 10

[END OF QUESTION PAPER]



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ADDITIONAL SPACE FOR ANSWERS

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ADDITIONAL SPACE FOR ANSWERS

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ACKNOWLEDGEMENTS

Question 5(a)—80076316 iralu/Shutterstock.com