

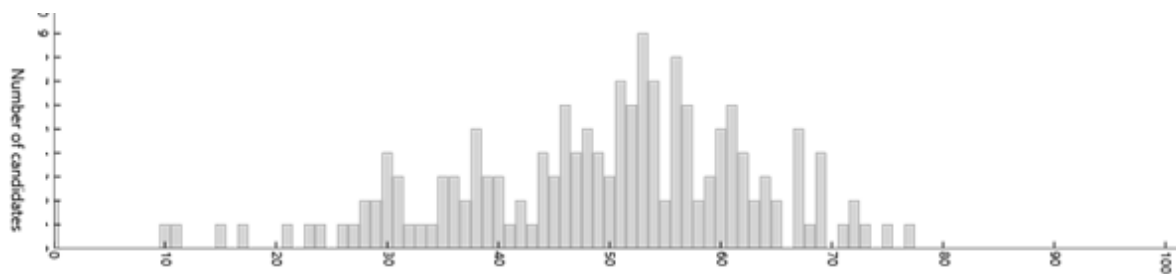


Summary report of the 2020 ATAR course examination: Earth and Environmental Science

Year	Number who sat	Number of absentees
2020	165	2
2019	185	1
2018	233	4
2017	184	6

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 low mean mark of 48.63% represents a substantial fall on the 2019 mean of 53.78%, and continues a trend of decreasing marks noted over the previous two years.

Attempted by 165 candidates Mean 48.63% Max 76.50% Min 0.00%

Section means were:

Section One: Multiple-choice	Mean 62.79%		
Attempted by 165 candidates	Mean 9.42(/15)	Max 14.00	Min 0.00
Section Two: Short answer	Mean 45.24%		
Attempted by 163 candidates	Mean 24.88(/55)	Max 40.50	Min 0.00
Section Three: Extended answer	Mean 47.77%		
Attempted by 162 candidates	Mean 14.33(/30)	Max 25.50	Min 0.00

General comments

Engagement appears to have remained high and consistent throughout the examination, with few instances of candidates failing to attempt a response to questions. Although the low marks represent a point of concern, individual response patterns largely conform to expectation, with higher marks achieved in the early parts of extended answer questions and later parts designed to elicit synthesis and higher-order thinking proving a greater challenge and differentiating stronger candidates. In addition, the examination incorporated a high proportion of skills-based questions.

Advice for candidates

- When answering questions, you need to demonstrate insight and understanding of the curriculum and relevant skills alongside the recall of specific facts.
- Ensure your answers are well-structured, logical, and supported by examples where appropriate.
- Real examples are strongly favoured as a means of demonstrating knowledge and understanding, particularly if you can establish their relevance to the question.
- The examination is constructed to accommodate different styles of thinking and expression. In some circumstances, you might choose to use annotated illustrations, dot points and tables as an effective approach in presenting an answer, even when not explicitly called for in a question.

Advice for teachers

- The syllabus for this course is largely geared towards practical insight and understanding of processes as they affect the real world, rather than in-depth knowledge of formal scientific theories. Students need to be exposed to this type of questioning.
- Include questions relating current events with the curriculum.
- Ensure that students are given practice questions to test the practical understanding of constructing and interpreting representative diagrams.
- Case studies and examples do not need to be drawn from a specific geographic region. Use diverse examples with students, where these illuminate the syllabus content in an informative fashion.

Comments on specific sections and questions

Section One: Multiple-choice (15 Marks)

Candidate performance in this section was in line with previous cohorts. The range of question difficulty is reflected in the mean marks which ranged from 39% to 95%. Although more challenging questions such as Questions 12 and 13 received fewer correct responses (with mean marks of 44% and 39%, respectively), results were still positively correlated against candidate performance, indicating more able candidates were less likely to choose one of the plausible distractors.

Section Two: Short answer (110 Marks)

The mean of 45.24% for this section represents a substantial fall from the mean of 49.76% achieved in 2019. Performance in consistent examination elements (notably the construction and interpretation of geological cross-sections) is comparable to previous years. Notably, poor performance in innovative question elements (particularly Question 22), but improved performance in new styles of question introduced in 2019 (Question 16), demonstrates that the cohort is able to adjust quickly to changes in the style of examination questions. Illustrations remain a weak point of candidate performance despite their consistent inclusion in recent examination papers.

Section Three: Extended answer (30 Marks)

Candidate performance in this section was consistent with that achieved in Section Two of the examination, with a similar fall in mean mark in comparison to 2019. Candidates were required to complete Question 25 and then choose to answer one of the other questions (Question 26 or 27). Approximately one third of the cohort chose to attempt Question 27, and candidate performance on this question was notably poor, with a mean of 5.19 out of 15 compared to 7.08 out of 15 for Question 26.