

2016 MATHEMATICAL METHODS

**FOR OFFICE
USE ONLY**

SUPERVISOR
CHECK

RE-MARKED

**ATTACH SACE REGISTRATION NUMBER LABEL
TO THIS BOX**

Graphics calculator ☐

Brand _____

Model _____

Computer software ☐

Friday 18 November: 9 am

Time: 3 hours

Pages: 35
Questions: 15

Examination material: one 35-page question booklet
one SACE registration number label

Approved dictionaries, notes, calculators, and computer software may be used.

Instructions to Students

- You will have 10 minutes to read the paper. You must not write in your question booklet or use a calculator during this reading time but you may make notes on the scribbling paper provided.
- Answer **all** parts of Questions 1 to 15 in the spaces provided in this question booklet. There is no need to fill all the space provided. You may write on pages 21 and 32 if you need more space, making sure to label each answer clearly.
- The total mark is 153. The allocation of marks is shown below:

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Marks	6	4	7	14	11	9	7	12	10	16	9	13	13	8	14
- Appropriate steps of logic and correct answers are required for full marks.
- Show all working in this booklet. (You are strongly advised **not** to use scribbling paper. Work that you consider incorrect should be crossed out with a single line.)
- Use only black or blue pens for all work other than graphs and diagrams, for which you may use a sharp dark pencil.
- State all answers correct to three significant figures, unless otherwise stated or as appropriate.
- Diagrams, where given, are not necessarily drawn to scale.
- The list of mathematical formulae is on page 33. You may remove the page from this booklet before the examination begins.
- Complete the box on the top right-hand side of this page with information about the electronic technology you are using in this examination.
- Attach your SACE registration number label to the box at the top of this page.