

# **National Certificate of Educational Achievement**

## **2013 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 2013 examinations were well answered. Using unfamiliar resource based material however, was a challenge for some candidates and questions that used these had fewer merit and excellence level responses. Rote learnt answers that showed no response to the question did not achieve, and are not likely to be awarded any level of achievement in future years. There is likely to be an increasing number of resource-based questions in future papers. Therefore teaching and learning about how to apply knowledge in an unfamiliar context is important.

## 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 typically:**

- understood the meaning of the market forces they selected
- chose suitable products for discussion
- demonstrated knowledge of the product selected for discussion.

#### 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 typically:**

- had no clear understanding of the market force they attempted to answer
- wrote answers that had limited reference to the question they answered
- wrote rote learnt responses that were not relevant to the question or contained outdated data.

#### ACHIEVEMENT WITH MERIT

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

- provided accurate detail to support answers
- completed graphs accurately and clearly, including units on the axes
- defined terms used in the examples provided
- recognised international trade is conducted in \$US where appropriate.

#### 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 typically:**

- linked the market situation selected to actual action appropriate to a horticultural or agricultural producer
- described long term solutions to market changes outside of recent climatic or disease events
- produced chains of reasoning that were logical and clearly expressed.

## COMMENT

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

### **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 typically:**

- understood the essential management practices
- provided basic information on quality produced
- provided general descriptions of attribute
- linked an aspect of market requirement to an attribute
- understood the term market requirements and how they related to their 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 typically:**

- provided rote learnt answers
- misunderstood the meaning of the term attribute
- misunderstood the meaning of the term quantity
- failed to link management practices with either quantity 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 typically:**

- defined quantity using data or detail
- defined attribute using data or detail
- showed in-depth understanding of the management practices selected.

#### 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 typically:**

- produced chains of reasoning that were logical and clearly expressed
- were able to evaluate pros and cons of relevant management practices
- provided new data for points made in discussion.

#### OTHER COMMENTS

Candidates found difficulty providing a range of management practices and/or attributes when pine or milk are used as the chosen product.

A detailed knowledge of the key aspects of quantity, quality, price and timing are fundamental for the chosen product.

Linking the market requirements and management practices to the market forces above is the requirement of this standard.

## **91352 Analyse a New Zealand primary production environmental issue**

### **ACHIEVEMENT**

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

- correctly described how a specific production system (e.g. irrigated dairy or potato production) contributed to the selected environmental issue
- explained valid implications (environmental, economic and social) of their chosen environmental issue
- described a realistic course of action that could be implemented to address the environmental impacts of their chosen issue.

### **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 typically:**

- poorly linked the environmental issue to a specific production system
- did not identify the production system
- failed to adequately explain relevant environmental implications and gave explanations that were vague or simply incorrect, e.g. ....causes 'pollution'
- gave rote learnt answers/data that was out of date or irrelevant to the chosen environmental issue
- wrote answers that indicated a poor awareness of potential social and economic implications
- attempted to evaluate courses of action that were unrealistic or unsuitable.

### **ACHIEVEMENT WITH MERIT**

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

- used appropriate data when impacts or course of action were explained and/or when discussing mitigating the issue
- explained the environmental impacts using supporting data or by linking the issue with the implication and explaining the impact (i.e. saying *why* it happens)
- demonstrated a depth of understanding of their chosen environmental issue, its impacts and the feasible courses of action that producers are likely to implement
- evaluated their chosen course of action by clearly explaining (without contradiction) the relative strengths and weaknesses of the chosen course of action.

## **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 typically:**

- used accurate and current data when evaluating course of action
- gave evidence of a breadth of knowledge in addition to a depth of understanding of the selected environmental issue whilst considering economic, political and social implications
- provided a full and balanced discussion about how to best mitigate the environmental issue whilst considering economic, political and social implications
- identified or differentiated the critical implications clearly from other statements provided.