



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 (μg)	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.

Lentil soup with white bread roll
Raspberry cheesecake
Fresh orange juice

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 (μg)	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.

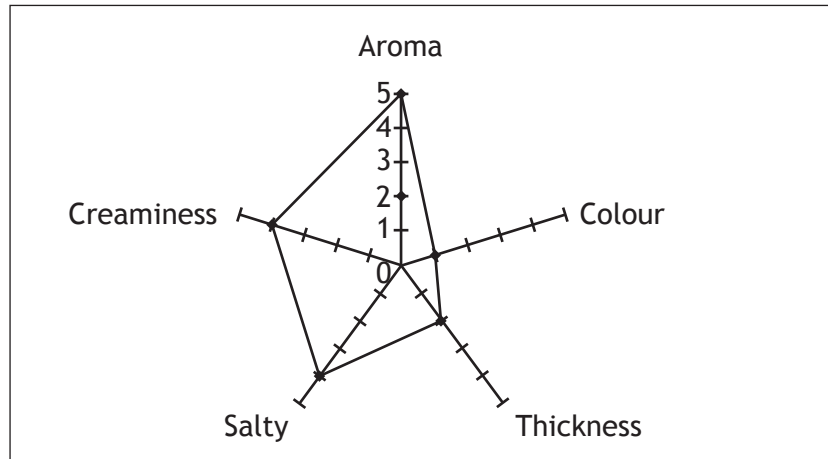
Explain **four** stages, other than marketing plan, in the development of a product to be included in the range.

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. | 3 |
| (b) Evaluate how manufacturers are helping consumers meet current dietary advice, in relation to: | |
| (i) Fruit and vegetables | |
| (ii) Salt intake. | 4 |
| (c) Explain three dietary factors which may contribute to obesity. | 3 |

[END OF QUESTION PAPER]

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