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National
Qualifications
2023 MODIFIED

Mark

X836/75/01

**Health and Food
Technology**

MONDAY, 15 MAY
9:00 AM – 10:50 AM



* X 8 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 questions 1 and 2 and any THREE from the following FOUR 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 8 3 6 7 5 0 1 0 1 *

Total marks — 50

Attempt questions 1 and 2 and any THREE from the following FOUR questions.

Question 1

- (a) Identify **two** ways to reduce the risk of dental caries.

2

Way 1 _____

Way 2 _____

- (b) State **one** function and name **one** food source of each of the following nutrients.

4

- Vitamin A
- Sodium

Vitamin A

Function _____

Food source _____

Sodium

Function _____

Food source _____



Question 1 (continued)

- (c) Describe **two** benefits of using Ultra Heat-Treated (UHT) foods for elderly consumers.

2

Benefit 1 _____

Benefit 2 _____

- (d) Explain **two** reasons why it is important for the elderly to follow a healthy balanced diet.

2

Reason 1 _____

Reason 2 _____

[Turn over



Question 2

A 25-year-old female reality TV star is overweight.

The table below shows the dietary reference values for females aged 19–50 years old.

Dietary reference values for females aged 19–50 years old					
Estimated average requirements	Reference nutrient intakes				Guideline daily amount
Energy (kcal)	Protein (g)	Vitamin B (mg)	Vitamin D (μg)	Iron (mg)	Fibre (g)
2175	55.5	1.0	10	14.8	30

The table below shows the dietary analysis of a typical days meals for the 25-year-old female.

Dietary analysis of her typical day's meals					
Energy (kcal)	Protein (g)	Vitamin B (mg)	Vitamin D (μg)	Iron (mg)	Fibre (g)
2850	45.2	1.2	7	6.2	23



Question 2 (continued)

- (b) Explain **two** ways that having an allotment may impact on the reality TV star's choice of food.

2

Way 1 _____

Way 2 _____

- (c) Explain **two** ways the reality TV star can help to reduce her risk of developing osteoporosis.

2

Way 1 _____

Way 2 _____



[Turn over for next question

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

Attempt any THREE from the following FOUR questions

Question 3

- (a) A food manufacturer is developing a new vegetarian ready meal.

Explain the importance of **each** of the following stages in the product development process of the vegetarian ready meal.

2

Prototype production _____

Marketing plan _____

- (b) The vegetarian ready meal is aimed at teenagers.

Give two reasons why a teenager may choose a vegetarian diet.

2

Reason 1 _____

Reason 2 _____



Question 3 (continued)

MARKS DO NOT WRITE IN THIS MARGIN

- (c) The vegetarian ready meal has the following information on the label.
Explain the importance of each to the consumer.

2

Use-by date _____



- (d) The vegetarian ready meal contains the following ingredients.

- brown rice
- peas
- red pepper
- vegetarian mince
- red kidney beans
- dried mixed herbs.

Identify **two** pieces of current dietary advice the vegetarian ready meal could help teenagers meet.

Explain the importance to health of **each** piece of current dietary advice.

4

Current dietary advice _____

Importance to health _____



[Turn over

Question 3 (d) (continued)

Current dietary advice _____

Importance to health _____



Question 4

(a) A young working couple wish to buy a meal kit delivery box.
Evaluate the suitability of the following box for the couple:

4

- over 50 recipes to choose from each week
- healthy eating range
- minimum £5 delivery fee
- ingredients supplied in set quantities for 2 or 4 people
- can be ordered on-line between 9am and 5pm daily.

Evaluation _____

[Turn over



Question 4 (continued)

- (b) Explain **two** reasons why the meal kit delivery company would carry out market research before launching their new product.

2

Reason 1 _____

Reason 2 _____

- (c) Explain why the ingredients in the meal kit may contain each of the following food additives.

2

Preservatives _____

Sweeteners _____



Question 4 (continued)

(d) The couple are expecting a baby.

Explain the importance of **each** of the following nutrients in the diet of a pregnant woman.

2

Iron _____

Protein _____

[Turn over



Question 5

- (a) A winter festive market has a range of street food stalls.

Describe **three** ways a Trading Standards Officer protects the consumers who visit the winter festive market street food stalls.

3

Way 1 _____

Way 2 _____

Way 3 _____



Question 5 (continued)

(b) One of the stalls is selling ginger biscuits.

Explain the effect on the finished biscuits if each of the following changes is made to the biscuit recipe.

Caster sugar to soft brown sugar _____

Butter to margarine _____

[Turn over



Question 5 (continued)

(c) The ginger biscuits can be bought in the following packaging:

- cardboard box
- plastic window
- variety of sizes
- stackable
- folds flat
- grease proof/absorbent layer
- resealable.

Evaluate the suitability of this packaging for the ginger biscuits.

4



Evaluation

Question 5 (c) (continued)

[Turn over



Question 6

- (a) A local sandwich shop prepares a range of fresh sandwiches.

Explain **three** ways the staff in the sandwich shop could ensure food safety when preparing the sandwiches.

3

Way 1 _____

Way 2 _____

Way 3 _____

- (b) The best selling sandwich in the sandwich shop has a cheese filling.

Identify **two** nutrients found in cheese.

2

Nutrient 1 _____

Nutrient 2 _____



Question 6 (continued)

- (c) The sandwich shop would like to carry out sensory testing on a new product. Name **one** type of sensory test the sandwich shop may carry out. Explain **two** reasons why they would carry out this type of test.

3

Sensory test _____

Explanation 1 _____

Explanation 2 _____

- (d) Describe **two** ways the sandwich shop could reduce their food waste.

2

Way 1 _____

Way 2 _____

[END OF QUESTION PAPER]



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ADDITIONAL SPACE FOR ANSWERS



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