

# Friday 14 June 2024 – Afternoon

# A Level Further Mathematics A

## Y543/01 Mechanics

Printed Answer Booklet

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#### You must have:

- Question Paper Y543/01 (inside this document) • the Formulae Booklet for A Level Further
- Mathematics A

· a scientific or graphical calculator

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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 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 non-exact numerical answers correct to 3 significant figures unless a different degree of accuracy is specified in the question.
- 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**

- The total mark for this paper is 75.
- The marks for each question are shown in brackets [].
- This document has **16** pages. •

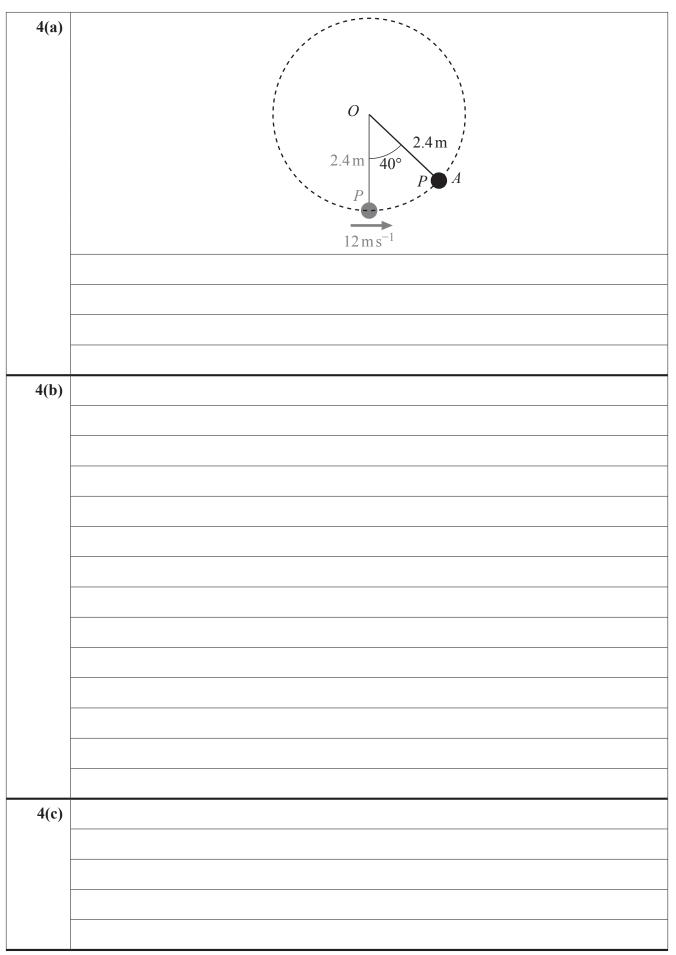
#### **ADVICE**

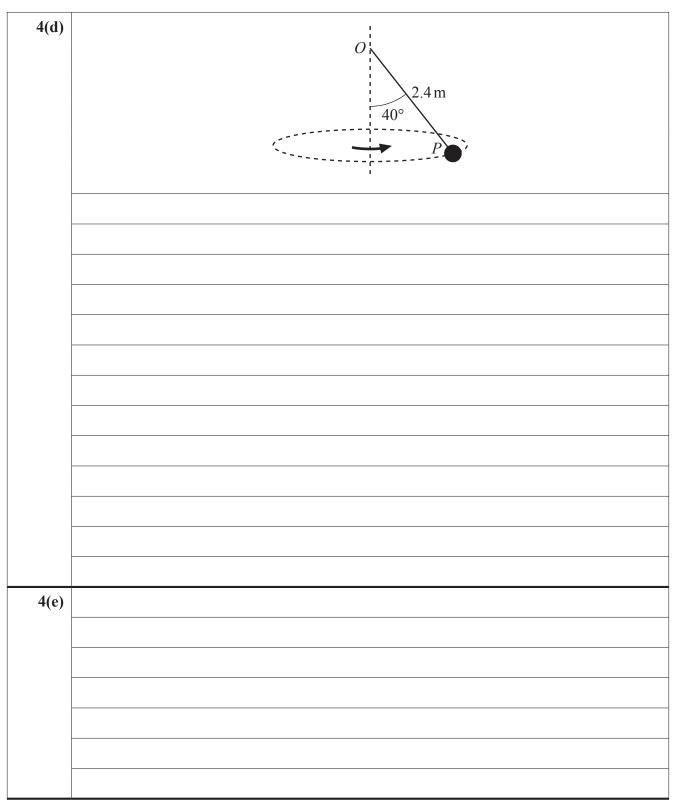
Read each question carefully before you start your answer.

1(a)	
1(b)	
1(c)	
1(d)	

2(a)	
2(b)	
-(~)	

<b>3(a)</b>	
<b>J(a)</b>	
3(b)	
2()	
<b>3(c)</b>	





## DO NOT WRITE IN THIS SPACE

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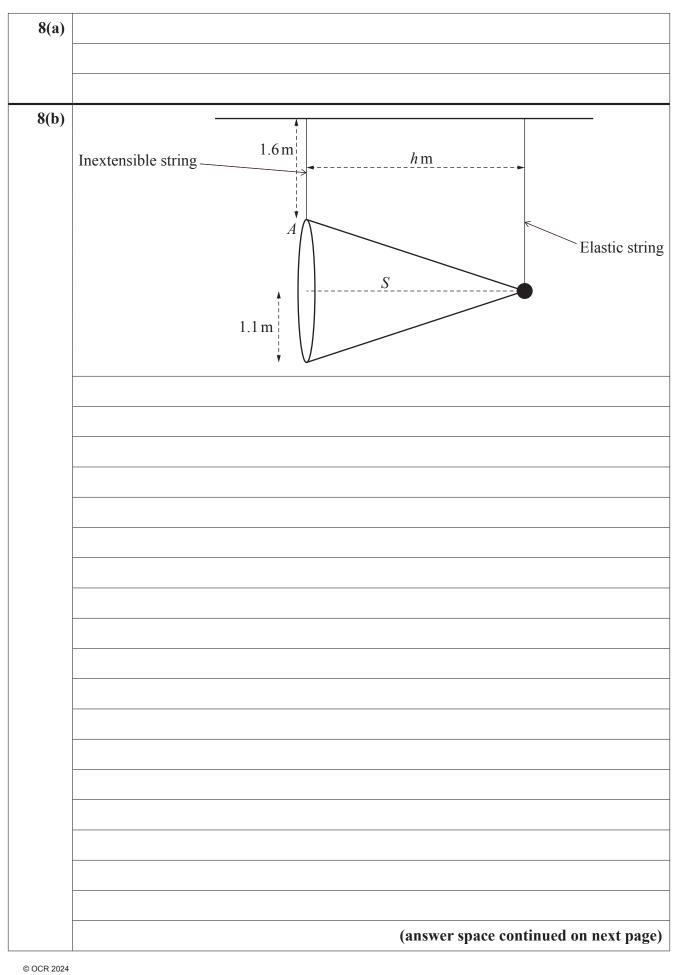
6(a)	
(h)	
6(b)	
	(answer space continued on next page)

6(b)	(continued)

9

7(a)	
7(1-)(1)	
7(b)(i)	
7(b)(ii)	
7(c)(i)	
	(answer space continued on next page)

7(c)(i)	(continued)
7(c)(ii)	
7(c)(iii)	



<b>8(b)</b>	(continued)

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



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