

# **National Certificate of Educational Achievement**

## **2014 Assessment Report**

### **Agricultural and Horticultural Science Level 3**

- 91530 Demonstrate understanding of how market forces affect supply of and demand for New Zealand primary products**
- 91531 Demonstrate understanding of how the production process meets market requirements for a New Zealand primary product(s)**
- 91532 Analyse a New Zealand primary production environmental issue**

## COMMENTARY

Overall the 2014 examinations were well answered. Using unfamiliar resource based material however, was again a challenge for some students and questions that used these had less merit and excellence level responses. However, the grade distribution pattern against candidate ability was well aligned, indicating that the questions were fair and representative of Level 3 expectations. It is important to emphasis the value of preparation that is not simply rote learnt responses.

Added to this, there is likely to be an increasing number of resource based questions in future papers and therefore teaching and learning about how to apply knowledge in an unfamiliar context should be an important consideration.

## STANDARD REPORTS

### **91530 Demonstrate understanding of how market forces affect supply of and demand for New Zealand primary products**

#### **ACHIEVEMENT**

**Candidates who were awarded Achievement for this standard demonstrated the required skills and knowledge. They commonly:**

- understood the meaning of the market forces they selected
- chose suitable products for discussion
- demonstrated knowledge of the product selected for discussion
- followed instructions given throughout the paper
- provided knowledge of the market forces effect on supply and demand of their chosen primary product.

#### **NOT ACHIEVED**

**Candidates who were assessed as Not Achieved for this standard lacked some or all of the skills and knowledge required for the award of Achievement. They commonly:**

- failed to follow the instructions given in the examination paper
- chose primary products which were not significant, with little available information
- wrote answers on processed products, rather than the product in its unprocessed form
- provided confused or contradicting answers
- wrote answers about what may happen in the future, as opposed to what has happened over the last 3-5 years
- failed to complete all questions in the examination paper.

#### **ACHIEVEMENT WITH MERIT**

**In addition to the skills and knowledge required for the award of Achievement, candidates who were awarded Achievement with Merit commonly:**

- provided data to support their answers, in the form of volumes in tonnes, price per TCE or tonne, tariff rate reductions, exchange rates etc.
- produced an answer that was logical in its structure, with limited irrelevant information
- produced an answer that showed understanding of the market forces operating, not just a wrote learned answer.

## **ACHIEVEMENT WITH EXCELLENCE**

**In addition to the skills and knowledge required for the award of Achievement with Merit, candidates who were awarded Achievement with Excellence commonly:**

- produced clear answers in a series of well construction paragraphs
- provided convincing reasons or arguments such as the significance of one market force over another using data
- provided new evidence, rather than rewriting information used in previous questions
- completed the answer without the inclusion of irrelevant information.

## **OTHER COMMENTS**

Candidates who attempted this paper generally answered it well. They provided evidence that they had learned how the market forces affect their chosen nationally significant primary product, with many providing data to support their answer. Most candidates attempted all questions in the examination paper which is very important now with grade score marking (GSM).

Candidates need to practice discussing market forces from a range of resources to ensure that they are able to answer future questions that are presented in a format that is unfamiliar to them.

Candidates are learning about significant primary products to New Zealand which has allowed them to get quality information with data to back up their answers.

Few candidates are giving economic theory answers of what could happen, instead they are providing answers of what has happened for their chosen primary product.

## **91531 Demonstrate understanding of how the production process meets market requirements for a New Zealand primary product(s)**

### **ACHIEVEMENT**

**Candidates who were awarded Achievement for this standard demonstrated the required skills and knowledge. They commonly:**

- were able to link the timing of their chosen product to the supply to the market for specific months of the year
- provided realistic quality attributes
- demonstrated an understanding of the reasons for the markets requirements in terms of attribute consistency and uniformity
- showed an awareness of the typical volume expected of their chosen product and could match it to the correct units e.g. 18 kg carcass weight for lamb
- could explain how a management practice is carried out to meet the volume demanded by the market.

## **NOT ACHIEVED**

**Candidates who were assessed as Not Achieved for this standard lacked some or all of the skills and knowledge required for the award of Achievement. They commonly:**

- were unable to describe when their chosen product would naturally be produced
- had difficulty explaining how a management practice is used to alter the timing of the natural harvest
- did not provide specific attributes for consistency and uniformity providing responses such as “big” when a specific count size should have been provided
- stated that growers were rewarded with “top dollar” in meeting the markets requirements rather than specific values or reasons the market actually has those requirements
- did not provide a realistic volume that is typically produced or aimed for
- could not link the manipulations of a management practice to its effect on volume or quality.

## **ACHIEVEMENT WITH MERIT**

**In addition to the skills and knowledge required for the award of Achievement, candidates who were awarded Achievement with Merit commonly:**

- provided specific dates for the harvest of the product and gave reasons why this is the case
- understood how management practices are used to alter the timing, and to ensure the market's quality and quantity requirements are met
- provided real values for the what the market demanded in terms of attributes and volume produced (usually on a national scale).

## **ACHIEVEMENT WITH EXCELLENCE**

**In addition to the skills and knowledge required for the award of Achievement with Merit, candidates who were awarded Achievement with Excellence commonly:**

- provided justified answers as to why/how management practices are used to ensure that market requirements are met
- provided data for all questions, which was real and up to date
- compared the affect of management practices on the production of their chosen product.

## **OTHER COMMENTS**

This standard involves candidates demonstrating understanding of the production of a nationally significant product and guidance needs to be provided in selecting a product. The market requirements involving the manipulated timing, quality, and quantity of the product must be able to be readily identified and discussed. Candidates who selected products such as honey, milk or wine grapes found answering questions on timing, consistency and uniformity difficult to answer to a merit level. A number of candidates repeated management practices in more than one section, and future exams are less likely to provide such opportunities, therefore candidates should always be knowledgeable of a range of management practices throughout the production of the primary product from establishment through to harvest.

## **91532 Analyse a New Zealand primary production environmental issue**

### **ACHIEVEMENT**

**Candidates who were awarded Achievement for this standard demonstrated the required skills and knowledge. They commonly:**

- named a production system and used relevant information regarding it
- gave a management practice that would work in reducing nutrient losses, and gave a valid option in mitigating against further nutrient loss in a system
- described the environmental issues regarding nutrient loss.

### **NOT ACHIEVED**

**Candidates who were assessed as Not Achieved for this standard lacked some or all of the skills and knowledge required for the award of Achievement. They commonly:**

- did not specify a production system
- did not link the environmental issue clearly back to the production system
- were either inaccurate with data or had incorrect facts
- gave rote learned answers that were irrelevant or not applicable to the question
- gave courses of action that were not suitable or relevant to the production system.

### **ACHIEVEMENT WITH MERIT**

**In addition to the skills and knowledge required for the award of Achievement, candidates who were awarded Achievement with Merit commonly:**

- used a course of action that worked in reducing nutrient losses and explained how it would reduce nutrient loss, not just making more nutrients available to plants (pH mapping) or just how water was controlled, as this was not the solution to reducing nutrient losses. A management practice aside from the practice used in the example was discussed, with a real attempt to compare the two practices. Strengths and weaknesses were evaluated for their initial management practice
- demonstrated a depth of understanding of their chosen management practice.

### **ACHIEVEMENT WITH EXCELLENCE**

**In addition to the skills and knowledge required for the award of Achievement with Merit, candidates who were awarded Achievement with Excellence commonly:**

- used a course of action that would be effective in immediately reducing the impacts of nutrient losses and provided in-depth knowledge of how their chosen management practice would do this
- provided real and relevant data to back up their written essay
- used quotes and real life examples from councils or producers that were working with management practices
- provided a full and balanced discussion about how to best mitigate the environmental issue whilst considering economic, political and social implications.