

# Tuesday 11 June 2024 – Afternoon

## A Level Mathematics B (MEI)

H640/02 Pure Mathematics and Statistics

Printed Answer Booklet

Time allowed: 2 hours

#### You must have:

- Question Paper H640/02 (inside this document)
- a scientific or graphical calculator





Please write clearly in black ink. <b>Do not write in the barcodes</b> .						
Centre number				Candidate number		
First name(s)						
Last name						

43 333543

43 333<sub>543</sub>

#### **INSTRUCTIONS**

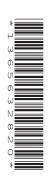
- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided in the **Printed Answer** Booklet. If you need extra space use the lined pages at the end of the Printed Answer Booklet. The guestion numbers must be clearly shown.
- 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.

### **INFORMATION**

This document has 16 pages.

### **ADVICE**

· Read each question carefully before you start your answer.



# Section A (21 marks)

1	
2	
3(a)	
3(b)	

4(a)			
	y • • • • • • • • • • • • • • • • • • •		
			0
		<b>→</b>	J
4(b)			
1(0)			
			-

5(a)					
		M	M'	Total	
	C	0.24		0.36	
	C'				
	Total	0.42		1	
5(b)					

6(a)	
6(b)	
6(c)	

## Section B (79 marks)

7(a)	
	$u_2 =$
	$u_3 =$
	$u_4 =$
7(b)	
7(-)	
7(c)	
7(d)	

8	

9(a)	
9(b)	
9(c)	
10( )	
10(a)	
10(b)	

11(a)	
11(a)	
	100
	90
	80
	70
	Gas cost in pounds 50
	Gas cost in pounds 50
	30
	20
	10
	0 20 40 60 80 100 120 140
	Electricity cost in pounds
	Electricity cost in pounds
11(b)	
11(c)	

12	

14(a)	
14(b)	
14(c)	
14(d)	
14(e)	
15(a)(i)	
15(a)(ii)	

15(b)	
15(c)	
15(d)	
15(u)	

15(e)	

16	

### 16

### **EXTRA ANSWER SPACE**

If you need extra space use this lined page. You must write the question numbers clearly in the margin.



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