



National
Qualifications
SPECIMEN ONLY

SQ23/H/01

**Health and Food
Technology**

Date — Not applicable

Duration — 1 hour and 30 minutes

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.



* S Q 2 3 H 0 1 0 1 *

Total marks — 50
Attempt ALL questions

Question 1

A nursery is reviewing the snacks it provides. The snacks must be healthy and appealing to the children.

- (a) The snack offered by the nursery must include fruit or vegetables.

Explain how a diet high in fruit and vegetables can reduce the risk of the following dietary diseases:

- bowel disease
- obesity.

2

- (b) Fruit and vegetables may be bought in modified atmosphere packaging (MAP).

Evaluate the suitability of modified atmosphere packaging for use in the nursery.

3

- (c) The nursery aims to meet the nutritional needs of the children.

The table below shows the Dietary Reference Values for 4-6 year-old males.

Dietary Reference Values for 4-6 year-old males				
Estimated average requirements	Reference Nutrient Intakes			
Energy (MJ)	Vitamin B2 (mg)	Vitamin C (mg)	Calcium (mg)	Sodium (mg)
4.06	0.8	30	450	700

The food intake of a four year-old boy at the nursery includes the following snack:

Snack

White breadsticks and Carrot sticks with Smoked mackerel dip and Salsa dip

Question 1 (continued)

The table below shows the dietary analysis of his food intake, including the snack.

Dietary analysis of the four year-old boy's food intake				
Estimated average requirements	Reference Nutrient Intakes			
Energy (MJ)	Vitamin B2 (mg)	Vitamin C (mg)	Calcium (mg)	Sodium (mg)
4.91	0.9	24	455	850

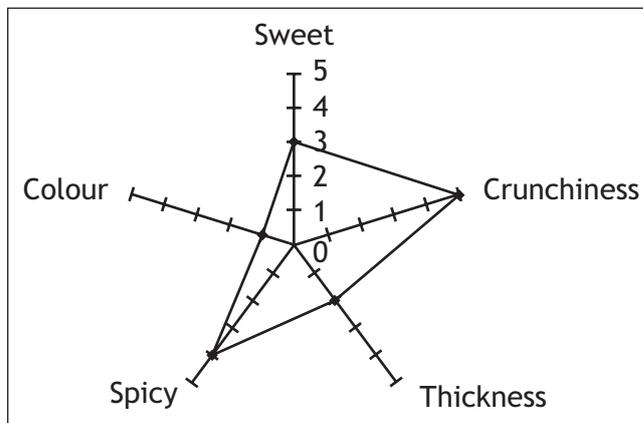
Analyse **three different** aspects of the boy's diet, in relation to the Dietary Reference Values (DRVs) for 4-6 year-old males.

For **each** aspect of his diet you have identified, comment on the impact of his diet in relation to the DRVs, the potential consequence for his health and a conclusion about the contribution made by the snack.

9

(d) A food manufacturer is developing a salsa dip for children.

The star profile below shows the results of sensory testing of a prototype of the dip.



Key: 5 = very high
 4 = high
 3 = neither high nor low
 2 = low
 1 = very low

Evaluate the suitability of this dip for children.

4

(e) Explain the role of staff from the Environmental Health Department in helping the nursery staff reduce the risk of food poisoning.

2

Question 2

A retailer is opening a new food store.

- (a) The retailer is planning to sell a range of organic produce.
Evaluate the impact of including a range of organic produce in the store. 4
- (b) The retailer wants to produce a range of vegetable soups for sale in the food store.
Explain how the loss of vitamin C could be minimised when preparing vegetables for the soup. 2
- (c) Evaluate the use of each of the following methods of advertising for the retailer:
• leaflets
• radio advertising. 4

Question 3

A manufacturer wants to add cupcakes to the current range of baked products on sale.

- (a) Explain why the manufacturer would carry out the following stages of food product development:
• prototype production
• first production run. 4
- (b) Evaluate the use of additives in the cupcakes. 4
- (c) Describe the result on the baked cupcakes of increasing the proportion of sugar in the cake mixture. 2

Question 4

Manufacturers develop new products to meet the needs of consumers.

- (a) Explain nutritional factors the manufacturer should consider when developing food products that could help to reduce the risk of coronary heart disease (CHD). 6
- (b) Explain how the information that the manufacturer could include on the food product label, **other than ingredients and nutritional information**, could help a consumer with coronary heart disease (CHD) to make informed food choices. 4

[END OF SPECIMEN QUESTION PAPER]



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Marking Instructions

These Marking Instructions have been provided to show how SQA would mark this Specimen Question Paper.

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General Marking Principles for Higher Health and Food Technology

This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this Paper. These principles must be read in conjunction with the detailed marking instructions, which identify the key features required in candidate responses.

- (a) Marks for each candidate response must always be assigned in line with these General Marking Principles and the Detailed Marking Instructions for this assessment.
- (b) Marking should always be positive. This means that, for each candidate response, marks are accumulated for the demonstration of relevant skills, knowledge and understanding: they are not deducted from a maximum on the basis of errors or omissions.
- (c)
 - (i) For marks to be awarded, responses must relate to the question asked. Where candidates give points of knowledge without specifying the context, these should be awarded marks unless it is clear that they do not relate to the context of the question.
 - (ii) In this question paper, the following command words are used:
A: Describe
B: Explain
C: Evaluate
D: Analyse
 - (iii) For each candidate response, the following provides an overview of the marking principles. Refer to the specific Marking Instructions for further guidance on how these principles should be applied.

A. Questions that ask candidates to Describe . . .

Candidates should provide a statement of characteristics or features related to the question. It is more than an outline or a list. They need not be in any particular order. Candidates may provide a number of straightforward points or a smaller number of developed points, or a combination of these.

Up to the total mark allocation for this question:

- 1 mark should be awarded for each accurate relevant point of knowledge linked to the context of the question.
- A further mark should be awarded for any accurate relevant point that is developed from the same point of knowledge.

B. Questions that ask candidates to Explain . . .

Candidates should make a number of points that relate to the cause and effect and/or make the relationship between things clear in the context of the question. Candidates may provide a number of straightforward explanations or a smaller number of developed explanations, or a combination of these.

Up to the total mark allocation for this question:

- 1 mark should be awarded for each accurate relevant point of reason.
- A further mark should be awarded for any accurate relevant point that is developed from the same reason.

C. Questions that ask the candidate to Evaluate . . .

Candidates should make a number of comments which make a judgement and determine the value of something based on the criteria provided in the question. Candidates may provide a number of straightforward comments or a smaller number of developed comments, or a combination of these.

Up to the mark allocation for this question:

- 1 mark should be awarded for each accurate relevant evaluative comment linked to the context of the question.
- A further mark should be awarded for any accurate relevant evaluative comment that is developed from the same point of information.

D. Questions that ask the candidate to Analyse . . .

Candidates should make a number of comments related to the context of the question. Candidates should identify appropriate information from the given sources, the relationship between the identified information, and their significance when taken together.

Up to the mark allocation for this question:

- 1 mark should be awarded for each explanation of the impact of one piece of information linked to the context of the question.
 - 1 further mark should be awarded for an explanation that is developed, to include the impact of a piece of information from a second source linked to the same identified piece of information. (2 marks)
- or
- 2 further marks should be awarded for an explanation that is developed to include the impact of further information from two further sources linked to the same identified piece of information. (3 marks)

Marking Instructions for each question

Question		Expected response	Max mark	Additional guidance
1	a	<p>Possible candidate responses could include:</p> <ul style="list-style-type: none"> • Fruit and vegetables contain dietary fibre making faeces soft and bulky so reduce the risk of bowel disease. • Many fruits have a high water content which binds with dietary fibre so reducing the risk of bowel disorders. • Fruit and/or vegetables are low in energy so would not provide extra calories so reducing the risk of obesity. <p><i>Accept any other appropriate answer</i></p>	2	<p>Candidates should make a number of points that make the issue plain or clear, for example by showing connections between the reasons given and the context of the question.</p> <p>Up to the mark allocation for this question:</p> <ul style="list-style-type: none"> • 1 mark should be given for each accurate relevant explanation • candidates can be credited up to a maximum of 2 marks <p>Candidates must explain two relevant points of information showing a link between a diet high in fruit and/or vegetables and a dietary disease.</p> <ul style="list-style-type: none"> • 1 mark should be given for each correct reason related to a different dietary disease up to a maximum of 2 marks in total • a maximum of 1 mark may be awarded for each correct explanation <i>(up to a maximum of 2 marks)</i>
1	b	<p>Possible candidate responses could include:</p> <ul style="list-style-type: none"> • +ve: A wide range of prepared fruits and vegetables can be bought. This could be suitable as little preparation would be needed, saving time/staff need not be skilled. • +ve: The shelf life of foods can be extended without the use of additives. This could be suitable as 	3	<p>Candidates should make a number of evaluative comments related to the context of the question.</p> <p>Candidates may provide a number of straightforward evaluations or a smaller number of developed evaluations, or a combination of these.</p> <p>Up to the mark allocation for this question:</p> <ul style="list-style-type: none"> • 1 mark should be awarded for each relevant evaluation • a further mark should be awarded for any evaluation that is developed <p><i>Candidates can be credited in a number of ways up to a maximum of 3 marks.</i></p>

Question		Expected response	Max mark	Additional guidance
		<p>the children may be sensitive to some additives so this will make it safe for them to eat.</p> <ul style="list-style-type: none"> • -ve: The shelf life can only be extended in good-quality foods. This might be less suitable as this may increase the cost of the foods and may be too expensive for the nursery. • -ve: Most foods that use modified atmosphere packaging require additional packaging. This may be less suitable for the nursery if it is concerned for the environment as this will increase waste. <p><i>Accept any other justifiable answer</i></p>		<p>Candidates should make comments on the suitability of modified atmosphere packaging (MAP).</p> <ul style="list-style-type: none"> • a maximum of 3 marks may be awarded for accurate evaluative comments relating to three different aspects of MAP • a maximum of 1 mark may be awarded for developed evaluations linked to an identified aspect of MAP <p>For example, candidate could provide <i>either</i>:</p> <ul style="list-style-type: none"> • 3 evaluative comments each linked to a different aspect of MAP (maximum of 3 marks) <i>or</i> • 1 evaluative comments linked to an aspect of MAP+ two evaluative comments linked to a second aspect of MAP <p style="text-align: right;"><i>(up to a maximum of 3 marks)</i></p>
1	c	<p>Possible candidate responses could include:</p> <p>Points of explanation which demonstrate the impact of features of the boy's diet when taken together:</p> <ul style="list-style-type: none"> • The energy intake is too high for the child. This could make him overweight/obese. <i>(Explanation of the impact of his energy intake linked to the DRV – 1 mark.)</i> • This could increase his risk of type 2 diabetes in later life. <i>(Possible</i> 	9	<p>Candidates should make a number of comments related to the context of the question.</p> <p>Candidates should identify appropriate information from the given sources, the relationship between the identified information, and their significance when taken together.</p> <p>Up to the mark allocation for this question:</p> <ul style="list-style-type: none"> • 1 mark should be awarded for each explanation of the impact of the boy's diet in relation to the DRVs • a further mark should be awarded for any relevant explanation that is developed to include an explanation of the possible consequence on the

Question	Expected response	Max mark	Additional guidance
	<p><i>consequence of his energy intake on his health – 1 mark.)</i></p> <ul style="list-style-type: none"> The breadsticks will be high in energy which may not be suitable as they will contribute to his energy intake. <i>(Conclusion about the contribution made by the snack – 1 mark.)</i> The vitamin C intake is too low for the child. The vitamin C could be used to absorb iron. As the intake is low, the iron in the diet may not be absorbed. <i>(Explanation of the impact of his vitamin C intake in relation to the DRV – 1 mark.)</i> This could increase the risk of the child becoming anaemic. <i>(Possible consequence of his vitamin C intake on his health – 1 mark.)</i> The carrot sticks/salsa will contain vitamin C, which is suitable as they are contributing to his vitamin C intake. <i>(Conclusion about the contribution made by the snack – 1 mark.)</i> The sodium intake is too high for the child. This could raise his blood pressure. <i>(Explanation of the impact of his sodium intake linked to the DRV – 1 mark.)</i> 		<p>boy's health <i>or</i> for any relevant explanation that is developed to include a conclusion about the contribution made by the snack</p> <ul style="list-style-type: none"> a further 2 marks should be awarded for any relevant explanation that is developed to include an explanation of the possible consequence on the boy's health and a conclusion about the contribution made by the snack <p>Candidates should make comments on the suitability of aspects of the food intake related to the individual in the case study, based on the range of information given.</p> <p>For each of three identified aspects of the boy's diet in relation to the DRVs:</p> <ul style="list-style-type: none"> 1 mark is available for explaining the impact of three different aspects of the boy's diet in relation to the DRVs 1 mark is available for explaining the possible consequences for the boy's health 1 mark is available for reaching a conclusion about the contribution made by the snack to the boy's diet <p style="text-align: right;"><i>(9 marks)</i></p> <p>For example, for each identified aspect of the boy's diet candidates could provide either:</p> <ul style="list-style-type: none"> one point which demonstrates the impact of his diet in relation to the DRVs <i>(1 mark)</i> plus one potential consequence of the impact on his health <i>(1 mark)</i> <i>or</i> one point which demonstrates the impact of his diet in relation to the DRVs <i>(1 mark)</i> plus one conclusion about the contribution made by the snack <i>(1 mark)</i>

Question		Expected response	Max mark	Additional guidance
		<ul style="list-style-type: none"> • Raised blood pressure could lead to increased risk of stroke in later life. <i>(Possible consequence of high sodium intake on his health – 1 mark.)</i> • The smoked mackerel is high in salt which is not suitable because it will contribute to his sodium intake. <i>(Conclusion about the contribution made by the snack – 1 mark.)</i> <p><i>For each identified feature, accept any other correct impact of diet, consequence for health, or the contribution made by the snack, linked to the appropriate DRV.</i></p>		<p>or</p> <ul style="list-style-type: none"> • one point which demonstrates the impact of his diet in relation to the DRVs <i>(1 mark)</i> plus one potential consequence of the impact on his health <i>(1 mark)</i> plus one conclusion about the contribution made by the snack <i>(1 mark)</i> <p>or</p> <ul style="list-style-type: none"> • a combination of the above <p style="text-align: right;"><i>(up to a maximum of 9 marks)</i></p>
1	d	<p>Possible candidate responses could include:</p> <ul style="list-style-type: none"> • +ve: The dip has been given a five for crunchiness. This may not be suitable as this may indicate the salsa has crunchy pieces of food which may be unappealing to children. • -ve: The colour has been rated at one. This may make the dip unattractive to children as it suggests the dip will lack colour. • +ve: The colour has been rated at one. This may be good as it may make 	4	<p>Candidates should make a number of evaluative comments related to the context of the question.</p> <p>Candidates may provide a number of straightforward evaluations or a smaller number of developed evaluations, or a combination of these.</p> <p>Up to the mark allocation for this question:</p> <ul style="list-style-type: none"> • 1 mark should be awarded for each relevant evaluation • a further mark should be awarded for any evaluation that is developed <p><i>Candidates can be credited in a number of ways up to a maximum of 4 marks.</i></p>

Question		Expected response	Max mark	Additional guidance
		<p>the product suitable for children who are sensitive to additives.</p> <ul style="list-style-type: none"> • +ve: The salsa has been given a rating of three for the sweetness. This may be suitable as the dip is quite sweet which may encourage children to eat it as many children like sweet foods. • -ve: The salsa may be less suitable as it has been given a rating of three for sweetness. This may discourage parents from buying the dip as it may increase the risk of dental carries. <p><i>Accept any other justifiable answer</i></p>		<p>Candidates should make comments on the suitability of the salsa for children based on the results of testing.</p> <ul style="list-style-type: none"> • a maximum of 4 marks may be awarded for accurate evaluative comments relating to four different aspects of the suitability of the salsa for children • a maximum of 2 marks may be awarded for developed evaluations linked to the same identified aspect of the suitability of the salsa for children <p>For example, candidates could provide <i>either</i>:</p> <ul style="list-style-type: none"> • four evaluative comments each linked to a different aspect of the suitability of the salsa for children (maximum of 4 marks) <i>or</i> • two evaluative comments linked to each of two different aspects of the suitability of the salsa for children (maximum of 4 marks) <i>or</i> • two evaluative comments each linked to a different aspect of the suitability of the salsa for children + two evaluative comments linked to a third aspect of the suitability of the salsa for children <p><i>(up to a maximum of 4 marks)</i></p>
1	e	<p>Possible candidate responses could include:</p> <ul style="list-style-type: none"> • The EH staff may offer advice to the nursery about safe storage of foods. • They may offer staff training to ensure that all staff involved in handling food can do so safely. • They may look at food preparation practices in the nursery and suggest 	2	<p>Candidates should make a number of factual relevant points. These should relate to the question.</p> <p>Up to the mark allocation for this question:</p> <ul style="list-style-type: none"> • 1 mark should be given for each accurate relevant interpretation of a point of knowledge <p><i>Candidates can be credited up to a maximum of 2 marks.</i></p>

Question		Expected response	Max mark	Additional guidance
		<p>improvements.</p> <p><i>Accept any other appropriate answer</i></p>		<p>Candidates should describe the duties of the EH staff in relation to reducing the risk of food poisoning.</p> <ul style="list-style-type: none"> • 1 mark should be given for each correct response made up to a maximum of 2 marks in total • a maximum of 2 marks may be awarded for correct interpretation of the duties of the EHO in relation to reducing the risk of food poisoning <i>(up to a maximum of 2 marks)</i>
2	a	<p>Possible candidate responses could include:</p> <ul style="list-style-type: none"> • +ve: Including organic produce may be beneficial as it may make it easier for ethically or environmentally aware consumers to access these products. • +ve: Potential consumers may be concerned about the impact on the environment of chemicals used in food production so this may increase sales. • +ve: There is a wide range of organic produce available, so consumers may be able to get the items they require. • -ve: Organic produce may have a shorter shelf life, which may be less suitable as there may be more waste. • -ve: Organic produce may be more expensive so may discourage consumers from buying. 	4	<p>Candidates should make a number of evaluative comments related to the context of the question.</p> <p>Candidates may provide a number of straightforward evaluations or a smaller number of developed evaluations, or a combination of these.</p> <p>Up to the mark allocation for this question:</p> <ul style="list-style-type: none"> • 1 mark should be awarded for each relevant evaluation • a further mark should be awarded for any evaluation that is developed <p><i>Candidates can be credited in a number of ways up to a maximum of 4 marks.</i></p> <p>Candidates should make comments on the suitability for the retailer of stocking organic produce.</p> <ul style="list-style-type: none"> • a maximum of 4 marks may be awarded for accurate evaluative comments relating to four different aspects of stocking organic produce • a maximum of 2 marks may be awarded for developed evaluations linked to the same identified aspect of stocking organic produce <p>For example, candidates could provide <i>either</i>:</p>

Question		Expected response	Max mark	Additional guidance
		<p><i>Accept any other justifiable answer, linked to either the consumer or the retailer.</i></p>		<ul style="list-style-type: none"> • four evaluative comments each linked to a different aspect of stocking organic produce (maximum of 4 marks) <i>or</i> • two evaluative comments linked to each of two different aspects of stocking organic produce <i>or</i> • two evaluative comments each linked to a different aspect of stocking organic produce + two evaluative comments linked to a third aspect of stocking organic produce (maximum of 4 marks) <p style="text-align: right;"><i>(up to a maximum of 4 marks)</i></p>
2	b	<p>Possible candidate responses could include:</p> <ul style="list-style-type: none"> • Avoid peeling vegetables when possible as the vitamin C can be lost from under the skin. • Cut vegetables into larger chunks to reduce the surface areas being exposed to air, which results in oxidation and the loss of vitamin C • Prepare vegetables when needed as preparation in advance can lead to oxidation and the loss of vitamin C. • Avoid soaking the vegetables as vitamin C is water-soluble so will be lost in the water. <p><i>Accept any other appropriate answer</i></p>	2	<p>Candidates should make a number of points that make the issue plain or clear, for example by showing connections between the reasons given and the context of the question.</p> <p>Up to the mark allocation for this question:</p> <ul style="list-style-type: none"> • 1 mark should be given for each accurate relevant explanation <p><i>Candidates can be credited up to a maximum of 2 marks.</i></p> <p>Candidates should explain two relevant points of information that explain how vitamin C can be preserved during the preparation of vegetables.</p> <ul style="list-style-type: none"> • 1 mark should be given for each correct reason related to a different aspect of preserving the vitamin C content of vegetables, up to a maximum of 2 marks in total • a maximum of 1 mark may be awarded for each correct explanation <p style="text-align: right;"><i>(up to a maximum of 2 marks)</i></p>
2	c	<p>Possible candidate responses could include:</p>	4	<p>Candidates should make a number of evaluative comments related to the context of the question.</p>

Question	Expected response	Max mark	Additional guidance
	<p>Leaflets</p> <ul style="list-style-type: none"> • +ve: This may be effective as leaflets advertising the shop could be put through local doors which may encourage people to try the shop. • +ve: Leaflets may be an inexpensive way to promote produce for the retailer which would be good as he/she may not have a large budget for advertising. • +ve: Leaflets can be left in a number of places such as local community centres so could be picked up by a wide variety of consumers which may be a benefit as this may increase sales to a wider consumer base. • -ve: Consumers may treat the leaflet as junk mail and not look at it which is bad as the money would have been wasted. • -ve: The products being advertised on the leaflet may not be of interest to the consumer so the leaflet would not encourage them to visit the store so it would not have an impact on sales. <p>Radio advertising</p> <ul style="list-style-type: none"> • +ve: Radio can be used locally. This 		<p>Candidates may provide a number of straightforward evaluations or a smaller number of developed evaluations, or a combination of these.</p> <p>Up to the mark allocation for this question:</p> <ul style="list-style-type: none"> • 1 mark should be awarded for each relevant evaluation • a further mark should be awarded for any evaluation that is developed <p><i>Candidates can be credited in a number of ways up to a maximum of 4 marks.</i></p> <p>Candidates should make evaluative comments on the use of each type of advertising for the retailer.</p> <ul style="list-style-type: none"> • a maximum of 3 marks may be awarded for accurate evaluative comments relating to the effectiveness of either identified method of advertising, up to a maximum of 3 marks • a maximum of 2 marks may be awarded for developed evaluations linked to the same identified point evaluating the use of the advertising method <p>For example, candidate could provide <i>either</i>:</p> <ul style="list-style-type: none"> • three evaluative comments each linked to a different point explaining the effectiveness of one advertising method + one evaluative comment linked to the second advertising method (maximum of 4 marks) <i>or</i> • two evaluative comments each linked to two different points explaining the effectiveness of each different advertising method (maximum of 4 marks) <p><i>or</i></p> <ul style="list-style-type: none"> • two evaluative comments each linked to a different point explaining the

Question		Expected response	Max mark	Additional guidance
		<p>might be suitable as it makes it easy to target consumers in the area where the shop is situated.</p> <ul style="list-style-type: none"> • +ve: Radio adverts are repeated on a regular basis throughout the day. This could be very effective as consumers listening at different times of the day will still be exposed to the advert and it may therefore encourage sales. • -ve: Some consumers may not listen to the radio. This may make it unsuitable as they will not be exposed to the advert so this would be ineffective in increasing sales. • -ve: Advertising on radio may be expensive for the retailer so may not be suitable as the cost may not be recouped in increased sales. • -ve: Products being advertised in this way cannot be seen by the consumers so may not encourage consumers to try the product, making this ineffective. <p><i>Accept any other justifiable answer</i></p>		<p>effectiveness of one advertising method + two evaluative comments linked to a third point explaining the effectiveness of a different advertising method (maximum of 4 marks)</p> <p><i>(up to a maximum of 4 marks)</i></p>
3	a	Possible candidate responses could include:	4	Candidates should make a number of points that make the issue plain or clear, for example by showing connections between the reasons given and the context

Question		Expected response	Max mark	Additional guidance
		<p>Prototype production</p> <ul style="list-style-type: none"> • A manufacturer would produce a prototype of what the product will look like so could decide if changes need to be made. • A manufacturer could measure the product against the specification to see if it needs to be modified to meet the brief. <p>First production run</p> <ul style="list-style-type: none"> • A manufacturer could find out whether the product meets the quality standards required so they could further modify the product if required. • A manufacturer could make changes to the labelling at this stage if the product needs to be changed so saving money at later stages. <p><i>Accept any other appropriate answer</i></p>		<p>of the question.</p> <p>Up to the total mark allocation for this question:</p> <ul style="list-style-type: none"> • 1 mark should be given for each accurate relevant explanation <p><i>Candidates can be credited up to a maximum of 4 marks.</i></p> <p>Candidates should explain four relevant points of information explaining the information gained from carrying out specified stages of food product development.</p> <p>1 mark should be given for each correct explanation related to a different point of information up to a maximum of 4 marks in total.</p> <ul style="list-style-type: none"> • a maximum of 1 mark may be awarded for each correct explanation • a maximum of 3 marks can be awarded for explanations linked to any one stage in the food product development process. <p>For example candidates could provide <i>either</i>:</p> <ul style="list-style-type: none"> • two different explanations linked to prototype production + two different explanations linked to first production run <i>or</i> • three different explanations linked to one identified stage in the question + one further point linked to the other identified stage in the question <i>(up to a maximum of 4 marks)</i>
3	b	Possible candidate responses could include:	4	Candidates should make a number of evaluative comments related to the context of the question.

Question	Expected response	Max mark	Additional guidance
	<p>Preservatives</p> <ul style="list-style-type: none"> • +ve: A small amount of salt (or any other appropriate preservative) may be added when baking the cupcakes which may extend the shelf life of the cupcakes which is good as it reduces waste. • -ve: If salt (or any other appropriate preservative) is used when baking the cupcakes it may affect the flavour, which may not be good as it may make it unappealing to consumers. <p>Sweeteners</p> <ul style="list-style-type: none"> • +ve: Can be used to enhance the flavour of the cupcakes without additional energy which would benefit consumers who are on calorie-controlled diets. • -ve: Cakes baked using sweeteners may not be as aesthetically appealing as the sweetener may not give a golden top so the cakes may be rejected by the consumer. <p>Flavourings</p> <ul style="list-style-type: none"> • +ve: Flavourings can be used to add a variety of different flavours to the cakes which is good as this will increase choice for consumers. • -ve: Some natural flavourings are 		<p>Candidates may provide a number of straightforward evaluations or a smaller number of developed evaluations, or a combination of these.</p> <p>Up to the total mark allocation for this question:</p> <ul style="list-style-type: none"> • 1 mark should be awarded for each relevant evaluation • a further mark should be awarded for any evaluation that is developed <p><i>Candidates can be credited in a number of ways up to a maximum of 4 marks.</i></p> <p>Candidates should make comments on the suitability of food additives.</p> <ul style="list-style-type: none"> • a maximum of 4 marks may be awarded for accurate evaluative comments relating to four different aspects of the use of food additives in cupcakes • a maximum of 2 marks may be awarded for developed evaluations linked to the same identified aspect of the use of food additives in cupcakes <p>For example, candidate could provide <i>either</i>:</p> <ul style="list-style-type: none"> • four evaluative comments each linked to a different aspect of food additives (maximum of 4 marks) <i>or</i> • two evaluative comments linked to each of two different aspects of food additives <i>or</i> • two evaluative comments each linked to a different aspect of food additives + two evaluative comments linked to a third aspect of food additives <i>(up to a maximum of 4 marks)</i>

Question		Expected response	Max mark	Additional guidance
		<p>expensive which may be less suitable as increased costs could be passed onto the consumer.</p> <p>Colourings</p> <ul style="list-style-type: none"> • +ve: Using colours when making the cupcakes could make them look attractive so encouraging consumers to try them. • -ve: Some people are sensitive to some colourings so adding colourings makes them unsuitable for certain groups of consumers so reducing choice for those groups. <p><i>Accept any other justifiable answer</i></p>		
3	c	<p>Possible candidate responses could include:</p> <p>Increasing sugar</p> <ul style="list-style-type: none"> • a hard sugary crust on top of the cake • coarse-grained cake • fruit will sink in a fruit cake • the structure may collapse <p><i>Accept any other appropriate answer</i></p>	2	<p>Candidates should make a number of factual relevant points. These should relate to the question.</p> <p>Up to the total mark allocation for this question:</p> <ul style="list-style-type: none"> • 1 mark should be given for each accurate relevant interpretation of a point of knowledge <p style="text-align: right;"><i>(up to a maximum of 2 marks)</i></p> <p>Candidates should describe the result on the baked product of increasing the proportion of sugar in the cake mixture.</p>
4	a	<p>Possible candidate responses could include:</p> <ul style="list-style-type: none"> • Use ingredients low in saturated fat 	6	<p>Candidates should list a number of points that make the issue plain or clear, by showing connections between the point and the context of the question.</p> <p>Up to the total mark allocation for this question:</p>

Question		Expected response	Max mark	Additional guidance
		<p>as these are lower in cholesterol so will help to reduce the risk of CHD.</p> <ul style="list-style-type: none"> Choose ingredients that are rich in omega 3 as these help to reduce LDL cholesterol so will help reduce the risk of CHD. Include ingredients rich in dietary fibre as it helps give a feeling of fullness therefore helps prevent snacking on high-fat foods so reducing the risk of CHD. Reduce salt as it contributes to high blood pressure so reducing it will reduce the risk of CHD. Include ingredients rich in vitamins ACE as these are anti-oxidants which are linked to lowering LDL cholesterol reducing the risk of CHD. Use methods of cooking that reduce fat to help reduce the fat content of the product so reducing the risk of CHD. <p><i>Accept any other appropriate answer, linked to reducing the risk of CHD.</i></p>		<ul style="list-style-type: none"> 1 mark should be awarded for each relevant explanation a further mark should be awarded for any explanation that is developed <p><i>Candidates can be credited in a number of ways up to a maximum of 6 marks.</i></p> <p>Candidates should explain different factors that should be considered when developing food products which could contribute to reducing the risk of coronary heart disease (CHD).</p> <ul style="list-style-type: none"> 1 mark should be given for each correct response made up to a maximum of 6 marks in total a maximum of 4 marks may be awarded for accurate explanations relating to four different factors linked to coronary heart disease a maximum of 2 marks may be awarded for developed explanations linked to the same identified factor <p>For example candidates could provide either:</p> <ul style="list-style-type: none"> four explanations each linked to a different factor (maximum 4 marks) or two explanations linked to each of three different factors (maximum 6 marks) or two explanations each linked to two different factors + two explanations linked to two further factors (maximum 6 marks) <p style="text-align: right;"><i>(up to a maximum of 6 marks)</i></p>
4	b	<p>Possible candidate responses could include:</p> <p>Portion size</p>	4	<p>Candidates should list a number of points that make the issue plain or clear, by showing connections between the point and the context of the question.</p> <p>Up to the mark allocation for this question:</p>

Question	Expected response	Max mark	Additional guidance
	<ul style="list-style-type: none"> This can help a consumer at risk of CHD as it gives a guide to how much should be eaten, reducing the risk of weight gain which is a contributing factor to CHD. <p>Health claims</p> <ul style="list-style-type: none"> Health claims such as ‘contains added fruit’ on the front of the pack make it easier for consumers who are at risk of CHD to select food suitable for their health requirements. <p>Cooking instructions</p> <ul style="list-style-type: none"> Cooking instructions may guide consumers at risk of CHD towards how to cook without the addition of fat, helping to reduce the risk of CHD. <p><i>Accept any other appropriate answer, linked to reducing the risk of CHD.</i></p>		<ul style="list-style-type: none"> 1 mark should be awarded for each relevant explanation a further mark should be awarded for any explanation that is developed <p><i>Candidates can be credited in a number of ways up to a maximum of 4 marks.</i></p> <p>Candidates should make comments on points of information, other than ingredients or nutritional information found on food labels, related to helping consumers with CHD make informed choices.</p> <ul style="list-style-type: none"> 1 mark should be given for each correct response made up to a maximum of 4 marks in total a maximum of 4 marks may be awarded for accurate explanations relating to four different factors linked to coronary heart disease a maximum of 2 marks may be awarded for developed evaluations linked to the same identified aspect of food choice <p>For example, candidates could provide <i>either</i>:</p> <ul style="list-style-type: none"> four explanations each linked to a different aspect of food labelling (maximum 4 marks) <i>or</i> two explanations linked to each of two different aspects of food labelling (maximum 4 marks) <i>or</i> two explanations each linked to one aspect of food labelling + two explanations linked to one further aspect of food labelling (maximum 4 marks) <p style="text-align: right;"><i>(up to a maximum of 4 marks)</i></p>

[END OF SPECIMEN MARKING INSTRUCTIONS]