



Oxford Cambridge and RSA

Tuesday 7 June 2022 – Afternoon

A Level Mathematics B (MEI)

H640/01 Pure Mathematics and Mechanics

Printed Answer Booklet

Time allowed: 2 hours



You must have:

- Question Paper H640/01 (inside this document)
- a scientific or graphical calculator



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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First name(s)

Last name

INSTRUCTIONS

- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided in the **Printed Answer Booklet**. If you need extra space use the lined pages at the end of the Printed Answer Booklet. The question numbers must be clearly shown.
- Answer **all** the questions.
- Where appropriate, your answer should be supported with working. Marks might be given for using a correct method, even if your answer is wrong.
- Give your final answers to a degree of accuracy that is appropriate to the context.
- The acceleration due to gravity is denoted by $g \text{ m s}^{-2}$. When a numerical value is needed use $g = 9.8$ unless a different value is specified in the question.

INFORMATION

- This document has **20** pages.

ADVICE

- Read each question carefully before you start your answer.

Section A (24 marks)

1(a)	
1(b)	
2	

4	

5(a)**5(b)**

Tension in the string =

Value of F =

Section B (76 marks)

6(a)	
6(b)	

6(c)	

6(d)	

7(a)

7(b)

8(a)**8(b)**

<p>8(c)</p>	
<p>8(d)</p>	

9(a)

9(b)

9(c)	

10	

(answer space continued on next page)

13(a)	

13(b)	
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13(c)	

13(d)	

14(a)	
14(b)	
14(c)	

14(d)	
14(e)	
Time =	
Temperature =	

ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).



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