



National  
Qualifications  
2016

**X736/76/11**

**Health and Food  
Technology**

THURSDAY, 2 JUNE

1:00 PM – 2:30 PM

**Total marks — 50**

Attempt ALL questions.

Write your answers clearly in the answer booklet provided. In the answer booklet you must clearly identify the question number you are attempting.

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

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



\* X 7 3 6 7 6 1 1 \*

Total marks — 50  
Attempt ALL questions

**Question 1**

- (a) Explain how a diet containing alternative proteins can contribute to a healthy diet. 2
- (b) Explain how a diet high in dietary fibre can increase the risk of anaemia. 2
- (c) A 15 year old girl has decided to become a vegetarian.

**Table 1** shows the Dietary Reference Values for 15–18 year old females.

| Dietary Reference Values for females aged 15–18 years old |                            |                               |                |              |
|---|----------------------------|-------------------------------|----------------|--------------|
| Estimated average requirements                            | Reference Nutrient Intakes |                               |                |              |
| Energy (MJ)/kcal  | Protein (g)                | Vitamin B12 ( $\mu\text{g}$ ) | Vitamin C (mg) | Calcium (mg) |
| 8.83/2110   | 45.4                       | 1.5                           | 40             | 800          |

The food intake of a 15 year old girl includes the following lunch.

|  |
|--|
| <p>Lentil soup with white bread roll</p> <p>Raspberry cheesecake</p> <p>Fresh orange juice</p> |
|--|

## Question 1 (c) (continued)

Table 2 shows the dietary analysis of the 15 year old girl's food intake, including the lunch.

| Dietary analysis of the 15 year old's food intake |                            |                               |                |              |
|---|----------------------------|-------------------------------|----------------|--------------|
| Estimated average requirements                    | Reference Nutrient Intakes |                               |                |              |
| Energy (MJ/kcal)                                  | Protein (g)                | Vitamin B12 ( $\mu\text{g}$ ) | Vitamin C (mg) | Calcium (mg) |
| 7.89/1885   | 47.3                       | 0.9                           | 45             | 750          |

Analyse **three different** aspects of the girl's diet, in relation to the Dietary Reference Values (DRVs) for 15–18 year old females.

For each aspect of her diet you have identified:

- comment on the impact of her diet in relation to the Dietary Reference Values
- a potential consequence for her health
- a conclusion about the contribution made by her lunch choice to her food intake.

9

(d) Evaluate each of the following marketing techniques used to promote food products aimed at teenage consumers.

- (i) Celebrity endorsement
- (ii) In-store tasting

3

(e) A manufacturer is developing a range of ready meals.

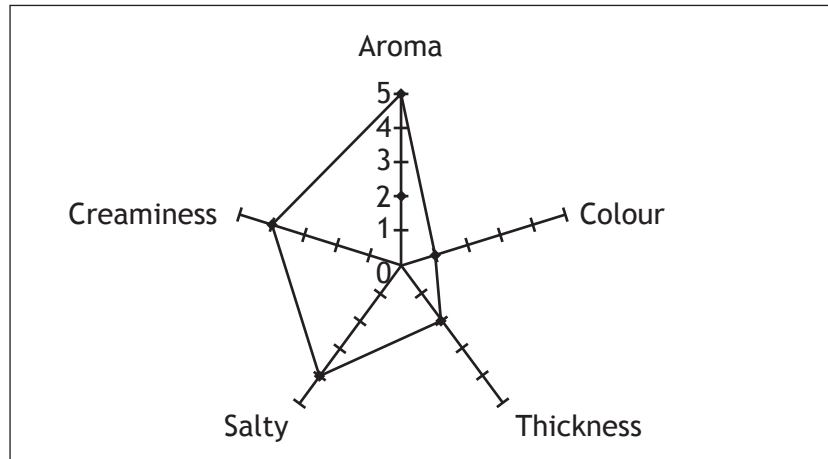
Explain **four** stages, other than marketing plan, in the development of a product to be included in the range.

4

[Turn over

Question 2

- (a) Explain how a food manufacturer can benefit from using food additives. 3
- (b) The star profile shows the results of sensory testing for a new soup. Evaluate the suitability of this soup for primary school children. 4



**Key:** 5 = very high  
 4 = high  
 3 = slightly high  
 2 = low  
 1 = very low

- (c) Explain why food poisoning may occur, despite food manufacturers being required to follow strict hygiene regulations. 3

[Turn over for next question

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## Question 3

- |  |   |
|--|---|
| (a) Explain the function of each of the following ingredients when used in baked products. |   |
| (i) Fat  | 1 |
| (ii) Egg   | 1 |
| (b) Evaluate the contribution of bread in the diet.  | 4 |
| (c) Evaluate how each of the following affects consumer food choice.                       |   |
| (i) Organic foods  | 2 |
| (ii) Fairtrade foods   | 2 |

## Question 4

- |   |          |
|---|----------|
| (a) Evaluate how consumer organisations can protect the consumer when buying food.                | <b>3</b> |
| (b) Evaluate how manufacturers are helping consumers meet current dietary advice, in relation to: |          |
| (i) Fruit and vegetables  |          |
| (ii) Salt intake.   | <b>4</b> |
| (c) Explain <b>three</b> dietary factors which may contribute to obesity.                         | <b>3</b> |

[END OF QUESTION PAPER]

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