OCR
Oxford Cambridge and RSA

Tuesday 4 June 2024 – Afternoon

A Level Mathematics A

H240/01 Pure Mathematics

Printed Answer Booklet

Time allowed: 2 hours

AB

You must have:
- Question Paper H240/01 (inside this document)
- 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 page 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 $g\,\text{m}\,\text{s}^{-2}$. 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 **100**.
- 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)

2(a)(i)	
2(a)(ii)	
2(b)	

3(a)

3(b)(i) $x^2 = 3x$ ☐ $x = 3$

3(b)(ii) $x > 4$ ☐ $x^3 > 64$

3(b)(iii) $x° = 45°$ ☐ $\tan x° = 1$

3(c)

4(a)

4(b)

4(c)

5

6(a)

6(b)

6(c)

7(a)

7(b)

7(c)

8(a)	
8(b)(i)	
8(b)(ii)	
8(c)(i)	
8(c)(ii)	

9(a)(i)	
9(a)(ii)	
9(b)	
9(c)	

10

11(a)

11(b)

11(c)(i)

11(c)(ii)

12(a)

12(b)

EXTRA ANSWER SPACE

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