

# 1

90924



909240



NEW ZEALAND QUALIFICATIONS AUTHORITY  
MANA TOHU MĀTAURANGA O AOTEAROA

SUPERVISOR'S USE ONLY

## Level 1 Agricultural and Horticultural Science, 2014

### 90924 Demonstrate knowledge of horticultural plant management practices and related plant physiology

9.30 am Tuesday 11 November 2014

Credits: Five

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate knowledge of horticultural plant management practices and related plant physiology.	Demonstrate in-depth knowledge of horticultural plant management practices and related plant physiology.	Demonstrate comprehensive knowledge of horticultural plant management practices and related plant physiology.

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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## QUESTION ONE: COUNCIL PARKS AND RESERVES

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Council flower bed



Describe TWO methods of cultivation that would be used in council flower beds.

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Describe THREE actions that are taken when preparing a flower bed for transplanting plants. Explain why each of the actions should be carried out in the way you have described.

Description of the action	Reason for the action
Action (1)	
Action (2)	
Action (3)	

Weeds can be controlled by chemicals or by using a push hoe.

Select and justify the better management practice for controlling weeds by comparing and contrasting it with the other management practice.

Selected management practice: \_\_\_\_\_

In your answer, you could consider:

- damage to non-targeted plants
- effectiveness of control
- members of the public.

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## QUESTION TWO: ROSE GARDENS

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Rose gardens are usually planted in beds or groups of plants to look good when they flower.

**Rose garden**



**Rose flower-heads before dead-heading**



Before applying pesticides with a knapsack sprayer, reading the product label is an essential step. Describe THREE reasons why instructions on the product label should be read.

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Describe THREE actions a grower would take to reduce fungal disease on roses. Explain the reason for each decision.

Description of the action	Reason for the action
Action (1)	
Action (2)	
Action (3)	

The rose flower-head can be removed once the petals have fallen. This is called “dead-heading”. Justify the management practice of removing dead-heads, compared with leaving the dead flower-heads on the plant.

In your answer, you could consider:

- plant health
- plant energy.

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### QUESTION THREE: KIWIFRUIT ORCHARDS

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**Kiwifruit training structures**



**Shelterbelt for kiwifruit**



Explain the reasons why kiwifruit are grown on training structures.

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Describe THREE actions a grower should carry out when pruning kiwifruit. Explain the reason for each action.

Description of the action	Reason for the action
Action (1)	
Action (2)	
Action (3)	

Kiwifruit orchards frequently have shelter around blocks of kiwifruit plants. Justify this as the better management practice for kiwifruit production, by comparing and contrasting it with having no shelter.

In your answer, you could consider:

- the way in which the environment is altered by a shelterbelt
- the effect on fruit quality.

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

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