

The University of Melbourne

Semester Two Assessment 2005

School of Agriculture and Food Systems
208 245 ANIMAL MANAGEMENT AND PRODUCTION

Number of Pages: 4 pages

Exam Duration: Three (3) hours

Reading Time: Fifteen (15) minutes

This paper has three (3) pages

Authorised Materials:

No materials are authorised.

Instructions to Invigilators:

Six (6) script books are required.

The examination paper is to remain in the examination room.

Instructions to Students:

There are two (2) sections.:

Answer ONE question from each part of section A.

Answer ONE question from any part Section B.

Answer TWO other questions.

You should have answered a total of SIX questions.

All questions have equal value.

Answer all questions in SEPARATE books.

SECTION A

Answer at least ONE question from EACH part of this section

Part 1. BEEF

Question 1

Write concise notes on ALL of the following:

- o outline typical values for fatness, carcass weight sex , age and any other specifications of cattle entering the domestic supermarket trade
- o outline the generational time-line of production for female cattle - conception, parturition, puberty, etc -assuming an annual cycle, i.e. that calving is at the same time every year.
- o outline typical feed dry matter intakes, growth rates and feed conversion efficiencies for 300kg steers being fed a ration of average to good quality (10MJ/kgDM and 12% CP), assuming a comfortable climate. (12 marks)

AND select ONE of the following

- a) The Australian Beef Industry has been described as a "small fish in a big pond and a big fish in a little pond". Explain this and discuss recent trends including exports, domestic consumption and cattle numbers in the beef industry. Conclude with your opinions about the short to medium term outlook for Australian beef producers.
- b) Discuss the advantages and disadvantages of a January - February calving in a beef production system based mainly on annual pasture in Northern Victoria.
- c) Describe in detail how you would manage a beef cow herd on improved pasture, for maximum cow productivity. (8 marks)

Question 2

Outline your animal husbandry program for an autumn calving beef herd run on perennial pasture in north-eastern Victoria, producing yearling cattle to supply to feedlots. Your answer should include:

- a) joining and calving times (include comments on the length of these periods, why joining/calving might occur at this time, bull:cow ratios, etc.);
- b) target weights and growth patterns of cows, heifers and steers;
- c) supplementary feeding (why is this needed and what types of feeds are used);
- d) animal health programs

(20 marks)

Part 2. SHEEP

Question 3

Explain what is meant by wool staple strength and why it is an important quality characteristic of wool. Discuss management strategies that can be used to improve staple strength.

(20 marks)

Question 4

What do consumers perceive as the key determinants of eating quality for lamb? Discuss the ways in which producers of prime lamb can manage product quality.

(20 marks)

Part 3. DAIRY

Question 5

Discuss the relationship between milk production, dry matter intake and body condition. Outline the importance of dairy cow body condition and explain how body condition is managed through the production year.

(20 marks)

Question 6

The dairy industry is characterized by its relatively high use of technology. One of these technologies is genetics. With reference to the selection of cows and bulls for breeding, outline some of the genetic tools available to dairy producers.

(20 marks)

SECTION B

Answer at least ONE question from this section.

Part 4. PIGS

Question 7

Outline the production cycle for a sow, describing the different housing systems through which she will pass, with reference to environmental requirements.

(20 marks)

Part 5. POULTRY

Question 8

There are a number of issues currently affecting the broiler and egg industries. Outline TWO issues for EACH industry and discuss their importance to the industry and the industry's responses.

(20 marks)

Part 6. OTHER ANIMAL INDUSTRIES

Question 9

Outline some reasons why people might buy or invest in alpacas. Discuss the ways in which alpacas can offer a return on investment and the possible future for the industry.

(20 marks)