

91290



912900



NEW ZEALAND QUALIFICATIONS AUTHORITY  
MANA TOHU MĀTAURANGA O AOTEAROA

2

SUPERVISOR'S USE ONLY

## Level 2 Agricultural and Horticultural Science, 2014

### 91290 Demonstrate understanding of techniques used to modify physical factors of the environment for NZ plant production

9.30 am Thursday 27 November 2014  
Credits: Four

| Achievement  | Achievement with Merit  | Achievement with Excellence  |
|--|---|--|
| Demonstrate understanding of techniques used to modify physical factors of the environment for commercial plant production in New Zealand. | Demonstrate in-depth understanding of techniques used to modify physical factors of the environment for commercial plant production in New Zealand. | Demonstrate comprehensive understanding of techniques used to modify physical factors of the environment for commercial plant production in New Zealand. |

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

**You should attempt ALL the questions in this booklet.**

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–8 in the correct order and that none of these pages is blank.

**YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.**

**TOTAL**

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Plants required for landscaping and market gardening are often propagated and grown in nurseries in protective environments to improve the plants' growth and quality.

(b) Compare and contrast these two protective environments for improved plant growth and quality in nursery production.

- the environmental impacts of each environment
- the economic impacts of each environment.

Shelter belts modify the environment to improve the timing of harvest of fruit production in New Zealand.

### Artificial shelter



- (b) Justify the use of a natural shelter belt over the use of shelter cloth in the production of fruit, by explaining why natural shelter belts are likely to provide fewer environmental impacts.

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A grower uses water scheduling during the field production of their export vegetable root crop. Water scheduling involves knowing when to irrigate and how much water to apply.

- (b) Justify the grower's use of water scheduling over using a gun irrigator. In your answer, compare the economics of management of the use of water scheduling in the selection of timed irrigation with that of daily irrigation using a gun irrigator.

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Extra space if required.  
Write the question number(s) if applicable.

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