Assessment Schedule – 2025

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

Assessment Criteria

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrating understanding involves explaining how the production process meets specific market requirements for a New Zealand primary product(s).	*Demonstrating in-depth understanding* involves explaining, in detail, how the production process meets specific market requirements for a New Zealand primary product(s).	*Demonstrating comprehensive understanding* involves using detailed explanations to justify how the production process used meets specific market requirements for a New Zealand primary product(s).

Evidence

TASK	Sample evidence	Achievement	Achievement with Merit	Achievement with Excellence
(a) (i)	*For Market (1), explain one requirement that this market has. Use recent data to support your answer.* **Timing requirements** • Returns for the chilled lamb market in the UK are high pre-Christmas due to lower domestic supply, with premiums being paid to producers who can supply during this time. Roast lamb legs are popular for family meals at Christmas, so lamb legs of 2.5 kg are ideal. • 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 (end of April), and premiums are paid for growers who can supply during this week.	Explains how a market requirement for this market has been met. Part (a) contributes for the Achievement and Merit criteria, but a candidate cannot get Achievement or Merit form Part (a) alone.	Gives detailed explanation and uses recent data to support answer.	

(ii)	*For Market (2), explain one requirement that this market has. Use recent data to support your answer. It must be a different requirement from that used for Market (1).* **Quality or attribute requirements** • Apples destined for the European market are to have less than 1 cm^2 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. • Deer velvet going to the Chinese market needs to have symmetrical tines and large, rounded tips. The Chinese market is after the tip, as this is the part of the velvet that is actively growing (up to 2 cm a day) and has large amounts of organic molecules (proteins and fats), and minerals that are seen in traditional medicine to have health benefits. • 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 30 Newtons per kilotex (Nkt), preferably higher. This way, the strands of wool will not break easily. • Merino 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. The finer the micron, the greater the reduction of 'wool itch'. • 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. • Satsuma mandarins going to the Japanese market need to be in the size range of 55 to 63 mm. **Quantity requirements** • 700 tonnes of mandarins are supplied into the Japanese market, with much of this demand being attributed to festivities associated with Golden Week.			
(b) (i)	*Explain how this management practice enables producers to meet the market requirement. Use recent data to support your answer.* **High-quality feed – Timing** • 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 400 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.	Describes how the management practice assists in meeting market requirements. Some data used.	Gives detailed explanation and refers to up-to-date data.	

(ii)	*Explain how this management practice enables producers to meet the market requirement. Use data to support your answer. It must be different from the practice used for Market (1).* **Fruit thinning – Quality** • Apple growers 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, fewer fruit come into contact with each other in bunches. It is these collisions that cause blemishes on fruit that can downgrade the fruit or make them unsaleable. **Breed selection – Attribute** • 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, enabling the farmer to meet the requirements of the market by choosing this breed.			
(c)	*Discuss why this management practice has a more significant impact on meeting the **market requirements** when compared to another management practice for your chosen product. Use recent data to support your answer.* **Breed selection** • The choice of breed allows the producer to meet all aspects of the market requirements. They can alter the quantity, quality, timing, and attributes of the lamb meat. The more market requirements producers can meet, the more consumers are willing to pay. • Buying genetics to allow the producer to meet these market requirements benefits the producer not just this year, but into the future, as they do not lose genetics. • Buying in rams allows many lambs to be produced due to mating ratios. • If a farmer can meet the requirements of the market, the price received will be higher. An increase in income with no further increase in costs will result in higher profit for the producer. • While flushing is useful, it is not reliable, as it is dependent on feed availability and the condition of the ewe prior to flushing. Flushing should be done in conjunction with good genetics, not to replace them. • Flushing can affect the quantity of lamb being produced on farm, but it doesn't have any effect on the timing or quality of the lamb being produced, so it is less significant than breed selection at meeting the market requirements.			Makes thorough comparison between the chosen market requirement and one other and can justify answer.

N1	N2	A3	A4	M5	M6	E7	E8
Some writing, but **does not explain** the market requirements for either market *OR* why a management practice enables the producer to meet a market requirement for either market.	**Partially explains** the market requirements for either market *AND* **partially explains** why a management practice enables the producer to meet a market requirement for either market.	**Explains** a market requirement for ONE market *AND* partially explains the market requirements for a second market *AND* **explains** how a management practice enables the producer to meet a market requirement for ONE market.	Explains the market requirements for BOTH markets *AND* explains how a management practice enables the producer to meet a market requirement for BOTH markets.	**Explains in detail** (use of data) a market requirement for ONE market *AND* **partially explains** the market requirements for a second market *AND* **explains in detail** (use of data) how a management practice enables the producer to meet a market requirement for ONE market.	Explains in detail (use of data) the market requirement for BOTH markets *AND* explains in detail (use of data) how a management practice enables the producer to meet a market requirement for BOTH markets.	**Partial discussion** of the management practice (for either market) that has the most significant impact in meeting the market requirements. Must mention more than one market requirement.	**Full and comprehensive discussion** of the management practice (for either market) that has a more significant impact in meeting the market requirements and the price received by the producer when compared with another management practice. Must mention more than one market requirement and compare with another management practice.

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