



ADDITIONAL MATHEMATICS

Subject Number: M132/I

Monday, 22 July

Time Allowed: 2 h 30 min
8:00 – 10:30 am

PAPER I (100 marks)

Instructions

1. This paper contains 15 printed pages.
Please check.
2. Answer all the seven questions in Section A and any two questions from Section B.
3. Section A carries 60 marks and Section B carries 40 marks.
4. The graph paper provided at the end of the question paper can be used if required.
5. Only non programmable calculators may be used.
6. All necessary working should be shown and any numerical expression being evaluated by calculators must be clearly stated; otherwise marks for method may be lost.
7. The final answer to a question requiring the use of calculators should normally be given to three significant figures.
8. The marks allocated to each question (or part of a question) are shown in brackets at the end of each question (or part of a question).
9. Write your Examination Number on top of each page of this question paper.
10. In the table provided on this page, tick against the question number you have answered.

Question Number	Tick if answered	Do not write in these columns	
1			
2			
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web numerically the solution is $\mathbf{d} = \frac{1}{5}(\mathbf{a} + \mathbf{b} + \mathbf{c})$ find the unit vectors that point from $\mathbf{a}$ to the other points $\mathbf{b}$ to $\mathbf{g}$ in question 2 express each vector in component $\mathbf{i}\mathbf{j}$ notation

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