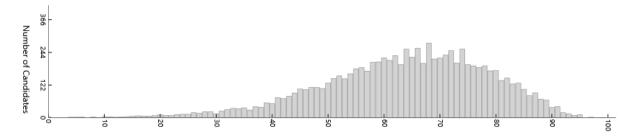


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Summary report of the 2016 ATAR course examination: Mathematics Applications

Year	Number who sat	Number of absentees
2016	8867	199

Examination score distribution



Summary

The examination had a mean of 63.72%. Candidate scores ranged from 0.00% to 99.35%. The standard deviation was 14.92%. The section means were: Section One: Calculator-free 71.42% with a standard deviation of 14.75%; and Section Two: Calculator-assumed 59.62% with a standard deviation of 16.03%.

Attempted by 8864 candidates Mear	ean 63.72%(/100) Max 99.35% Min 0.0	0%
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Section means were:

Section One: Calculator-free	Mean 25.00(/35)	Max 35.00	Min 0.00
Section Two: Calculator-assumed	Mean 38.75(/65)	Max 64.35	Min 0.00

General comments

The examination was well-balanced with a good proportion of simple and complex questions. Timing did not seem to be an issue as most candidates attempted all questions. Question 1 (minimum spanning tree) appeared to be the easiest on the paper with a mean of 86.94% and Question16 (annuities) appeared to be the most difficult with a mean of 42.26%.

The syllabus requires candidates to 'explain', 'comment on' and 'give reasons'. Some struggled with this aspect. Candidates also had difficulty with the correct use of the new vocabulary used in the networks topic. Many candidates did not read questions carefully and lost easy marks. Also, it appeared that many candidates were not familiar with their calculator and failed to take full advantage of its features.

The network questions were answered well. Questions that required some written explanation were done poorly. It was disappointing that many candidates could not convert a score out of 50 to a percentage.

Advice for candidates

- Read guestions carefully to avoid losing easy marks.
- Make sure your explanations are clear and concise.
- If a question is worth two marks, show an intermediate step as this may result in a mark.
- Know the difference between a recursive rule and a general rule for a sequence.
- Use thick highlighters where necessary e.g. Question 14.

Advice for teachers

- Answers to money questions should be correct to two decimal places.
- Learning correct terminology needs to be emphasised regularly.
- Rounding correctly needs to be practised.

Comments on specific sections and questions Section One: Calculator-free

Attempted by 8863 candidates Mean 25.00(/35) Max 35.00 Min 0.00

Most candidates attempted all questions in this section and found it easier generally than Section Two. Basic arithmetic and algebraic skills were lacking, especially in Question 4. The section contained some fairly routine questions. However, questions that required explanations were done poorly.

Section Two: Calculator-assumed

Attempted by 8857 candidates Mean 38.75(/65) Max 64.35 Min 0.00

Most candidates attempted all questions in this section. Candidates found this more difficult than the first section. Some of the finance questions proved a little difficult for some, especially Question 16. Clearly, some candidates could not use the finance app on their calculators. The setting out for the maximum flow question was quite untidy. Rounding was also an issue for some candidates.