

The University of Melbourne

Semester Two Assessment 2005

School of Agriculture and Food Systems
208 271 ANIMAL MANAGEMENT

Number of Pages: 4 pages

Exam Duration: Three (3) hours

Reading Time: Fifteen (15) minutes

This paper has four (4) 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

Discuss management strategies that can be used to improve staple strength. Include in your discussion:

- what is meant by wool staple strength, with a diagram to illustrate your answer
- why wool staple strength is an important quality characteristic
- causes of poor staple strength and how these can be corrected (20 marks)

Question 4

Discuss the ways in which producers of prime lamb can manage product quality. Your answer should include:

- the key determinants of eating quality for lamb, as perceived by consumers
- what affects these factors
- how management can be used to guarantee quality (20 marks)

Part 3. DAIRY

Question 5

Discuss, with the aid of a diagram, 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. Your answer should include reference to:

- measurement of body condition
- the implications of not having the correct body condition
- the ways in which body condition is managed (20 marks)

Question 6

The dairy industry is characterized by its relatively high use of technology. One of these technologies is genetics. Outline some of the genetic tools available to dairy producers, referring to:

- the ways in which cows are selected for breeding
- the ways in which bulls are selected for breeding
- figures and indices provided by the dairy industry to help in these decisions (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. Your answer should:

- describe the breeding cycle of a sow, with approximate timelines
- describe the housing of sows at different stages of her breeding cycle, including some alternatives
- include some references to environmental requirements at each stage (20 marks)

Part 5. POULTRY

Question 8

There are a number of issues currently affecting the broiler and egg industries. These include:

- Broiler industry: international competitiveness; use of antibiotics and growth promotants; urban encroachment and pollution; implementation of a National biosecurity code; Bird Flu
 - Egg industry: creation of a national egg corporation; promotion of egg consumption through advertising; welfare of poultry in cages; development of a quality assurance program; alternate production systems
- Choose TWO issues for EACH industry. Describe each of issue and discuss:

- its importance to the industry
- 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. Include in your answer:

- the attraction/benefits of alpacas
- the costs of buying and maintaining alpacas
- products and/or uses of alpacas (20 marks)