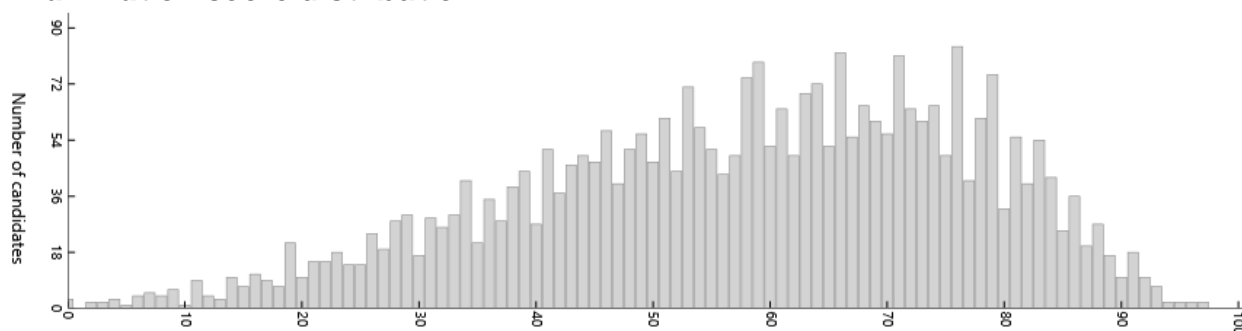




Summary report of the 2017 ATAR course examination: Physics

Year	Number who sat	Number of absentees
2017	3304	33
2016	3493	53

Examination score distribution



Summary

Attempted by 3301 candidates Mean 57.77% Max 97.22% Min 1.67%

This was a more difficult paper than last year with a higher standard deviation and a lower mean. The mean mark for the paper was 57.77% (61.8% in 2016) and scores ranged from 97.22% to 1.67%. Timing to complete the paper did not appear to be an issue for stronger candidates, though may have impacted the performance of the weaker candidates.

Section means were:

Section One: Short response	Mean 50.15%		
Attempted by 3301 candidates	Mean 15.04(/30)	Max 29.44	Min 0.56
Section Two: Problem-solving	Mean 65.35%		
Attempted by 3301 candidates	Mean 32.68(/50)	Max 50.00	Min 0.56
Section Three: Comprehension	Mean 50.88%		
Attempted by 3259 candidates	Mean 10.18(/20)	Max 19.72	Min 0.00

General comments

The majority of questions were attempted by the majority of candidates. A high number of non-attempts appeared to be from candidates who did not have a valid attempt at the paper as a whole. Although the paper contained an error in Question 9, there did not appear to be any candidates who were adversely affected. Several questions relating to the syllabus appeared to be misunderstood by candidates, such as those questions dealing with black bodies or dealing with experimental error. Standard type questions as a whole were easily answered and contained a useful amount of information with a few exceptions noted below.

Comprehension questions proved to be more challenging than the examiners intended and were less approachable, though maintained their discriminating ability. The responses given by the candidates were on the whole very good.

Weaker candidates struggled to access the questions on the less well defined parts of the syllabus such as the standard model.

Advice for candidates

- If you have made a calculation in your head, indicate where numbers you are using have come from to aid the marker in giving your working due consideration.
- Use a diagram to be able to illustrate how you are working the question, e.g. clearly point out where the pivot point you are using is located.
- Logically setting out your work is very important when trying to obtain marks for working, particularly for answers where more than one method can be correct.

Advice for teachers

- Use the syllabus when planning the course, rather than a textbook.
- Encourage students to follow a logical step by step approach to answering questions.
- Encourage students to state clearly any assumptions and conclusions made in answers.

Comments on specific sections and questions

Section One: Short response (30 Marks)

Attempted by 3301 candidates Mean 15.04(/30) Max 29.44 Min 0.56

This section contained more of the independent syllabus content that is not widely available in textbooks used in the classrooms, making the section mean lower than expected.

Section Two: Problem-solving (50 Marks)

Attempted by 3301 candidates Mean 32.68(/50) Max 50.00 Min 0.56

This section was the easiest for candidates to approach, with the multipart questions providing the scaffolding needed for weaker candidates to more easily address the concepts.

Section Three: Comprehension (20 Marks)

Attempted by 3259 candidates Mean 10.18(/20) Max 19.72 Min 0.00

The comprehension section is generally more poorly completed than other sections and this year proved to be no exception. The passages used were edited for brevity though appeared to make the concepts too ambiguous for the weaker candidates to approach the questions easily, resulting in a higher number of non-attempts.