

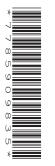
Monday 20 May 2019 – Afternoon

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 (inserted) Formulae Further Mathematics B (MEI) You may use:

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

- The Question Paper will be found inside the Printed Answer Booklet.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer all the questions.
- Write your answer to each question in the space provided in the Printed Answer **Booklet.** If additional space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.
- You are permitted to use a scientific or graphical calculator in this paper.
- Final answers should be given to a degree of accuracy appropriate to the context.

INFORMATION

- You are advised that an answer may receive **no marks** unless you show sufficient detail of the working to indicate that a correct method is used. You should communicate your method with correct reasoning.
- The Printed Answer Booklet consists of 12 pages. The Question Paper consists of 8 pages.

			-				
1(a)							
	r	1	2	3	4	5	
	$\mathbf{P}(X=r)$	4 <i>k</i>	10k				
1(b)							
1(c)							
1(d)							

1(e)	
2(a)	
2(b)	
2(c)	

3(a)	
2(h)	
3(b)	
3(c)(i)	
3(c)(ii)	

4(a)	
4(b)	
4(c)	

5(b)					
5(0)	Number of females	Probability	Expected frequency	Chi-squared contribution	
	0	0.049 02	9.8045	10.6022	
	1			1.7513	
	2			4.1274	
	3	0.26787	53.5742		
	4	0.14424	28.8476	0.5977	
	≥5	0.05561	11.1215	8.7744	

5(c)	
5(d)	

6(a)	
6(b)	
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6(c)	

6(d)	
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6(e)	
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6(f)	
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ADDITIONAL ANSWER SPACE

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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