



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.

2

1(a)							
	r	1	2	3	4	5	
	P(X=r)	4 <i>k</i>	10k				
1(b)							
1(c)							
1(d)							

1(e)	
2(a)	
2 (b)	
•	
2(c)	
2 (c)	
2(C)	
2(0)	
2(0)	
2(0)	
2(0)	

4

3(a)	
3(b)	
3(c)(i)	
3(c)(ii)	
3(c)(II)	

4 (a)	
4(b)	
4 (0)	
4(c)	

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)	
6(c)	

6(d)	
6(e)	
6(f)	

10 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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