



Oxford Cambridge and RSA

Wednesday 4 June 2025 – 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 page 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

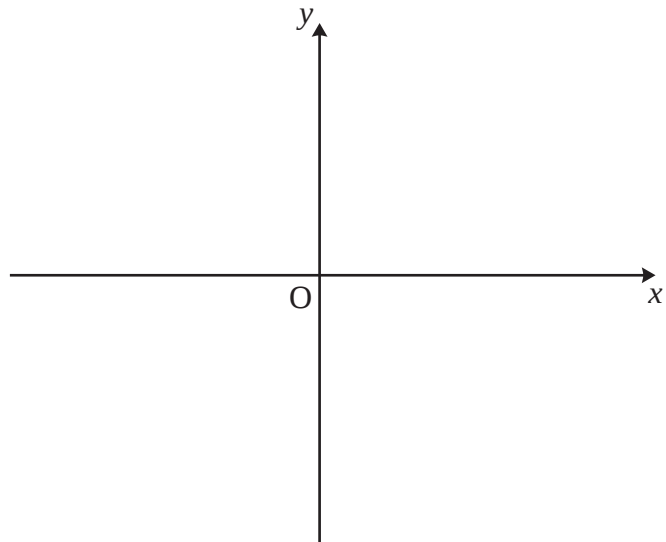
- This document has **20** pages.

ADVICE

- Read each question carefully before you start your answer.

Section A (20 marks)

1(a)



1(b)

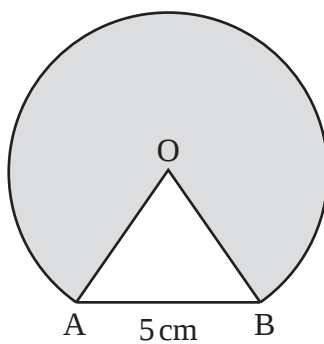
2

3(a)	
3(b)	
3(c)	

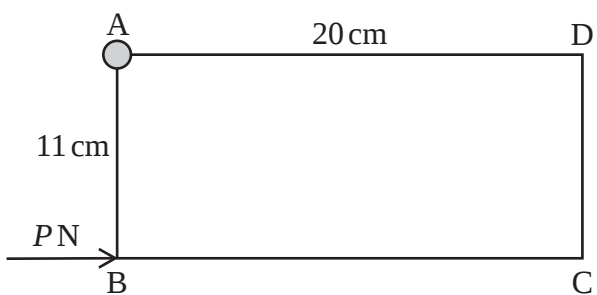
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5

4



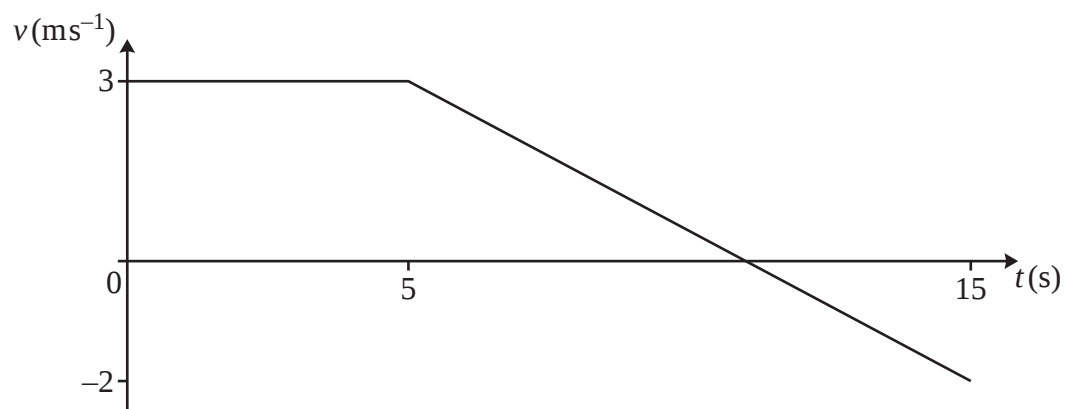
5



6

Section B (80 marks)

6(a)



6(b)

6(c)

$D =$

$T =$

7

8(a)	
	8(b)

9(a)	
9(b)	
9(c)	

10(a)	
10(b)	

10(c)	
	10(d)

11(a)	
	11(b)
(answer space continued on next page)	

11(b)	(continued)
11(c)	

12(a)	

DO NOT WRITE IN THIS SPACE

12(b)	
	12(c)

[illegible]

13(b)	
	13(c)
13(d)	

14(a)	
14(b)	

[illegible]

