

Friday 14 June 2024 – Afternoon

A Level Further Mathematics A

Y543/01 Mechanics

Printed Answer Booklet

Time allowed: 1 hour 30 minutes



You must have:

- Question Paper Y543/01 (inside this document)
- the Formulae Booklet for A Level Further Mathematics A
- 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 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 $g\text{ m s}^{-2}$. When a numerical value is needed use $g = 9.8$ unless a different value is specified in the question.

INFORMATION

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

ADVICE

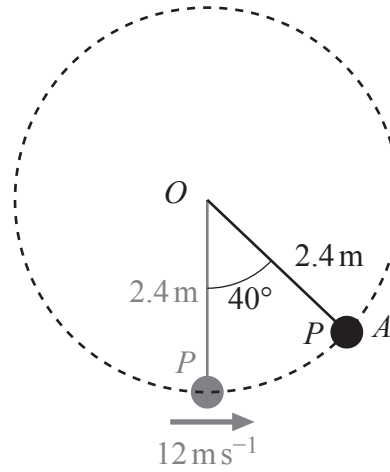
- Read each question carefully before you start your answer.

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

2(a)	
2(b)	

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

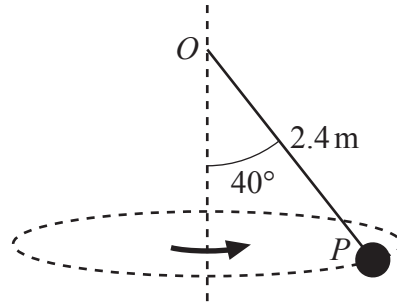
4(a)



4(b)

4(c)

4(d)



4(e)

DO NOT WRITE IN THIS SPACE

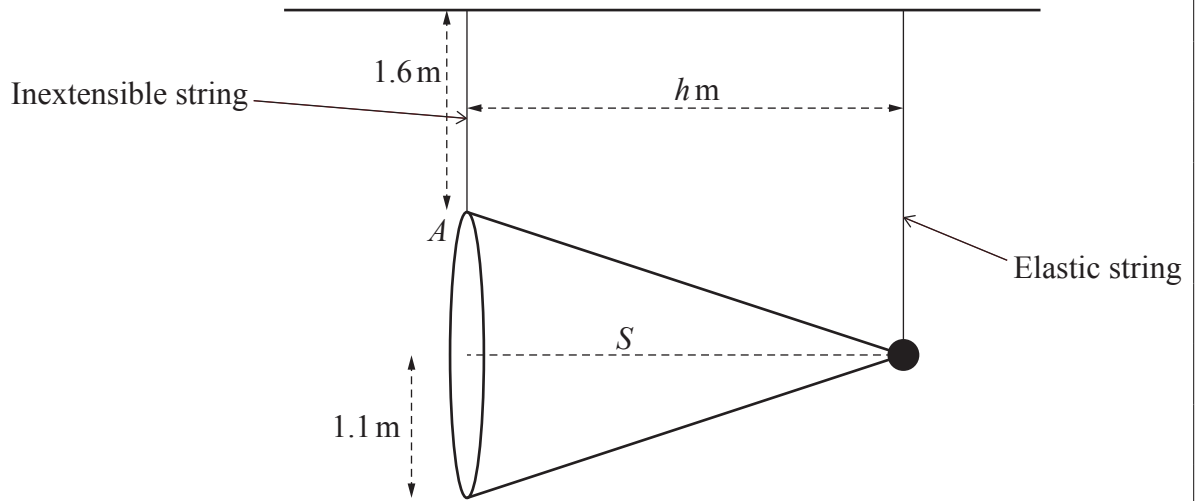
5

7(a)	
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)	

8(a)

8(b)



(answer space continued on next page)

8(b)	(continued)

