

91297



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

2

SUPERVISOR'S USE ONLY

Level 2 Agricultural and Horticultural Science, 2013

91297 Demonstrate understanding of land use for primary production in New Zealand

2.00 pm Friday 29 November 2013

Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of land use for primary production in New Zealand.	Demonstrate in-depth understanding of land use for primary production in New Zealand.	Demonstrate comprehensive understanding of land use for primary 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

ASSESSOR'S USE ONLY

You are advised to spend 60 minutes answering the questions in this booklet.

QUESTION ONE: CHANGING LAND USE

Last century, land traditionally used for sheep and beef production was changed to forestry production.

(a) Explain, in detail, what economic and environmental factors may have contributed to farmers converting their sheep and beef land to forestry.

(i) Economic factors

(ii) Environmental factors

QUESTION TWO: ROOT CROP PRODUCTION

Ohakune is located in the central North Island, where land is traditionally used for root crops such as carrots.

- (a) Explain, in detail, why seasonal root crops can be grown more successfully in areas such as Ohakune than in other parts of the North Island. In your answer, consider the environmental and economic factors which make root crop growing in the Ohakune area a preferred option.

- (i) Environmental factors

- (ii) Economic factors

An environmental court has ruled to restrict the amount of fertiliser that growers in Ohakune can use on their land, to stop it leaching into waterways. This may have an influence on the profitability of root crop growing. One grower is considering changing the land use to dairy production.

(b) Analyse the advantages and disadvantages of changing the land use to dairy production.

In your answer, consider:

- the environmental issue of fertiliser
- existing workforce considerations
- economic returns of root crop production compared with dairy production.



QUESTION THREE: KUMARA PRODUCTIONASSESSOR'S
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A Dargaville (Northland) farmer has been producing kumara for many years. It has been considered to be the best use of the land.

- (a) Explain, in detail, why the land in Northland is suitable for kumara production. Consider the environmental (climate and soil type) and economic factors for continuing to grow kumara in the area.

- (i) Environmental factors

- (ii) Economic factors
