

Tuesday 19 October 2021 – Afternoon

A Level Further Mathematics B (MEI)

Y421/01 Mechanics Major

Printed Answer Booklet

Time allowed: 2 hours 15 minutes



You	must	have:
• Qı	lestion	Paper

- Question Paper Y421/01 (inside this document)
 the Formulae Booklet for Further Mathematics B
- (MEI)
- a scientific or graphical calculator



Please write clearly in black ink. Do not write in the barcodes.							
Centre number					Candidate number		
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 $gm s^{-2}$. 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.

Turn over

Section A (34 marks)

1	
2	
4	
	- 1

Image:
4
4

5	

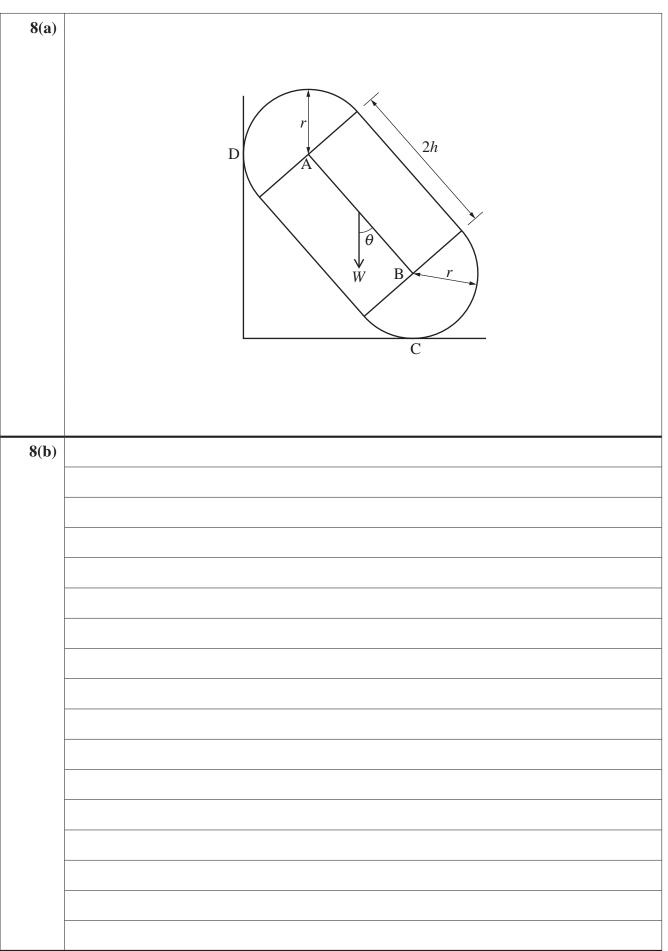
6(a)	
6(b)	
6(c)	
6(d)	
6 (e)	

Section B (86 marks)

7 (a)	
7(b)	

7(c)	





8 (c)	

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9(b)	
9 (c)	

10(a)	

10(b)	

11(a)	

11(b)	

11(c)(i)	
11(c)(ii)	

12(a)	
12(b)	

12(c)	
	(answer space continued on next page)
	(answer space continued on next page)

:)	(continued)

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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