

**TEST OF MATHEMATICS
FOR UNIVERSITY ADMISSION**

D513/01

Mock Test A

PAPER 1

75 minutes

Additional materials: Answer sheet

INSTRUCTIONS TO CANDIDATES

Please read these instructions carefully, but do not open the question paper until you are told that you may do so.

A separate answer sheet is provided for this paper. Please check you have one. You also require a soft pencil and an eraser.

This paper is the first of two papers.

There are 20 questions on this paper. For each question, choose the one answer you consider correct and record your choice on the separate answer sheet. If you make a mistake, erase thoroughly and try again.

There are no penalties for incorrect responses, only marks for correct answers, so you should attempt **all** 20 questions. Each question is worth one mark.

You can use the question paper for rough working or notes, but **no extra paper** is allowed.

Please complete the answer sheet with your candidate number, centre number, date of birth, and full name.

You **must** complete the answer sheet within the time limit.

Calculators and dictionaries are **NOT** permitted.

There is no formulae booklet for this test.

Please wait to be told you may begin before turning this page.

This question paper consists of 21 printed pages and 3 blank pages.

- 1 Find the area of the finite region bounded by the curves

$$y = \sqrt{x} \quad \text{and} \quad y = \sqrt{2-x}$$

and the x -axis.

A $\frac{1}{3}$

B $\frac{2}{3}$

C 1

D $\frac{4}{3}$

E $\frac{5}{3}$

F $\frac{3}{4}$