

91290



Draw a cross through the box (X) if you have NOT written in this booklet

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Mana Tohu Mātauranga o Aotearoa
New Zealand Qualifications Authority

Level 2 Agricultural and Horticultural Science 2025

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

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.

Do not write in the margins (/////////). This area will be cut off when the booklet is marked.

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

Identify a plant production type and management practice of modifying light.

Light modification management practice: _____

QUESTION TWO: Irrigation

Choose a method of irrigation.

Irrigation method: _____

- (a) Explain how this method modifies physical factors of the environment and impacts pasture production.

- (b) Justify a farmer's decision to irrigate their farm using your chosen method, taking into account the **environmental** and **economic** impacts of this practice.

QUESTION THREE: Temperature

Identify a production type and a management practice that could be used to modify temperature in horticultural production.

Horticultural production type: _____

Temperature management practice: _____

- (a) (i) Describe how the use of your chosen management practice modifies the temperature of the physical environment for your chosen horticultural production type.

- (ii) Explain how modifying the temperature improves plant growth.

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

QUESTION
NUMBER

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