

Assessment Schedule – 2022

Agricultural and Horticultural Science: Demonstrate understanding of how the production process meets market requirement for a New Zealand primary product(s) (91531)

Assessment Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<i>Demonstrating understanding</i> involves explaining how the production process meets market requirements for a New Zealand primary product(s).	<i>Demonstrating in-depth understanding</i> involves explaining in detail how the production process meets market requirements for a New Zealand primary product(s).	<i>Demonstrating comprehensive understanding</i> involves analysing how the production process meets market requirements for a New Zealand primary product(s).

Evidence

Question One:

Part	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
A	<p>Market requirements</p> <p><i>Timing requirements</i></p> <ul style="list-style-type: none"> In the UK, the returns for the chilled lamb market are high pre-Christmas, with premiums being paid to producers who can supply during this time. New Zealand apples are in high demand in Asia when their domestic producers cannot produce fruit. This gives us a window of supply. New Zealand fruit is in demand from week 7 of the year through to week 35, when their domestic supply kicks in. Early in this window is especially profitable for New Zealand producers as other Southern Hemisphere producers are not in the market. Mandarins are required for Golden Week in Japan, and premiums are paid for growers who can supply during this week. <p><i>Quality requirements</i></p> <ul style="list-style-type: none"> Apples are to have less than 1cm² of blemish on their skin to be able to be sold as class 1 fruit. This is due to their being sold as high-quality premium fruit. Strong wool used for carpets needs to be sound, and not break easily for it to make a quality carpet. The staple strength would need to be greater than 30Nkt, preferably higher. This way, the strands of wool do not break easily. Apples need to be a count size of between 70 and 90 to return high prices in the Asian markets. The count size is the number of apples that can fit into an 18.6 kg box. 	<p>Explains TWO different market requirements for a chosen primary product.</p> <p>Explains in general terms without specific supporting evidence or data.</p>	<p>Explains TWO different market requirements for a chosen primary product.</p> <p>Uses relevant data to support evidence.</p> <p>Specific data provided of weeks, volumes, fat cover etc. (towards Merit).</p> <p>TWO different market requirements must be used from the list provided.</p>	

	<p><i>Attribute requirements</i></p> <ul style="list-style-type: none"> • Wool used for clothing like Icebreaker needs to be around 20 microns. This is to ensure the fibre is not prickly when worn next to the skin. • Satsuma mandarins going to the Japanese market need to be in the size range of 55 to 63 mm. <p><i>Quantity requirements</i></p> <ul style="list-style-type: none"> • 700 tonnes of mandarins are supplied into the Japanese market, with much of this demand being attributed to festivities associated with Golden Week. 			
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B	<p>Management practices</p> <p><i>High-quality feed – Timing</i></p> <ul style="list-style-type: none"> • Having lambs on high-quality crops, with high energy values, will result in faster weight gain in lambs. Lambs put on an average of 150 g per day “live weight” on average pasture but are able to put on in excess of 500 g per day live weight on crops such as chicory. Higher weight gains per day will result in the lamb reaching slaughter size earlier, allowing them to make the chilled Christmas market, where higher returns are paid. <p><i>Fruit thinning – Quality</i></p> <ul style="list-style-type: none"> • Growers of apples commonly thin their fruit trees, to reduce the number of fruit on the tree. They do this by spraying sulphur or hormones during and just after flowering, to force the tree to drop flowers and fruitlets. By reducing the number of apples on the tree, less fruit comes into contact with each other in bunches. It is these collisions that cause blemishes on fruit that can downgrade the fruit or make them unsellable. <p><i>Breed selection – Attribute</i></p> <ul style="list-style-type: none"> • Farmers must choose the correct breed of sheep to allow them to produce the micron size the market requires. Base layer clothing typically requires the micron count to be 20 microns or less to make it softer against the skin and less irritable. Merino sheep produce wool with a micron count from 12 microns upwards, allowing a farmer to meet the requirements of the market by choosing this breed. 	<p>Explains a management practice that is carried out to meet each of the market requirements identified in Part A.</p> <p>Management practices may be selected from the establishment to harvest of the primary product.</p> <p>Clearly links the management practice to the market requirement.</p>	<p>Explains in detail a management practice that is carried out to meet each of the market requirements identified in Part A.</p> <p>Management practices may be selected from the establishment to harvest of the primary product.</p> <p>Clearly links the management practice to the market requirement.</p> <p>Specific volumes of water applied, fertiliser volumes, feed types used, varieties used etc.</p>	
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C	<p>Market requirement to maximise profitability</p> <p><i>Timing</i></p> <ul style="list-style-type: none"> • Discusses how the market has a specific window when it needs supply. • The specific window may be due to an event, a festival or no domestic supply in market. • If the supplier can meet this time window, the prices received will be much higher than selling at a later date. • Examples of prices should be given to exemplify the prices and how they change over the season. <p><i>Quality</i></p> <ul style="list-style-type: none"> • Discusses how the market has specific grades to be met by the producer. • If the product is not able to meet the grades set, then the product will not be able to be sold in the market, and it will likely be sold for lower value domestically. • Lower volumes of the primary product will therefore be sold to the higher value market. • Examples of prices of the higher value and lower value markets should be provided. <p><i>Attributes</i></p> <ul style="list-style-type: none"> • The primary products price is based on attributes, such as fat, colour, size, flavour profiles, being met. • Some products have incentive payments for the product meeting certain grades or criteria. • If the criteria or grade are not met, the price will reflect this. • Examples of prices between grades should be provided. <p><i>Quantity</i></p> <ul style="list-style-type: none"> • Some markets have a requirement for a certain volume of product. • This may be due to the market wanting all its product from a single exporter, or for the exporter to supply a range of products or varieties, or for the supply to cover a large portion of the year. • Scale of supply is a requirement for many markets. 	<p>Justifies the market requirement (from Part A) that has the greatest impact on the volumes or price received, which will in turn affect the profitability of the grower or producer.</p> <p>Uses data to support answer.</p>	<p>Justifies the market requirement (from Part A) that has the greatest impact on the volumes or price received, which will in turn affect the profitability of the grower or producer.</p> <p>They cover the strengths of their chosen management practice and why it is the most significant management practice at affecting profitability.</p>	<p>Justifies the market requirement (from Part A) that has the greatest impact on the volumes or price received, which will in turn affect the profitability of the grower or producer.</p> <p>Answers should be well prepared and laid out in a logical order.</p> <p>They should cover how their chosen management practice is able to influence many or all of the market requirements they have covered and those they may not have covered in previous parts of this examination.</p>
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N1	N2	A3	A4	M5	M6	E7	E8
<p>Partially explains how ONE relevant management practice allows the producer to meet a market requirement.</p>	<p>Partially explains how TWO relevant management practices allow the producer to meet a market requirement.</p>	<p>Explains in general terms how ONE relevant management practice allows the producer to meet a market requirement.</p>	<p>Explains in general terms how TWO relevant management practices allow the producer to meet a market requirement.</p>	<p>Explains in detail (using data or well-linked material) how ONE relevant management practice allows the producer to meet a market requirement.</p> <p>AND</p> <p>Explains in general terms how ONE</p>	<p>Explains in detail (using data or well-linked material) how TWO relevant management practices allow the producer to meet TWO market requirements.</p>	<p>Explains in detail (using data or well-linked material) how TWO relevant management practices allow the producer to meet TWO market requirements.</p> <p>AND</p> <p>Partial justification of the market requirement</p>	<p>Explains in detail (using data or well-linked material) how TWO relevant management practices allow the producer to meet TWO market requirements.</p> <p>AND</p> <p>Comprehensive justification of the</p>

				relevant management practice allows the producer to meet a market requirement.		that has the greatest effect on maximising profitability but lacking detail or data in some areas.	market requirement that has the greatest effect on maximising profitability.
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N0 = No response; no relevant evidence.

Cut Scores

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0 – 2	3 – 4	5 – 6	7 – 8