![Government of Western Australia — School Curriculum and Standards Authority logo]

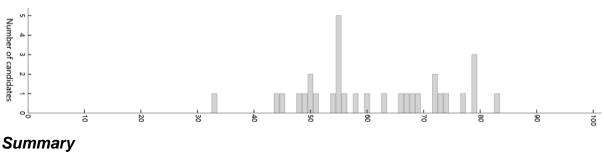**Summary report of the 2022 ATAR course examination report:**
Animal Production Systems

Year	Number who sat	Number of absentees
2022	31	2
2021	52	2
2020	44	1
2019	45	0

The number of candidates sitting and the number attempting each section of the examination can differ as a result of non-attempts across sections of the examination.

Examination score distribution–Written

Summary
Attempted by 31 candidates   Mean 61.05%   Max 82.88%   Min 32.50%

Section means were:
Section One: Multiple-choice	Mean 69.84%		
Attempted by 31 candidates	Mean 13.97(/20)	Max 18.00	Min 6.00
Section Two: Short answer	Mean 61.16%		
Attempted by 31 candidates	Mean 30.58(/50)	Max 44.75	Min 16.00
Section Three: Extended answer	Mean 55.0%		
Attempted by 31 candidates	Mean 16.50(/30)	Max 24.38	Min 9.38

General comments
The examination mean score was 61.05%. This was consistent with past years. The maximum mark was slightly lower than last year (82.88% compared to 87.31%), while the minimum mark was very similar. Overall, candidates performed well in Section One and were least successful in Section Three.

Advice for candidates
- Make sure you understand the meaning of the different question verbs and know how to answer each type in sufficient detail to score well. Practise answering different types of question, with different question verbs. Refer to the *Glossary of key words in the formulation of questions* available on the course page.
- Familiarise yourself with issues that are happening in other parts of Australia, outside of your local area, and around the world and study how these are affecting the ability of Australian farmers to produce safe and affordable products.
- During the examination, take time to read and interpret all questions properly; practise time management to ensure that you can answer all questions to the very best of your ability.

- Select your extended answer question carefully; make sure it is the one that you are most confident about answering and that you understand the content being examined well. Take time to plan your answer.

Advice for teachers
- Students should be helped and encouraged to apply their knowledge to 'real-life' situations, including the evaluation of practical aspects of the animal production system they have studied.
- Students need to be instructed to consider the role of Australia in the global marketplace, particularly in regards to the potential effects of global events on the sustainability of Australian animal production. There have been many recent world events that have impacted upon Australian agriculture, such as increasing fuel prices, cost of living and biosecurity threats; examining these issues can provide excellent teaching opportunities and help to make what is learned in the classroom more relevant to students.
- Students need to practise planning extended answer type questions and, ideally, have exposure to doing this under pressure. Appropriate question selection is also important and it would be useful for students to gain further experience and guidance in doing this.

Comments on specific sections and questions

Section One: Multiple-choice (20 Marks)
Candidates performed fairly well in this section. The mean score of 69.84% was the highest of the three sections of the examination. Some areas which appear to require attention are candidates understanding of the term 'standard error' (Question 7), the identification of the products of carbohydrate metabolism (Question 8) and the difference between economic threshold and injury level (Question 13). Question 11, which required candidates to identify appropriate conclusions from supplied data in unfamiliar contexts, appeared to be difficult for many and Question 20 also appeared to be a challenge, with a significant number of candidates unable to correctly identify the similarity in function of the 'true' stomach and the abomasum (of gastric and microbial digestive systems respectively).

Section Two: Short answer (100 Marks)
Candidates performed reasonably well in this section, with a mean score of 61.16%. The highest mean scores were seen in Questions 22 and 26, which examined the formulation of feed rations and the impact of climate change. While most candidates demonstrated a reasonable understanding of the syllabus context examined, they appeared to struggle with the higher order thinking aspects of the questions. Potential areas of weakness included the application of technologies in animal production, the importance of the global economy to Australian animal production and good experimental design.

Section Three: Extended answer (40 Marks)
Candidate performance in this section was the weakest of the three with a mean score of 55.00%, however, overall candidates performed better in the Extended answer section this year compared to last year. In the compulsory extended answer many candidates could not adequately evaluate the production system or identify how factors affecting product quality/quantity could be managed. Application and evaluation of the chosen animal production system are areas that need to be explicitly addressed in the delivery of the course.