





Level 1 Agricultural and Horticultural Science, 2014

90921 Demonstrate knowledge of livestock management practices

9.30 am Tuesday 11 November 2014 Credits: Five

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate knowledge of livestock management practices.	Demonstrate in-depth knowledge of livestock management practices.	Demonstrate comprehensive knowledge of livestock management practices.

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 LISE ONLY

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QUESTION ONE: SHEEP

Vaccinating is a management practice that is used to help maintain healthy sheep.

In the table below, describe THREE actions that are taken when vaccinating a sheep. Explain why each action should be carried out in the way you have described.

Explain how vaccinating improves production.

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Facial eczema is a disease that affects sheep in warm, moist conditions from January to April.

Facial eczema on sheep

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Two management practices that can reduce the occurrence of facial eczema in sheep are:

- the selection of eczema-resistant rams for breeding
- treatment with zinc.

Select the better management practice to reduce facial eczema. Justify your choice by comparing and contrasting it to the other practice.

Selected management practice:

In your answer, you could consider both the short-term and long-term effects of the practice.

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QUESTION TWO: DEER

NAIT (National Animal Identification Tracing) ear tags are an electronic tagging system that is required for beef cattle and deer.

NAIT tagging in deer

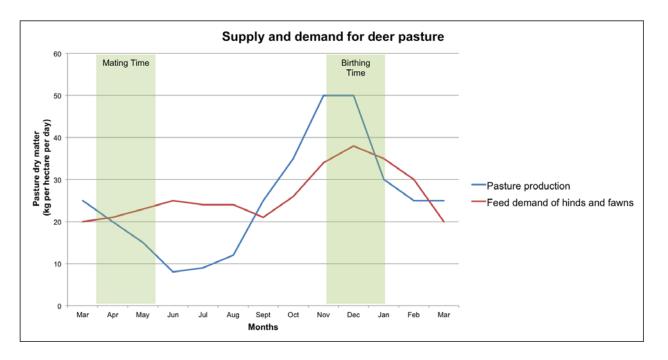


In the table below, describe the information tracked by the NAIT ear tag system, and explain how the farmer uses this information to improve production.

Information/data tracked by the NAIT ear tag	How the information improves production		

Describe ONE other system that farmers have previously used to identify animals for tracking before NAIT became available.

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Deer mate in autumn, and their fawns are born in late spring or early summer.

Using the information in the graph above, justify when and why a farmer would give deer supplementary feed.

In your answer, you could consider:

- the feed requirements of hinds throughout the year
- the nutritional value of supplementary feed.

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QUESTION THREE: CATTLE

Artificial insemination is used on dairy farms.

In the table below, describe THREE steps that are taken during the artificial insemination process, and explain why each of these steps is carried out. Refer to parts of the female reproductive system in your answer.

Description of the step	Reason for the step
Step (1)	
Step (2)	
Step (3)	

Describe the effect that internal parasites have on cattle. Refer to parts of the animal in your answer.

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A farmer is breeding cattle for the beef meat market, and is looking to purchase a new bull to mate with the herd.

Sire	Birth weight (kg)	Post-weaning growth (kg/day)	Resistance to internal parasites	18-month weight (kg)
A	88	1.5	Low	720
В	92	1.3	High	650

Statistics for the offspring of two different bulls

Using the information in the table above, select the better sire (bull) to be mated with the cows, and justify your selection by comparing with the other bull.

Selected sire:

