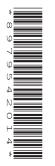


# Wednesday 13 October 2021 – Afternoon A Level Mathematics B (MEI)

## H640/02 Pure Mathematics and Statistics

## Printed Answer Booklet

### Time allowed: 2 hours



| <ul> <li>You must have:</li> <li>Question Paper H640/02 (inside this document)</li> <li>a scientific or graphical calculator</li> </ul> |
|---|
|   |



| Please write clearly in black ink. Do not write in the barcodes. |  |  |  |  |  |                  |  |  |  |  |
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| 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 your final answers to a degree of accuracy that is appropriate to the context.

#### INFORMATION

• This document has 20 pages.

#### ADVICE

• Read each question carefully before you start your answer.

Section A (23 marks)

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|      | <i>c</i> = |
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| 2(b) |            |
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Section B (77 marks)



| 9(a)  | (continued) |
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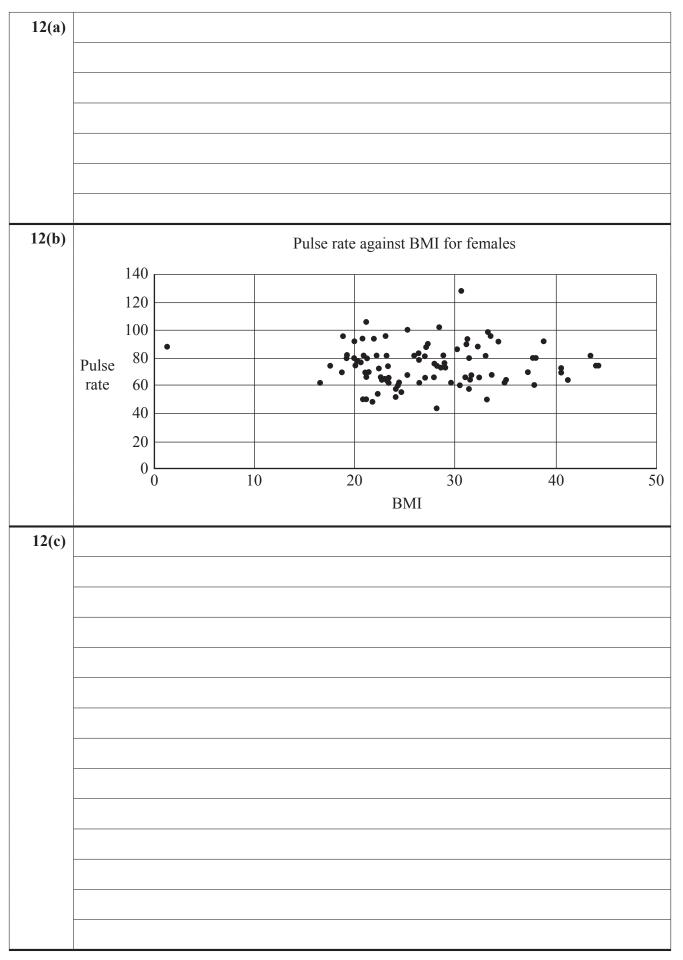
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| 10(1) |                           |
| 10(b) |                           |
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| 10(c) |                           |
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|       | the interquartile range = |

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| 12(f) |                      |
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| 13(a) |                      |
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|       | mean =               |
|       | standard deviation = |
| 13(b) |                      |
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|       | <i>n</i> =           |
|       | <i>p</i> =           |

| 13(c) |                               |    | 1  |    | 1  | 1 |           |
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|       | Number of damaged decorations | 0  | 1  | 2  | 3  | 4 | 5 or more |
|       | Observed number of boxes      | 19 | 35 | 28 | 13 | 5 | 0         |
|       | Expected number of boxes      |    |    |    |    |   |           |
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