

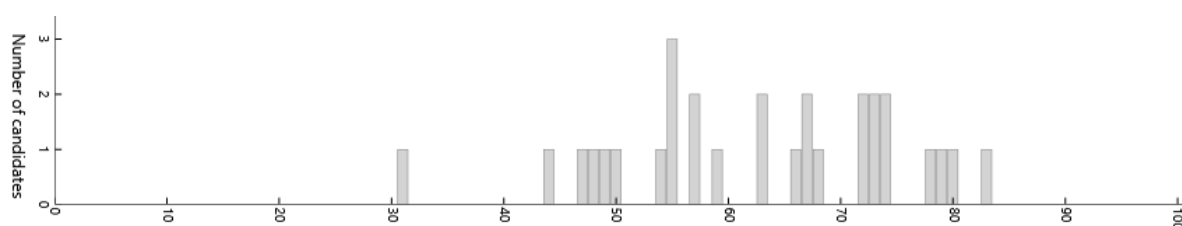


Summary report of the 2022 ATAR course examination report: Plant Production Systems

| Year | Number who sat | Number of absentees |
|------|----------------|---------------------|
| 2022 | 29 | 0 |
| 2021 | 41 | 0 |
| 2020 | 43 | 0 |
| 2019 | 39 | 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

The examination's mean was consistent with that of past years. The candidates' strength was in the Multiple-choice section and their weakness lay in the Extended answer section.

Attempted by 29 candidates Mean 62.48% Max 82.93% Min 30.67%

Section means were:

| | | | |
|--------------------------------|-----------------|-----------|-----------|
| Section One: Multiple-choice | Mean 70.86% | | |
| Attempted by 29 candidates | Mean 14.17(/20) | Max 18.00 | Min 8.00 |
| Section Two: Short answer | Mean 69.47% | | |
| Attempted by 29 candidates | Mean 34.74(/50) | Max 44.19 | Min 17.42 |
| Section Three: Extended answer | Mean 45.26% | | |
| Attempted by 28 candidates | Mean 13.58(/30) | Max 22.50 | Min 0.00 |

General comments

The performance of candidates in Section One was not as strong as last year, however, significantly higher scores were achieved in Section Two. Candidate scores were also slightly down on previous years in the Extended answer section, it was difficult to find more than one well-constructed answer in either of the two choices.

Advice for candidates

- If you study an aspect of plant production that includes a practical example, make sure you have a full understanding of its role in that area of production.
- Extended answer questions should be broken down and a plan made to ensure the answer is coherent. Filling the page with irrelevant information does not attract marks.

Advice for teachers

- Provide students with the opportunity to practise questions that require them to look at and interpret data, then draw a conclusion.

- Students have historically scored well in their Multiple-choice and Short answer and poorly in the Extended answer section. Ensure in-class assessments have an emphasis on writing extended responses.
- Make sure that your students' knowledge of sustainability is up-to-date and correct. For example, it is a well-documented fact that tree lines around paddocks have no effect on slowing the on-set of salinity.
- Planning is the key to a good answer. Encourage students to make a plan before answering longer questions.

Comments on specific sections and questions

Section One: Multiple-choice (20 Marks)

This section had a lower mean than in 2021. Most candidates chose the largest increase in light intensity for Question 2, but the stem of the question clearly asked candidates to look at the rate of photosynthesis. Responses to Question 8 indicated that candidates had a lack of understanding around mode of action, whilst responses to Question 15 overlooked the most obvious method for developing resistance.

Section Two: Short answer (99 Marks)

There was a significant improvement in the mean scores for this section from 2021. Describe and explain parts of questions were generally where candidates did not achieve full marks. The questions that had extensive scaffolding were well answered. Question 26, which required candidates to use a wide range of knowledge and to make assumptions from the data, was well done.

Section Three: Extended answer (20 Marks)

Generally, in this section, questions were poorly answered where candidates were asked to write about strategies or adaptations. Candidates attempts in the plant breeding question, particularly in part (b), where they applied the triple bottom line to the sustainability of plant breeding methods were better.