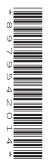


# Wednesday 13 October 2021 – Afternoon A Level Mathematics B (MEI)

## 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.										
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)

1	
	<i>a</i> =
	<i>b</i> =
	<i>c</i> =
2(a)	
2(b)	
3	

4	
5(a)	
5(b)	

6(a)	
6(b)	

7(a)	
7(b)	

Section B (77 marks)



9(a)	(continued)
0(1-)	
9(b)	

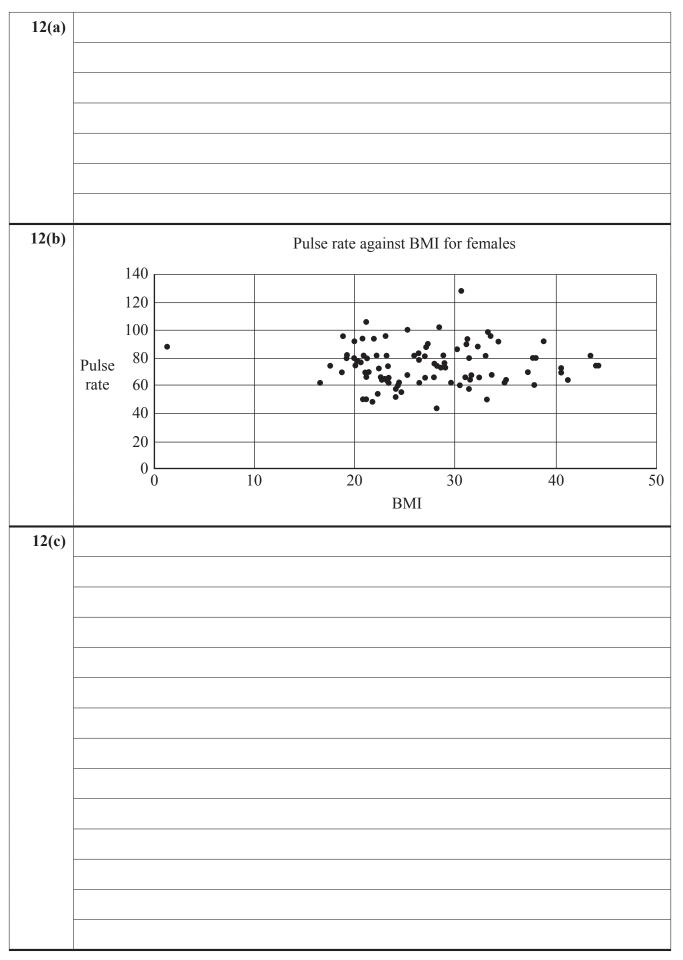
9(c)	

9(d)	
10(a)	
10(1)	
10(b)	
10(c)	
10(d)	
	the median =
	the interquartile range =

10(e)	
10(f)	
11(a)	

[	
11(b)	
11(c)	

11



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

13(c)			1		1	1	
	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						
-							
-							
-							
-							
-							
-							
F							
-							
-							
-							
-							
-							
-							
-							
-							
-							
-							
F							
-							
13(d)							
ŀ							

14(a)	
14(b)	
14(0)	

14(c)	
14(d)	
15(a)	

15(b)	
15(c)	

15(d)	
13(u)	
15(e)	

16	
10	

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).



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