

## Thursday 15 October 2020 – Afternoon

### AS Level Further Mathematics A

#### Y533/01 Mechanics

#### Printed Answer Booklet

Time allowed: 1 hour 15 minutes



**You must have:**

- Question Paper Y533/01 (inside this document)
- the Formulae Booklet for AS Level Further Mathematics A
- 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 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 **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.

<b>1(a)</b>	
<b>1(b)</b>	
<b>2(a)</b>	

<b>2(b)</b>	
<b>2(c)</b>	
<b>2(d)</b>	



<b>4(a)</b>	
<b>4(b)</b>	
<b>4(c)</b>	
<b>4(d)(i)</b>	
<b>4(d)(ii)</b>	







<b>6(b)</b>	<b>(continued)</b>

<b>6(c)</b>	



<b>7(b)</b>	
<b>7(c)</b>	

