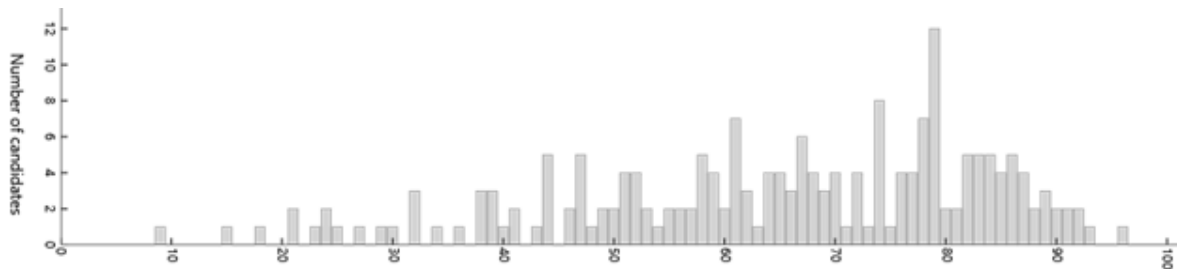




Summary report of the 2019 ATAR course examination: Engineering Studies

Year	Number who sat	Number of absentees
2019	198	3
2018	240	2
2017	178	3
2016	232	4

Examination score distribution–Written



Summary

Attempted by 198 candidates

Mean 64.94%

Max 95.53%

Min 9.22%

The number of candidates decreased by 17.5% compared to 2018. The means for all sections were similar except for Section Two: Mechanical Part B. The examination was fair and tested most of the syllabus. Examination feedback was generally favourable.

Section means were:

Section One: Core content Part A: Multiple-choice Attempted by 198 candidates	Mean 66.82%		
Section One: Core content Part B: Extended answer Attempted by 198 candidates	Mean 68.13%	Mean 20.44(/30)	Max 28.15 Min 2.05
Section Two: Mechanical Part A: Multiple-choice Attempted by 118 candidates	Mean 67.71%	Mean 6.77(/10)	Max 10.00 Min 1.00
Section Two: Mechanical Part B: Extended answer Attempted by 118 candidates	Mean 57.95%	Mean 28.98(/50)	Max 48.30 Min 1.70
Section Two: Mechatronics Part A: Multiple-choice Attempted by 80 candidates	Mean 65.62%	Mean 6.56(/10)	Max 10.00 Min 2.00
Section Two: Mechatronics Part B: Extended answer Attempted by 80 candidates	Mean 68.63%	Mean 34.32(/50)	Max 49.51 Min 0.49

General comments

The majority of candidates performed well in the Core section of the examination. The examination covered a large section of the syllabus in both the core and the specialist sections. The examination was well structured and unambiguous. Questions ranged from very straightforward to others that were more challenging, allowing discrimination of candidates. The more capable candidates produced responses that were correct, well detailed with calculations that were logical and presented in a well-structured manner. Less capable candidates tended to produce answers that were incorrect or superficial and calculations that were either completely incorrect or of the wrong magnitude.

Advice for candidates

- Read all questions carefully and thoroughly before attempting them, especially the Multiple-choice questions as some alternatives may be similar.
- Use the space next to the Multiple-choice questions for rough working if necessary.
- You must provide correct units for your numeric answers.
- Show all workings for calculation questions as this allows some marks to be awarded if your final answer is incorrect.
- Be familiar with the layout of the Data Booklet so that information can be found quickly.

Advice for teachers

- Advise students to read all questions carefully before attempting them.
- Encourage students to show all workings in answers that require calculations and to set this working out in a way that can be easily followed.
- Encourage students to write neatly.

Comments on specific sections and questions

There was a 10.68% difference between the means of the two specialist Part B sections.

Section One: Core content Part A: Multiple-choice (10 Marks)

Questions 2, 7 and 9 appeared to be the most difficult questions, while Questions 4, 5 and 9 appeared to be the easiest.

Section One: Core content Part B: Extended answer (73 Marks)

Generally, candidates performed well in the Core Extended answer section, with almost every candidate attempting every question. Some candidates confused material properties in Question 12 and in Question 13 some candidates performed calculations incorrectly.

Section Two: Mechanical Part A: Multiple-choice (10 Marks)

All candidates attempted all questions in this section with Question 17 being the easiest question and Question 24 being the most difficult.

Section Two: Mechanical Part B: Extended answer (103 Marks)

This section had the lowest mean of 57.95%. Generally, candidates performed well with Question 25 (c)(iii) and Question 27, parts (a) and (b), discriminating well amongst candidates. Only top-performing candidates answered Question 30 correctly.

Section Two: Mechatronics Part A: Multiple-choice (10 Marks)

All candidates attempted all questions with Question 35 being the easiest and Question 34 being the hardest. Generally, candidates performed well within the mechatronics multiple-choice section.

Section Two: Mechatronics Part B: Extended answer (103 Marks)

Almost all candidates attempted every question within the Mechatronics Extended answer section. Candidates performed well in the mechatronics extended section with Question 44 (c)(i) proving to be a good discriminator.