

91294



NEW ZEALAND QUALIFICATIONS AUTHORITY
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SUPERVISOR'S USE ONLY

Level 2 Agricultural and Horticultural Science, 2018

91294 Demonstrate understanding of how NZ commercial management practices influence livestock growth and development

9.30 a.m. Wednesday 28 November 2018

Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of how management practices influence livestock growth and development in commercial production in New Zealand.	Demonstrate in-depth understanding of how management practices influence livestock growth and development in commercial production in New Zealand.	Demonstrate comprehensive understanding of how management practices influence livestock growth and development in commercial 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 2–12 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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This examination requires you to discuss THREE different livestock of your choice, such as sheep, salmon, cattle, deer, pigs, poultry, insects, horses, or alpacas. **Before** selecting your livestock, carefully read ALL the questions to ensure that your selection will allow you to meet ALL the requirements.

QUESTION ONE: PRODUCTION MONITORING AND TIMING

Select your livestock for this question. The livestock you select for this question **must** be different to those you select for Question Two and Question Three.

Selected livestock: _____

Feed utilisation in livestock can be monitored using practices such as weighing, measuring, or condition scoring. The results of this can be used by the farmer to make management decisions that have an effect on the growth and development of the livestock.

Measuring



Source: <https://caseagrants.ucsd.edu/sites/default/files/Coho%20Smolt.JPG>.

Condition scoring



Source: <https://www.agric.wa.gov.au/sites/gateway/files/Fat%20Cow.JPG>.

(a) Describe how farmers monitor the growth and development of your chosen livestock.

(b) Explain how this management practice can be used to improve the growth and development of your livestock.

(c) Justify the use of this management practice by discussing the economic impact and the effect on production timing.

More space for this answer is available on the next page.

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The examination continues on the following page.**

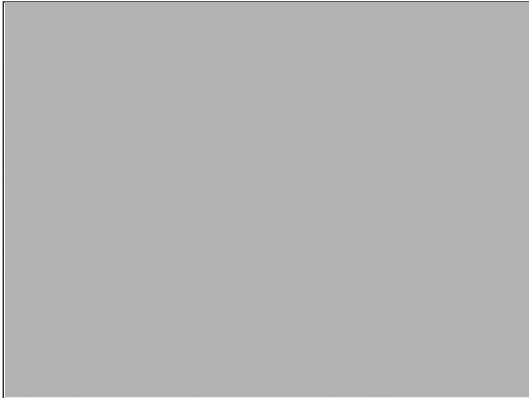
QUESTION TWO: BREEDING

Select your livestock for this question. The livestock you select for this question **must** be different to those you select for Question One and Question Three.

Selected livestock: _____

Selective breeding management practices are used to improve the characteristics of livestock, so that the product produced fully meets the demands of the buyer. For example, thoroughbred sires are chosen for traits that enable their offspring to run fast.

Racehorse



<https://www.nzracing.co.nz/OnHorseFiles/News%20Images/Burgundy.jpg>

Breeding bull



http://www.silverstreamcharolais.co.nz/wordpress/wp-content/uploads/2015/09/IMG_6181-e1448096026418.jpg

(a) Describe how farmers/producers select the breeding stock for your chosen livestock.

(b) Explain how farmers/producers use this selective breeding practice to improve the growth and development of your chosen livestock.

(c) Evaluate the effectiveness of this breeding programme by explaining how it would improve the quality and economics of production for your chosen livestock.

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**More space for this answer is
available on the next page.**

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The examination continues on the following page.**

QUESTION THREE: LIVESTOCK HEALTH

Select your livestock for this question. The livestock you select for this question **must** be different to those you select for Question One and Question Two.

Selected livestock: _____

Ensuring that livestock receive necessary healthcare is important in order to maximise growth and development. For example, dairy goats need to have their feet trimmed frequently. This is partly due to our pastoral farms lacking the hard and stony ground of the environment they prefer.

Goat hoof-trimming



www.youtube.com.

Treatment of bees against mites



<http://scientificbeekeeping.com/the-learning-curve-part-3-the-natural-miticides/>.

- (a) Explain how a health management practice is carried out on your chosen livestock, and how it improves livestock growth and development.
