



National
Qualifications
2026

2026 Health and Food Technology

Advanced Higher

Question Paper Finalised Marking Instructions

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General marking principles for Advanced Higher Health and Food Technology

Always apply these general principles. Use them in conjunction with the detailed marking instructions, which identify the key features required in candidates' responses.

- (a) Always use positive marking. This means candidates accumulate marks for the demonstration of relevant skills, knowledge and understanding; marks are not deducted for errors or omissions.
- (b) If a 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.
- (c) Candidates may demonstrate their skills, knowledge and understanding at different points in their response. Award marks for relevant and appropriate skills, knowledge and understanding wherever they are demonstrated.
- (d) Award marks only where responses relate to the question asked. If candidates give points of knowledge without specifying the context, do not award marks unless it is clear the points relate to the context of the question.

For **explain** questions 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. They may provide several straightforward explanations or a smaller number of developed explanations, or a combination of these.

Up to the total mark allocation for this question:

- award **1 mark** for each accurate relevant point of reason
- award **a further mark** for any accurate relevant point that is developed from the same reason.

Example question – Explain the role of minerals in the diet of the elderly.

Example answer – Iron is required to create haemoglobin, which is essential in the formation of red blood cells. This is important in the elderly as if they are deficient in iron, it could cause them to become anaemic. (**1 mark** for an explanation that makes clear the relationship between the function of iron and the role specifically related to the elderly.) This could result in them losing their independence as they will be too tired to take part in daily activities. (**1 additional mark** as response is linked to the same nutrient and further explains the function specifically related to the elderly.)

For **discuss** questions candidates should make several points that communicate issues, ideas, or information about a given topic or context that will make a case for and/or against. It is not always necessary for candidates to give both sides of the debate in responses.

Up to the total mark allocation for this question:

- award **1 mark** for each accurate point of knowledge that is clearly relevant
- award **1 mark** for any further development of a relevant point, including exemplification or a conclusion where appropriate.

Example question – Discuss how food manufacturers can help consumers reduce food waste.

Example answer – One way food manufacturers could help consumers reduce food waste is having detailed storage advice on the front of pre-packed food. This can help consumers reduce waste as the advice is more readily accessible to them and ensures the food is stored in a way that keeps it at optimum quality. (**1 mark** for accurate relevant point of discussion linked to how the food manufacturer can help the consumer reduce food waste.) In addition to this, manufacturers are now moving away from 'freeze on day of purchase' guidance to 'freeze before the use-by-date, which means if food isn't eaten, consumers know have clear instructions for storage which should minimise food waste. (**1 further mark** for development of discussion point.)

For **evaluate** questions candidates should make several points that make a judgement and determine the value of something based on the criteria provided in the question. They may provide several straightforward points or a smaller number of developed points, or a combination of these.

Up to the total mark allocation for this question:

- award **1 mark** for each accurate, relevant evaluative point
- award a **further mark** for any accurate, relevant development of that point.

Example question – Evaluate the role of product testing, a marketing plan and product launch on the development of a new food product.

Example answer – a food manufacturer would carry out product testing to test a number of attributes/characteristics of the new product. This will give results for specific attributes which can be altered according to testers opinion to develop a more refined product. (**1 mark** for relevant evaluative point linked to product testing). It may take time to refine the based on the product testing results, which could cost the manufacturer more money so reducing profits (**1 further mark** for relevant developed evaluative point linked to the same area of product development)

For **analyse** questions candidates should identify/describe/explain relevant parts, and the relationship between the parts and/or the whole. Candidates should be able to draw out and relate any implications and/or analyse data.

Up to the total mark allocation for this question:

- award **1 mark** for each accurate, relevant point of analysis which is made up of:
 - an **initial accurate fact** about a need of individuals with allergies and intolerances
 - a **further fact** which agrees or disagrees with the initial fact and demonstrates a way that food manufacturers/retailers are meeting the specified need
 - an **impact** on individuals with food allergies and intolerances.
- award **1 further mark** for any accurate, relevant development of that point

Example question – Analyse ways food manufacturers and retailers are meeting the needs of individuals with food allergies and intolerances.

Example answer – Individuals with allergies or intolerances are unable to consume products which include the ingredient they are allergic or intolerant to, for example, those with a dairy allergy/intolerance cannot consume cow's milk products. (**An initial accurate fact about individuals with allergies and intolerances**). Manufacturers are meeting the needs of these individuals by producing non-dairy milk alternatives such as oat milk. (**A further fact stating a way in which manufacturers are meeting the need identified**). Therefore, increasing food choice for these individuals (**An impact on individuals with food allergies and intolerances**). (**1 mark** for relevant point of analysis) Also, manufacturers often fortify these products with nutrients that would be naturally present in the allergen containing product, so ensuring individuals avoid nutritional deficiencies due to their allergy/intolerance. (**1 further mark** for a development of the same point analysis.)

Marking instructions for each question

Question			Expected response	Max mark	Additional guidance
1.	(a)		Possible responses could include: - at the stage of concept screening, the food manufacturer screens all ideas from concept generation for feasibility as it allows the manufacturer to carry forward the best ideas and develop a specification for a new food product (1 mark for relevant discussion point linked to concept screening and the food manufacturer). The drawing up of the specification is a positive step as it allows the manufacturer to eliminate ideas that may be costly or difficult to process for example so helps to develop a commercially viable product (1 further mark for relevant developed point of discussion linked to the same area of product development) - during the first production run, the food manufacturer produces the new product at full scale within the factory setting for the very first time. This enables the quality assurance team to evaluate the product under actual manufacturing conditions, ensuring it meets the required standards. (1 mark for relevant discussion point linked to first production run and the food manufacturer). This allows the manufacturer to sort out potential production problems before large scale production which is beneficial to avoid downtime which could result in delayed production or loss of profit for the manufacturer. (1 further mark for relevant developed discussion point linked to the same area of product development.) In addition, this stage allows the manufacturer to make changes to the product so that machinery can manufacture the product to a high standard ensuring consistency of quality when it is launched. (1 further developed mark for relevant point linked to the same area of product development) - a food manufacturer could carry out product launch by launching the new product on a small scale. This allows them to monitor the sales of the new product and make any changes necessary; this will ensure when the product is fully launched it will be more successful. (1 mark for relevant discussion point linked to product launch and the food manufacturer). If the manufacturer does not respond to the feedback from the small-scale launch, there is a possibility may not be successful. (1 further mark for relevant developed point of discussion linked to the same area of product development) Or any other valid response.	10	Candidates should make several points that communicate issues, ideas, or information in relation how food manufacturers use the stages of the food product development process. Candidates do not need to give both sides of the debate in their responses. - award 1 mark for each accurate point of discussion which is linked to an accurate stage of the food product development process and the food manufacturer - award 1 further mark for any development of a discussion point - award a maximum of 9 marks if candidates only refer to one stage of the food product development process, no marks will be awarded if the food product development stage is inaccurate (Up to a maximum of 10 marks)

Question		Expected response	Max mark	Additional guidance
	(b)	Possible responses could include: • a food label must display the ingredients in descending order by quantity, enabling consumers to clearly see what the product contains. This helps individuals make informed choices, especially if they wish to avoid certain ingredients they dislike or prefer not to consume. (1 mark for relevant evaluative point linked to how labelling can influence consumer food choice) • the ingredients list on the food label will highlight in bold any of the top 14 food allergens, which is good because it allows the consumer to make an informed choice and avoid any food they may be allergic to. (1 mark for relevant evaluative point linked to how labelling can influence consumer food choice) • glass packaging is recyclable which is good because it will appeal to environmentally aware consumers so encouraging them to choose products which are packaged in this way. (1 mark for relevant evaluative point linked to how packaging can influence consumer food choice). Furthermore glass packaging is reusable for example jam jars which means consumers may not need to buy storage containers. (1 further mark for developed evaluative point linked to how packaging can influence consumer food choice). However, products in glass packaging can be easily broken so may be considered unsafe so consumers may not buy glass packaged products. (1 further developed mark for an evaluative point linked to how packaging can influence consumer food choice) Or any other valid response.	10	Candidates should make points which make a judgement or determine the influence of food packaging and labelling on consumer food choice. Candidates may provide straightforward points, developed points, or a combination of these. • award 1 mark for each accurate, relevant evaluative point • award a further mark for any accurate, relevant development of that point • award a maximum of 9 marks if candidates only refer to either food packaging or labelling (Up to a maximum of 10 marks)

Question			Expected response	Max mark	Additional guidance
2.			Possible responses could include: - current dietary advice (CDA) includes pegging red and processed meat at around 70g per person per day. (the initial fact based on accurate current dietary advice) this is because too much red and processed meat contains saturated fat which raises cholesterol in the blood. (further fact which links CDA to diet related condition/disease) this may reduce the incidence of heart disease/stroke/death (impact) (award 1 mark for relevant point of analysis) pegging red and processed meat will also reduce total fat consumed by the body therefore reducing risk of weight gain and obesity. (1 further mark for development of the point) - CDA also includes increasing fruit and vegetable intake to 400g per person per day. (the initial fact based on accurate current dietary advice) the fibre in fruit and vegetables absorbs water to make soft, bulky faeces which are easy to pass reducing risk of constipation. (further fact which links CDA to diet related condition/disease) this in turn can reduce risk of bowel cancer and other bowel diseases. (impact) (award 1 mark for relevant point of analysis) furthermore, the fibre in fruits and vegetables is filling so reduces temptation to snack on fatty/sugary foods so reducing risk of weight gain/obesity. (1 further mark for development of the point) Or any other valid response.	10	Candidates must demonstrate the ability to identify, describe and explain the impact of current dietary advice on reducing the risk of diet related conditions and diseases. Award 1 mark for each accurate, relevant point of analysis which is made up of: - an accurate piece of current dietary advice as the initial fact - a further fact which links/agrees or disagrees with the initial fact - an impact of the current dietary advice on reducing the risk of diet related conditions and diseases - award 1 further mark for any accurate, relevant development of that point - award a maximum of 9 marks if candidates only refer to one piece of current dietary advice no marks will be awarded if the current dietary advice is inaccurate or not stated in its entirety (up to a maximum of 10 marks)

Question			Expected response	Max mark	Additional guidance
3.			Possible responses could include: - Folate is necessary particularly during the first 12 weeks of pregnancy to support the development of the neural tube in the unborn baby. This can reduce the risk of neural tube defects eg spina bifida (1 mark for an explanation which makes clear the relationship between the function of folate and the role specifically related to pregnant women) - Folate is also necessary in the diet of a pregnant women to make red blood cells if iron is lacking therefore helping to prevent anaemia. (1 mark for an explanation which makes clear the relationship between different function of folate and the role specifically related to pregnant women). If the pregnant woman becomes anaemic it could result in symptoms including tiredness, lethargy, breathlessness which could hinder the pregnant woman's daily activities(1 further mark for development of explanation linked to folate and a pregnant woman) - Vitamin A is necessary to make visual purple which helps with vision particularly in dim light. This can reduce the risk of night blindness for the pregnant woman. (1 mark for an explanation which makes clear the relationship between the function of Vitamin A and the role specifically related to pregnant women). However, high quantities of Vitamin A taken by a pregnant woman can be harmful for the developing foetus (1 further mark for development of explanation linked to Vitamin A and a pregnant woman) if this continues, it may lead to defects in the unborn baby eg cleft palate (1 further developed mark for an explanation linked to Vitamin A and a pregnant woman) Or any other valid response.	10	Candidates should make several points that relate to the cause and effect and/or make the relationship between things clear in relation to the role of micronutrients in the diet of a pregnant woman. Candidates may provide several straightforward explanations, developed points, or a combination of these. Up to the total mark allocation for the question. - award 1 mark for each accurate, relevant point of explanation - award 1 further mark for any accurate, relevant development of that point - award a maximum of 9 marks if candidates only refer to one micronutrient (up to a maximum of 10 marks)

Question			Expected response	Max mark	Additional guidance
4.			Possible responses could include: - green tea is known as being anti-inflammatory due to the polyphenols it contains and so has been seen to reduce the risk of atherosclerosis, and this is beneficial to an individual at risk of CHD as it prevents inflamed and damaged arteries. (1 mark for evaluative point linked to the use of functional foods in the diet) Similarly, the anti-inflammatory properties in green tea can also reduce the risk of symptoms flaring up in arthritis (1 further mark for development of evaluative point linked to functional foods) - spreading fats like Benecol and Flora Pro Activ have added plant sterols which lower HDL cholesterol levels, and this is beneficial to a person at risk of CHD as it lowers their cholesterol levels, reducing the risk of heart disease. (1 mark for evaluative point linked to the use of functional foods in the diet) - probiotics found in fermented milk products like yoghurt drinks, have live bacterial cultures added to them to improve the microbial balance in the gut and this is beneficial as it aids in good digestion (1 mark for evaluative point linked to the use of functional foods in the diet) - some plant based novel proteins foods like tofu are high biological value and so this is beneficial in the diet as they will help growth, repair and maintenance of body cells. (1 mark for evaluative point linked to the use of novel protein in the diet). Furthermore, when plant based novel proteins foods like tofu are consumed instead of red meat, there is less saturated fat in the diet, so the risk of coronary heart disease is reduced. (1 further mark for development of evaluative point linked to novel proteins) Or any other valid response	10	Candidates should make points which make a judgement or determine the value of use of novel proteins and functional foods in the diet. Candidates may provide straightforward points, developed points, or a combination of these. - award 1 mark for each accurate, relevant evaluative point - award 1 further mark for any accurate, relevant development of that point - award a maximum of 9 marks if candidates only refer to the use of novel protein foods and functional foods in the diet (Up to a maximum of 10 marks)

[END OF MARKING INSTRUCTIONS]