

Scholarship 2011 Assessment Report Agricultural and Horticultural Science

INTRODUCTION

This was the third year of the Scholarship examination for Agricultural and Horticultural Science, which was introduced in 2009. In 2011, 35 candidates sat the examination, and nine scholarships were awarded with a cut score of 12 marks. One candidate achieved Scholarship with Outstanding Performance with a consistent performance across all three questions.

Three of the 35 candidates did not attempt or answer all questions – a smaller proportion than in 2010 and 2009.

COMMENTARY

This report should be read in conjunction with the 2009 and 2010 Assessment Reports.

The 2011 examination had some positive outcomes. The number of schools participating has increased to 15 schools; 74 schools had candidates in the Level 3 examination. The standard of answers from candidates at the top of this cohort displayed comprehensive knowledge of their subject areas. In addition to the Scholarship awards, a further eight candidates were close to reaching the required standard.

Although it was clear that some candidates had specifically responded to the issues raised in the earlier reports, in general the same issues were identified in 2011 – specifically, about half the candidates showed little or no evidence of wide reading on the topic and showed evidence of having understanding that was little more than general knowledge. As a consequence, both the overall level of achievement and the number of scholarships fell short of expectations.

Unlike other subject examinations, where there is often a relatively concise body of knowledge, this examination requires the candidate to collate widely dispersed learning resources and then to interpret, critically analyse, and write a clear answer to the specific parts of the question. It is not possible to develop those skills without repeated practice, and prospective candidates for the 2012 examination are encouraged to develop model answers for the questions in previous examinations, and to discuss and refine those answers with their study peers. The Horticulture & Agriculture Teachers Association of New Zealand (HATA) have developed learning resource kits on key knowledge areas covered by the examination, and these are available by logging onto their web site: http://hatanz.com/

It is important that the candidate understands that a good 'Excellence' style answer is not the sole requirement of this Scholarship examination. How Scholarship differs is that the candidate must demonstrate detailed knowledge and understanding of the complete 'value chain' (paddock to plate) for agriculture and/or horticulture systems and industries, the market requirements of NZ's trading partners and the perspectives of multiple stakeholders. Although quoting numbers might provide credibility for answers, repetition of facts and figures without a comprehensive discussion of their relevance to the question, can create a rote-learnt style of answer, and one that does not display the depth of understanding expected of a Scholarship candidate.

Specific comments on each of the three questions follow.

Question One – 'Choose two contemporary issues and discuss in relation to one system...'

- Generally, candidates achieved better results in this question.
- Most candidates' understanding of the selected issues did not show critical analysis, perceptive thinking, or evidence of wider general knowledge. A few candidates showed evidence of having clearly read widely on the issues and had planned a model answer before the examination.
- Most candidates related one issue to the one nominated production system; but as in previous years, system was not the best illustration of the second issue. This weakness was compounded when the question was extended to the wider primary production sector.

Question Two – 'balance environmental impacts with economic and social considerations ...'

- This question required candidates to nominate two issues and discuss perspectives and innovative solutions. Many candidates were able to describe the environmental issues and recognise and discuss some differing perspectives on the issue, but most candidates struggled with possible innovative solutions.
- Social aspects of sustainability continue to be poorly recognised and understood.

Question Three – '... choose one issue and critically discuss the impact on two systems'

- This question provided a wider spread of marks.
- As with Question One, candidates typically showed a system-centric view and adequately discussed one issue and one system but often found the second issue much more problematic. In part, this is a reflection of limited reading and the lack of ability to think in a more interpretive and less prescriptive way.

SCHOLARSHIP WITH OUTSTANDING PERFORMANCE

One candidate was awarded Scholarship with Outstanding Performance with marks of 6, 7, and 8 for the three questions. This Top Scholar script will be on the Scholarship web page.

SCHOLARSHIP

Candidates who were awarded Scholarship but not Scholarship with Outstanding Performance commonly:

- read the questions carefully, especially those in multiple parts
- communicated in a logical, concise manner
- provided evidence of in-depth reading of relevant learning resources
- quoted data and references in support of their answer
- managed their time effectively, especially answering questions in an order that allocated their initial time to their most confident response
- demonstrated some ability to 'evaluate', 'critically analyse' and 'compare and contrast'
- provided evidence of understanding of a broader range of systems, issues, and considerations.

OTHER CANDIDATES

Candidates who were not awarded Scholarship or Scholarship with Outstanding Performance commonly:

- did not read the questions carefully or understand what the examiner was asking for, especially for multiple part questions
- did not allocate time effectively although no candidate appeared to run out of time, the quality of answers generally deteriorated despite few candidates changing the question/response order
- selected 'minor' primary production systems that gave reduced scope for a comprehensive answer
- concentrated on environmental aspects of sustainability and producer responses
- provided limited understanding or made no mention of economic and social considerations
- provided generic responses did not illustrate the answer with specific data or references
- showed little evidence of reading on the topics
- showed a lack of in-depth knowledge and understanding of at least two primary production systems
- lacked structure in the presentation of their written responses
- spent most of their response discussing what the issues involved and why they were issues but not showing understanding and perception of the future implications and range of stakeholder responses.

CONCLUSIONS

The four key 'take-home messages' arising from the 2011 examination are that candidates should:

- choose primary production systems that give greater scope for discussing aspects of sustainability and a range of contemporary issues
- read a wide range of learning resources on the topics listed in the Assessment Specifications
- read the examination questions carefully and write a well-structured answer that addresses each part of each question
- allocate some time at the commencement of each answer to planning the framework of a response in the space provided.