



Oxford Cambridge and RSA

**Thursday 14 October 2021 – Afternoon**

**AS Level Further Mathematics B (MEI)**

**Y412/01 Statistics a**

**Printed Answer Booklet**

**Time allowed: 1 hour 15 minutes**



**You must have:**

- Question Paper Y412/01 (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

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Candidate number

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First name(s)

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**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.

**INFORMATION**

- This document has **12** pages.

**ADVICE**

- Read each question carefully before you start your answer.

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| <b>1(a)</b>       |  |
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| $\text{Var}(X) =$ |  |
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| <b>1(b)(ii)</b>   |  |
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**2(a)****2(b)**

$$E(X) =$$

$$\text{Var}(X) =$$

**2(c)**

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| <b>2(d)(i)</b>  |  |
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| <b>3(a)</b>     |  |
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**3(b)**

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**3(c)**

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**3(d)**

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| <b>4(a)(i)</b>  |  |
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| <b>4(b)</b>     |  |
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**5(a)**

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**5(b)**

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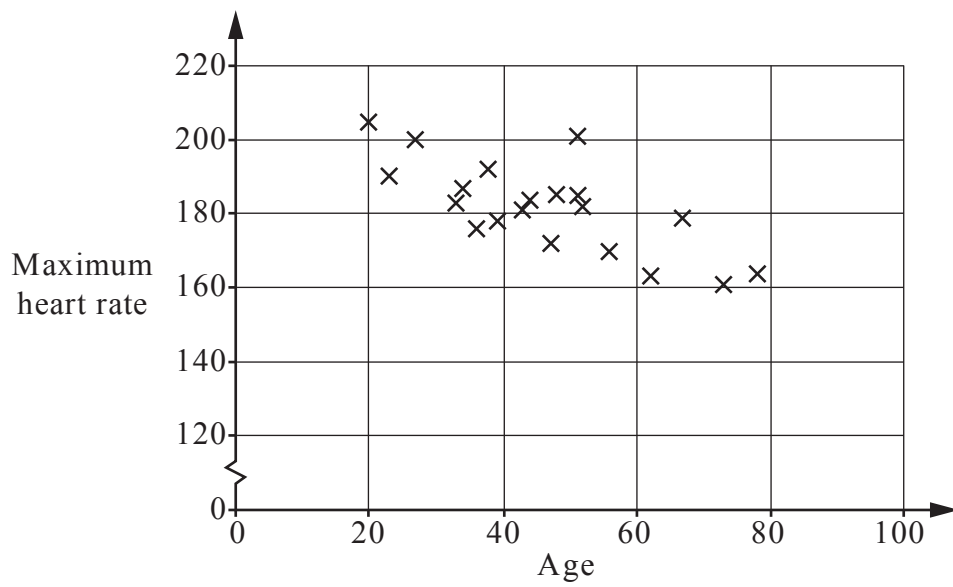
**5(c)**

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6(a)

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6(b)(i)



6(b)(ii)

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| <b>6(c)</b> |                           |
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| <b>6(d)</b> |                           |
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|             | Prediction for 40 years = |
|             | Prediction for 5 years =  |
| <b>6(e)</b> |                           |
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| <b>7(a)(i)</b> |  |
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| <b>7(a)(ii)</b> |  |
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| <b>7(b)</b> |  |
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