OCR
Oxford Cambridge and RSA

Thursday 15 October 2020 – Afternoon

AS Level Further Mathematics A

Y533/01 Mechanics

Printed Answer Booklet

Time allowed: 1 hour 15 minutes

8316644511

You must have:
- Question Paper Y533/01 (inside this document)
- the Formulae Booklet for AS Level Further Mathematics A
- a scientific or graphical calculator

Y53301

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 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 $g\,\mathrm{m\,s^{-2}}$. 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 **60**.
- The marks for each question are shown in brackets **[ ]**.
- This document has **12** pages.

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

1(a)

1(b)

2(a)

2(b)

2(c)

2(d)

3(a)

3(b)

4(a)	
4(b)	
4(c)	
4(d)(i)	
4(d)(ii)	

5(a)

5(b)

5(c)

5(d)

6(a)

6(b)

(answer space continued on next page)

6(b)	(continued)
6(c)	

7(a)

7(b)

7(c)

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).