Government of **Western Australia**
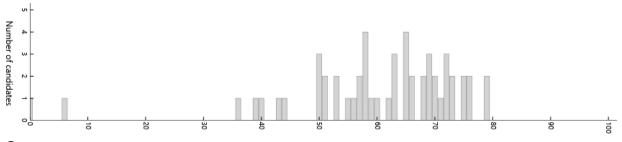School Curriculum and Standards Authority

Summary report of the 2017 ATAR course examination:
Plant Production Systems

Year	Number who sat	Number of absentees
2017	53	0
2016	46	1

Examination score distribution – Written

Summary
Attempted by 53 candidates   Mean 59.69%   Max 79.25%   Min 0.00%

Section means were:
Section One: Multiple-choice   Mean 75.00%
Attempted by 53 candidates   Mean 15.00(/20)   Max 19.00   Min 0.00

Section Two: Short answer   Mean 61.72%
Attempted by 52 candidates   Mean 30.86(/50)   Max 40.62   Min 0.48

Section Three: Extended answer   Mean 49.90%
Attempted by 51 candidates   Mean 14.97(/30)   Max 24.75   Min 0.38

The Plant Productions Systems ATAR course is now in its second year of being examined. The candidates are required to complete three sections, with all questions in Sections One and Two to be completed. Section Three has a compulsory question and a choice between two extended answer questions. The examination allowed for discrimination between candidate responses and all questions were attempted. The examination had a mean of 59.69% and marks ranged from 0% to 79.25%.

General comments
The responses by many candidates indicated a superficial knowledge of the critical aspects that underpin the syllabus. While most of the candidates attempted all of the questions, many were not confident and tended to pad the answer by rewriting the question or rewriting the same information in a slightly different way. There appeared to be little planning undertaken by most in the extended answer section, even with the level of scaffolding provided in the compulsory question.

Advice for candidates
- Questions that require you to 'explain' or 'describe' require planning so that the marks can be maximised.
- Read the question carefully, dissect it into the parts that are going to attract marks and, without repeating the question as an opening statement, write a coherent answer.
- Make sure you have an in-depth knowledge of one enterprise including all of the parameters for selecting, growing, protecting, harvesting and marketing its product.

Advice for teachers
- Ensure that students are given appropriate opportunity to practice writing responses to 'explain' or 'describe' questions.
- Students need to develop a better understanding of the scientific approach from writing a hypothesis to interpreting the data.
- Ensure students practice how to make comparisons at the management level when dealing with budgeting computations.
- Ensure students are given sufficient opportunity to understand Australian plant exports and how export markets are maintained.
- Ensure students understand the use of water in a plant production system including how water is stored in the soil and how the plant utilises water.
- Ensure students are able to discuss the management of a plant enterprise in detail.
- Ensure students are provided with sufficient opportunity to practice answering extended answer questions where they are required to dissect, plan and write a coherent response.
- Ensure students practice questions relating to environmental factors and sustainability, particularly relating to pH and salinity as the environmental factor.

Comments on specific sections and questions

Section One: Multiple-choice (20 Marks)
Candidates answered this section well. The easiest Questions were 4, 5, 9, 11, 14 and 20. The most difficult was Question 7 where most candidates chose Gross Margin Budget rather than Cash Flow Budget. A Gross Margin is used to look at the relative profitability of similar enterprises in a farm business rather than the whole farm business.

Section Two: Short answer (104 Marks)
In general, candidates responded well to content relating to Economic Injury Level (EIL), Economic Threshold (ET), budgeting, photosynthesis, nutrient movement in plants and graphing skills. Questions relating to scientific approach, export markets and water availability were poorly answered.

Section Three: Extended answer (40 Marks)
The extended answer section had the lowest mean of the three sections of the examination. In Question 28, candidates were unable to identify a Quality Assurance program, in Question 29 candidates were unable to explain how the environmental factor of salinity could be bred into a cultivar, and in Question 30 candidates were unable to identify risks or apply the risk to the triple bottom line.