N5

National
Qualifications
2015

2015 Health and Food Technology

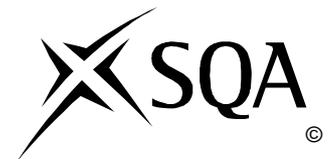# National 5

Finalised Marking Instructions

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General Marking Principles for National 5 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 <u>always</u> 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) If a specific candidate response does not seem to be covered by either the principles or detailed Marking Instructions, and you are uncertain how to assess it, you must seek guidance from your Team Leader.

(d) **(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) There are five types of question used in this question paper. Each assesses a particular skill, namely:
A: State/give/name/identify
B: Describe
C: Explain
D: Make adaptations to…
E: Evaluate the suitability of…

(iii) For each question type, the following provides an overview of the marking principles and an example of their application for each type.

Questions that ask candidates to state/give/name/identify
Candidates should list a number of relevant items or facts. These should relate to the context of the question and do not need to be in any particular order up to the total mark allocation.

Questions that ask candidates to describe…
Candidates must define or give an account of points which should relate to the question. 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.

Question: Describe one way the cake could be stored to keep it in good condition.

Example: *Store in an airtight container/wrap in foil/cling film.* **(1 mark for correct description of method of storage.)**

Questions that ask candidates to explain
Candidates should make the relationship between things clear, for example by giving accurate relevant points showing connections between these and 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.

Question: Explain two ways in which the man could use the information on food labels to help him make healthier food choices.

Example: *He could check to see how much fat/sugar/salt/fruit/vegetables is in the product so he can choose/avoid these*. **(1 mark for accurate relevant point linked to the context of the question.)**

Questions that ask the candidate to make adaptations to…
Candidates should make a number of adjustments to improve the dish/recipe given in the question. Candidates may provide a number of adaptations to meet given requirements and would normally be expected to explain the purpose of each.

Up to the mark allocation for this question:
- 1 mark should be awarded for each relevant adaptation.
- A second mark should be awarded for any adaptation that is explained in relation to the requirements of the question as in the following example.

Question: What adaptations could be made (to a given recipe) to help meet current dietary advice?

Example: *The bacon could be grilled instead of fried* **(1 mark for adaptation).** *This would meet current dietary advice to eat less fat* **(a second mark for detail linked to the relevant current dietary advice).**

Questions that ask the candidate to evaluate the suitability of…
Candidates should make a number of evaluative comments which make a judgment based on the information provided, related to the context of the question. Candidates may provide a number of straightforward observations or a smaller number of developed observations, or a combination of these.

Up to the mark allocation for this question:
- 1 mark should be awarded for each relevant evaluative comment linked to the context of the question.
- A second mark should be awarded for any evaluative comment that is developed, as in the following example:

Question: Taking account of the Dietary Reference Values (DRVs) for males aged 50 plus, comment on the suitability of his day's meals.

Example*: His intake of sodium is too high and this will make his high blood pressure worse*. **(1 mark for comment)** *This will increase his risk of a stroke*. **(A further mark for the development of the comment.)**

Detailed Marking Instructions for each Question

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
1.	(a)	(i)		1	Candidates should identify the most suitable home bake product. **1 mark** should be awarded for correct choice of home bake product— B

		(ii)	Candidates should list a number of relevant facts and provide further justification related to the facts listed.
			
			Candidates may provide a number of explanations for the identified fact, 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 an accurate relevant point of Knowledge **related to case study**
			• **A further mark** should be awarded for any further reason linked to the same fact
				3	Candidates can be credited in a number of ways **up to a maximum of 3 marks.**
					
					Candidates could provide a number of accurate explanations to justify their choice.
					
					1 mark should be given for each accurate response up to a maximum of **3 marks in total**:
					
					1 mark should be awarded for each relevant reason offered in support of the candidate's choice of product, up to the total mark allocation. Some examples of valid reasons are given below. **Where all reasons relate to one feature (eg quantity), a maximum of 2 marks should be awarded for reasons offered.**
					
					For example, in respect of the correctly identified home bake product, candidates could provide either:
					
					    three reasons each linked to a different aspect of the home bake product or
					    two reasons linked to one aspect of the cake plus one reason linked to a different aspect of the product
					
					(up to a maximum of three marks)
					
					Where a candidate identifies an incorrect home bake product:
					one mark should be awarded for each relevant reason offered in support of the choice provided:
					• the aspect identified is the best or equal best reason

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
					• the link to the case study is relevant *(up to a maximum of 2 marks)* **Main ingredients** **There is wholemeal self-raising flour in the carrot cake** • this will help to meet the dietary advice of eating more total complex carbohydrates/increase NSP(fibre)/prevent constipation **There are carrots/sultanas in the recipe** • this helps to meet the target of eating more fruit and vegetables • so helps meet dietary advice for eating less sugar **There is polyunsaturated margarine in the recipe** • so this will help to cut down saturated fat intake/reduce heart disease **Cost to make** **This is the cheapest** • less expensive to produce/more profit. **Preparation time** **It only takes 10 minutes make** • can have time for other things /they are busy **Eat within** **One of the longest keeping times/lasts 7-10 days** • can make them a few days in advance • they keep well in case they are not sold straight away **Quantity** **16 slices** • there are more portions therefore the café may make more profit • there are more slices so the café don't have to bake so many so save time

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question

	(b)		Candidates should list a number of relevant facts and provide further explanation related to the facts listed.
			
			1 mark should be given for each accurate relevant point of knowledge.
				4	Candidates can be credited in a variety of ways **up to a maximum of 4 marks.**
					
					Candidates should explain the function in the diet of the nutrient specified. Candidates should identify a food source for that given nutrient.
					1 mark should be given for each correct response made, up to a maximum of **4 marks** in total:
					
					    a maximum of 2 marks may be awarded for correctly identified nutrients
					    a maximum of 2 marks may be awarded for correct food source linked to any one of the identified nutrients
					
					Vitamin B group (accept answers from any vitamin B)
					Functions
					• essential for release of energy from food
					• essential for healthy skin/nerves
					• growth in children.
					• cell Production
					
					Food Source
					• any good food source
					
					Carbohydrates
					Functions
					• (source of) energy.
					• (excess can be converted to heat so will provide) warmth/heat.
					
					Food Source
					• any good food source

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
	(c)		Candidates should make a number of relevant points. These should relate to the question Up to the total mark allocation for this question: **1 mark** should be given for each accurate relevant point of knowledge	2	Candidates can be credited in a number of ways **up to a maximum of 2 marks.** Candidates should explain link to health of increasing foods rich in Total Complex Carbohydrates. 1 mark should be given for each correct response made, up to a maximum of **2 marks in total**: • contain NSP/fibre which can prevent constipation/bowel disorders/bowel cancers. • fill us up so less likely to snack on foods high in sugar/fat leading to obesity (eg chocolate/crisps.) • low in fat so less chance of obesity. • lowers in blood cholesterol

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question

2.	(a)		Candidates should make a number of evaluative comments related to the context of the question.
			
			Candidates may provide a number of straight forward evaluations or a smaller number of developed evaluations, or a combination of these.
			
			Up to the mark allocation for this question:
			
			• **1 mark** should be awarded for each
			• relevant evaluation **linked to case study**
			• **A further mark** should be awarded any evaluation that is developed
				6	Candidates can be credited in a number of ways up to **a maximum of 6 marks.**
					
					Candidates should make comments on the suitability of aspects of the day's meals related to the individual in the case study.
					
					    a maximum of **four marks** may be awarded for accurate evaluative comments relating to four different aspects of the day's meals related to the individual in the case study
					    a maximum of **two marks** may be awarded for developed evaluations linked to the same identified aspect of the day's meals
					
					For example, candidate could provide either:
					
					four evaluative comments **each** linked to a **different aspect** of the gymnast's meals (**maximum of four marks**) or
					two evaluative comments linked to **each of three different aspects** of the gymnast's meals or
					two evaluative comments **each linked to two different aspects** of the gymnast's meals **+ two** evaluative comments **linked to two further aspects** of the gymnast's meals
					
					(up to a maximum of six marks)
					
					Energy – 7.13MJ
					-ve this has less energy than needs so she may feel tired/lethargic at school/gymnastics/may lose weight.
					Protein – 43.6g
					+ve she is 13/growing/will get enough protein for growth/repair/ maintenance of body cells and tissues.
					+ve she will have enough to help repair injury/maintain muscle/injuries. Still growing at 13 so her growth will not be slowed down.
					-ve secondary source of energy could lead to obesity in later life
					
					Vitamin A – 520ug
					-ve lack of could result in poor vision affecting balance/performance at gymnastics/school leading to accident/injury

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
					Iron – 6.7mg -ve this is less than needs so will feel tired/lethargic meaning reduced performance at gymnastics/school -ve this is less than needs so will be likely to suffer anaemia/13/growing **Vitamin C - 37mg** +ve higher in Vitamin C so helps increase iron absorption +ve if injures herself, high vitamin C levels will help body to heal/bruises/ she is 13/growing, so may have enough for making connective tissue. **Sodium** -ve lack of sodium could result in muscle cramp in training/gymnastics.
	(b)		Candidates should make a number of points that make the issue plain or clear, for example by showing connections between reason and the context of the question. Up to the total mark allocation for this question: **1 mark** should be given for each accurate relevant reason	**2**	Candidates can be credited **up to a maximum of 2 marks**. Candidates must describe a number of relevant reasons for drinking enough water. 1 mark should be given for each correct reason up to a maximum of **2 marks in total:** a maximum of **2 marks** may be awarded for correct reason for drinking enough water. • rehydrate after exercise/prevents dehydration • control body temperature/helps to cool body down/sweating. • lubricates joints • flushes toxins

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
	(c)		Candidates should make a number of points that make the issue plain or clear, for example by showing connections between factors and the context of the question. These could show justification for the factor. Up to the total mark allocation for this question: **1 mark** should be given for each accurate explanation	2	Candidates can be credited **up to a maximum of 2 marks**. Candidates must explain a number of factors relating to being a teenager. 1 mark should be given for each correct explanation made up to a maximum of **2 marks in total**: a maximum of **1 mark** may be awarded for each accurate explanation relating to influence on his food choice **Peer Pressure** • influences from peer group may determine where/what type of food is purchased/ eaten. **Religion** • may influence food choice as some religions require that certain foods are excluded from the diet so restricting choice

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
3.	(a)		Candidates should make a number of points that make the issue plain or clear, for example by showing connections between reason and the context of the question. Up to the total mark allocation for this question: **1 mark** should be given for each accurate relevant reason	2	Candidates can be credited **up to a maximum of 2 marks**. Candidates must describe a number of relevant advantages and disadvantages of market research. 1 mark should be given for each correct reason up to a maximum of **2 marks in total:** **Advantages** - identifies a need/want for a particular food product on the market - identifies a gap in the market for a particular food product - identifies market trends to see what would be a success/popular **Disadvantages** - takes time to collect/process data - may have difficulty recruiting people to take part in research/or to carry out research - not always accurate - costs money
	(b)		Candidates must make a number of factual relevant points. These should relate to the question. Up to the total mark allocation for this question: **1 mark** should be given for each accurate relevant point of knowledge	2	Candidates can be credited **up to a maximum of 2 marks**. Candidates should provide an accurate explanation of the importance of each stage in product development. 1 mark should be given for each correct reason up to a maximum of **2 marks in total:** **Concept Screening** - the filtering stage - producing specification **Prototype production** - make a sample(s)/specimen of the product. - identify any changes that may be required.

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
	(c)		Candidates must make a number of factual relevant points. These should relate to the question. Up to the total mark allocation for this question: **1 mark** should be given for each accurate relevant point of knowledge	1	Candidates can be credited **up to a maximum of 1 mark.** Candidates should provide an accurate explanation of why strong flour is used in bread making. 1 mark should be given for each correct reason up to a maximum of **1 mark in total:** • protein is more elastic helping bread to rise • allows kneading/shaping of dough due to elasticity • creates structure internally/ holds structure
	(d)		Candidates must make a number of factual relevant points. These should relate to the question. Up to the total mark allocation for this question: **1 mark** should be given for each accurate relevant point of knowledge	1	Candidates can be credited **up to a maximum of 1 mark.** Candidates should state one way of incorporating air in a product 1 mark should be given for each correct reason up to a maximum of **1 mark in total:** • aeration • sieving • whisking • rubbing in • creaming • kneading • beating • rolling and folding • folding • whipping

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
	(e)		Candidates should make a number of evaluative statements related to the context of the question. Candidates may provide a number of straightforward evaluations or a smaller number of developed evaluations, or a combination of these. Up to the mark allocation for this question: • **1 mark** should be awarded for each relevant evaluation • **A second mark** should be awarded for any evaluation that is developed	4	Candidates can be credited in a number of ways **up to a maximum of 4 marks.** Candidates should make comments on the suitability of the sandwich in relation to the case study. 1 mark should be given for each accurate response up to a maximum of **4 marks in total**: For example, candidate could provide either: **four** evaluative comments **each** linked to a **different aspect** of the sandwich or **two** evaluative comments linked to **each** of **two different aspects** of the sandwich or **two** evaluative comments **each linked to a different aspect** of the sandwich + **one** evaluative comments **linked to a third & fourth aspect** of the sandwich *(up to a maximum of four marks)* Accept any link to current dietary advice, a health benefit and a reduced risk of dietary disease/supermarket/ range/ sandwich. Should not accept the same consequence more than once **Tuna** +ve oily fish helps to meet Current Dietary Advice -ve tinned tuna does not meet requirements for oily fish

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
					Sweetcorn +ve vegetables help meet the Current Dietary Advice **Low fat mayonnaise** +ve reduced fat, helps to meet current dietary advice eat less fat/ average intake of total fat to be reduced -ve contains more water which may make the sandwich wet/ unsuitable for use **White bread** -ve low in NSP/dietary fibre so won't give a feeling of fullness so may not prevent them from snacking on high fat/high sugar foods. -ve bread provides carbohydrate – too much could contribute to weight gain **Butter** +ve adds flavour so sandwich can be tastier/enjoyable. -ve high energy which can result in weight gain.

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question

4.	(a)		Candidates should list a number of relevant facts and provide further explanation related to the facts listed.
			
			Candidates may provide a number of facts, 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 given for each accurate relevant point of knowledge.
			• **A further mark** should be given for point of explanation.
				4	Candidates can be credited in a variety of ways **up to a maximum of 4 marks.**
					
					Candidates should list up to two sensory tests.
					Candidates should explain why the company will carry out each test.
					1 mark should be given for each correct response made, up to a maximum of **4 marks** in total:
					
					    a maximum of **2 marks** may be awarded for correctly identified sensory tests
					    a maximum of **2 marks** may be awarded for correct explanation linked to any one of the identified sensory tests
					
					For example, candidate could provide either:
					
					Two sensory tests, **each with one** correctly explained reason why it is carried out
					or
					Two sensory tests, with **two correctly explained reasons why it is carried out for one** sensory test.
					
					(up to a maximum of four marks)
					
					Preference/Rating test
					• collect information/opinions about specific attributes of a product.
					
					Ranking/Scoring/Grading test
					• find out how much a tester likes/dislikes a product/specific characteristics.
					
					Discrimination/Difference test
					• find out if testers can tell the difference between the manufacturer's product and that of a competitor/existing products.
					Paired comparison test
					• find out if testers can tell the difference between two products in terms

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
					• of a specific attribute eg sweetness. **Triangle test** • find out if the tester can identify the product on test from two other similar products. **Taste threshold test** • find out the minimum concentration of an ingredient before the product becomes unacceptable.
	(b)		Candidates must make a number of factual relevant points. These should relate to the question. Up to the total mark allocation for this question: • **1 mark** should be given for each accurate relevant point of knowledge	2	Candidates can be credited **up to a maximum of 2 marks**. Candidates must give reasons why a consumer might choose Fairtrade products. 1 mark should be given for each correct reason up to a maximum of **2 marks in total:** • this is good as reassures ethical consumers they are helping support low income workers/developing countries. • in some cases the quality of the food is higher in Fairtrade products which is good because the consumer may receive a better quality product. • Fairtrade products may be organic which would appeal to an ethical consumer • Fairtrade ingredients may cost more

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
	(c)	(i)	Candidates must make a number of factual relevant points. These should relate to the question. Up to the total mark allocation for this question: • **1 mark** should be given for each accurate relevant point of knowledge	1	**Product name** • important so the consumer knows what is being bought/is not misled. • important as consumer may identify/have expectations with a particular brand. Candidates can be credited **up to a maximum of 1 mark.** Candidates should provide an accurate explanation of importance to the consumer. **1 mark** should be given for each correct reason
		(ii)	Candidates must make a number of factual relevant points. These should relate to the question. Up to the total mark allocation for this question: • **1 mark** should be given for each accurate relevant point of knowledge	1	**Weight of product** • allows the consumer to compare prices/look for value for money. • allows the consumer to calculate the number of portions in a product. • allows the consumer to calculate how much to buy. Candidates can be credited **up to a maximum of 1 mark.** Candidates should provide an accurate explanation of importance to the consumer. **1 mark** should be given for each correct reason
	(d)		Candidates must make a number of factual points. These should relate to the question. Up to the total mark allocation for this question: • **1 mark** should be given for each accurate relevant point of knowledge	2	Candidates can be credited **up to a maximum of 2 marks.** Candidates should provide current consumer organisations eg Trading Standards (Department) Environmental Health (Department)

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question

5.	(a)		Candidates should make a number of evaluative statements related to the context of the question.
			
			Candidates may provide a number of straightforward evaluations or a smaller number of developed evaluations, or a combination of these.
			
			Up to the mark allocation for this question:
			
			• **1 mark** should be awarded for each relevant evaluation
			• **A second mark** should be awarded for any evaluation that is developed
				4	Candidates can be credited in a number of ways **up to a maximum of 4 marks.**
					
					Candidates should make comments on the suitability of the packaging in relation to the case study.
					
					1 mark should be given for each accurate response up to a maximum of **4 marks in total**:
					
					      a maximum of **four marks** may be awarded for accurate evaluations relating to three aspects of the packaging
					      a maximum of **two marks** may be awarded for developed evaluations relating to the same identified aspect of the packaging
					
					For example, candidate could provide either:
					
					four evaluative comments **each** linked to a **different aspect** of the packaging
					or
					two evaluative comments linked to **each** of **two different aspects** of the packaging or
					two evaluative comments **each linked to a different aspect** of the packaging **+ two** evaluative comments **linked to a third aspect** of the packaging
					(up to a maximum of four marks)
					
					Bio-degradable
					• suitable as the school may be an eco-friendly school and this will be in keeping with school policy.
					• suitable as the school may want to contribute to the reduction of waste.
					
					Low cost
					• suitable as this is inexpensive and will not make the pasta too expensive for the pupils to buy/add too much to the cost of the pasta.
					• suitable as this may be within the budget of the school canteen.

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
					Rigid Shape • suitable as this will keep the pasta in good shape/stop them from getting squashed so will be attractive to the pupils. • suitable as the pasta will be able to be displayed easily in the canteen. • suitable as the packaging could form a 'plate' which the pupils could eat from. **Stackable** • suitable as the pasta can be stored easily in the canteen. • suitable as the pasta can be displayed easily in the canteen. **See through** • suitable as pupils may be encouraged to buy as they can see the contents.
	(b)		Candidates should make a number of points that make the issue plain or clear, for example by showing connections between reason and the context of the question. Up to the total mark allocation for this question: • **1 mark** should be given for each accurate relevant reason	2	Candidates can be credited **up to a maximum of 2 marks**. Candidates must describe why manufacturers package food. 1 mark should be given for each correct reason up to a maximum of **2 marks in total:** • to keep the food in a hygienic condition/longer shelf life. • to protect the contents from physical damage/contamination/ pollution/atmospheric conditions (eg dampness). • to attract the consumer. • transportation. • provide information from labelling.

Question			General Marking Instructions for this type of question	Max Mark	Specific Marking Instructions for this question
(c)	(i)		Candidates should make a number of points that make the issue plain or clear, for example by showing connections between reason and the context of the question. Up to the total mark allocation for this question: • **1 mark** should be given for each accurate relevant description	2	**Preservatives** • prolong shelf life/ makes food last longer • stop fatty food going rancid • stop oxidation in apples • consumer does not have to shop so often • prevents wastage • allows bulk buying Candidates can be credited **up to a maximum of 2 marks**. Candidates must describe why the food additives are beneficial to the consumer. 1 mark should be given for each correct description up to a maximum of **2 marks in total** for each additive type:
		(ii)	Candidates should make a number of points that make the issue plain or clear, for example by showing connections between reason and the context of the question. Up to the total mark allocation for this question: • **1 mark** should be given for each accurate relevant description	2	**Flavourings** • replaces flavours lost in processing • makes a stronger flavour • enhances flavours to foods/ makes food taste better • cheaper than natural flavours • enhances the smell Candidates can be credited **up to a maximum of 2 marks**. Candidates must describe why the food additives are beneficial to the consumer. 1 mark should be given for each correct description up to a maximum of **2 marks in total** for each additive type:

[END OF MARKING INSTRUCTIONS]