OCR
Oxford Cambridge and RSA

Tuesday 19 October 2021 – Afternoon

A Level Further Mathematics B (MEI)

Y431/01 Mechanics Minor

Printed Answer Booklet

Time allowed: 1 hour 15 minutes

You must have:
- Question Paper Y431/01 (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 $g\,\mathrm{m\,s^{-2}}$. When a numerical value is needed use $g = 9.8$ unless a different value is specified in the question.

INFORMATION
- This document has **12** pages.

ADVICE
- Read each question carefully before you start your answer.

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

2

$W =$

$\mu =$

$\theta =$

3

$v =$

$P =$

4(a)

4(b)

4(c)

4(d)

4(e)

5(a)

5(b)

θ Minimum =

θ Maximum =

5(c)

5(d)	

6(a)

6(b)

Speed of S =

Direction of motion of S is

Speed of B =

Direction of motion of B is

6(c)

6(d)

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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