

OCR

Oxford Cambridge and RSA

Friday 5 June 2015 – Morning

AS GCE QUANTITATIVE METHODS (MEI)

G246/01 Decision Mathematics 1

PRINTED ANSWER BOOK

Candidates answer on this Printed Answer Book.

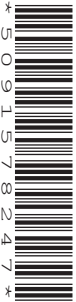
OCR supplied materials:

- Question Paper G246/01 (inserted)
- MEI Examination Formulae and Tables (MF2)

Other materials required:

- Scientific or graphical calculator

Duration: 1 hour 30 minutes



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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INSTRUCTIONS TO CANDIDATES

These instructions are the same on the Printed Answer Book and the Question Paper.

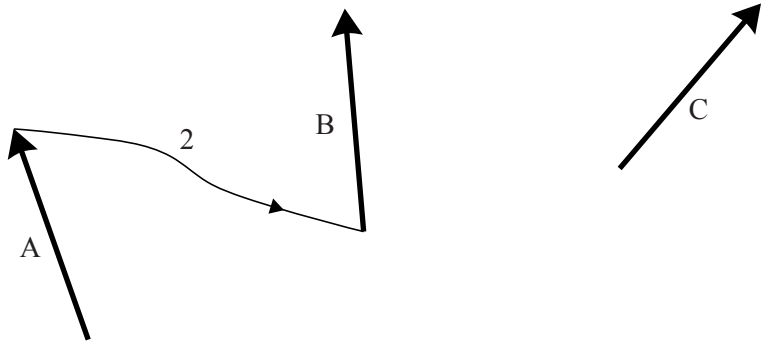
- The Question Paper will be found inside the Printed Answer Book.
- Write your name, centre number and candidate number in the spaces provided on the Printed Answer Book. Please write clearly and in capital letters.
- **Write your answer to each question in the space provided in the Printed Answer Book.** Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Answer **all** the questions.
- Do **not** write in the bar codes.
- 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 FOR CANDIDATES

This information is the same on the Printed Answer Book and the Question Paper.

- The number of marks is given in brackets [] at the end of each question or part question on the Question Paper.
- 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 being used.
- The total number of marks for this paper is **72**.
- The Printed Answer Book consists of **12** pages. The Question Paper consists of **8** pages. Any blank pages are indicated.

Section A (24 marks)

<p>1 (i)</p>	
<p>1 (ii)</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>1 (iii)</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>1 (iv)</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

2 (i)

i	1	2	3						
m_1	2								
c_1	8								
m_2		2							
c_2		5							
m_3			4						
c_3			3						
j									
a									
b									
d_1									
x_1									
y_1									
d_2									
x_2									
y_2									
d_3									
x_3									
y_3									

Print area

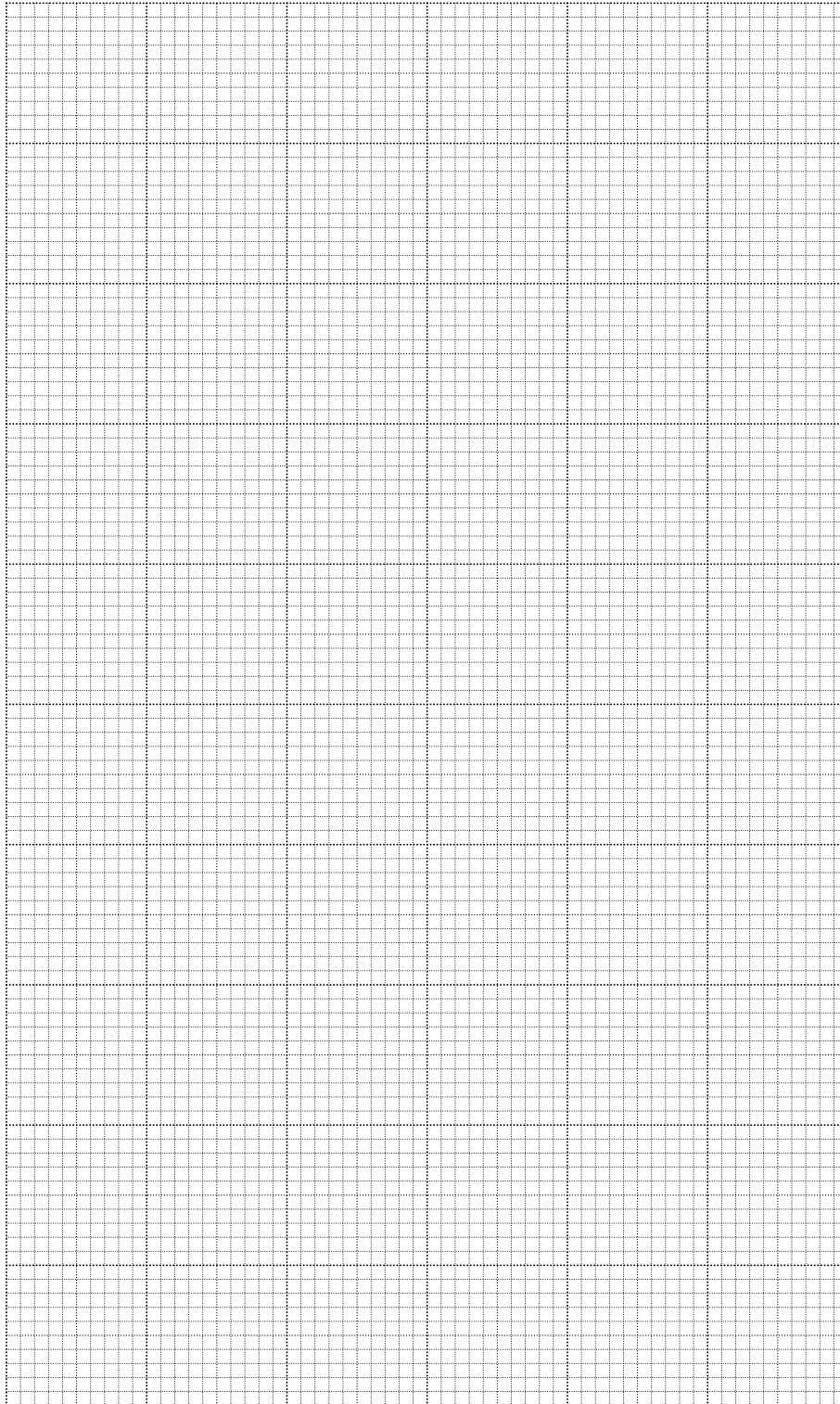
2 (ii)

3 (i)	
3 (ii)	
	(answer space continued on next page)

PLEASE DO NOT WRITE IN THIS SPACE

3 (ii) (continued)

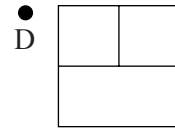
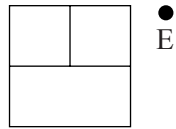
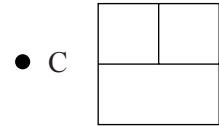
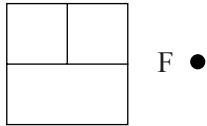
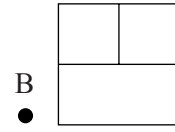
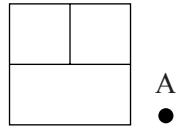
A spare copy of this graph can be found on page 11



3 (iii)

Section B (48 marks)

4 (a)



4(b)(i)

A ●

B ●

F ●

● C

● E

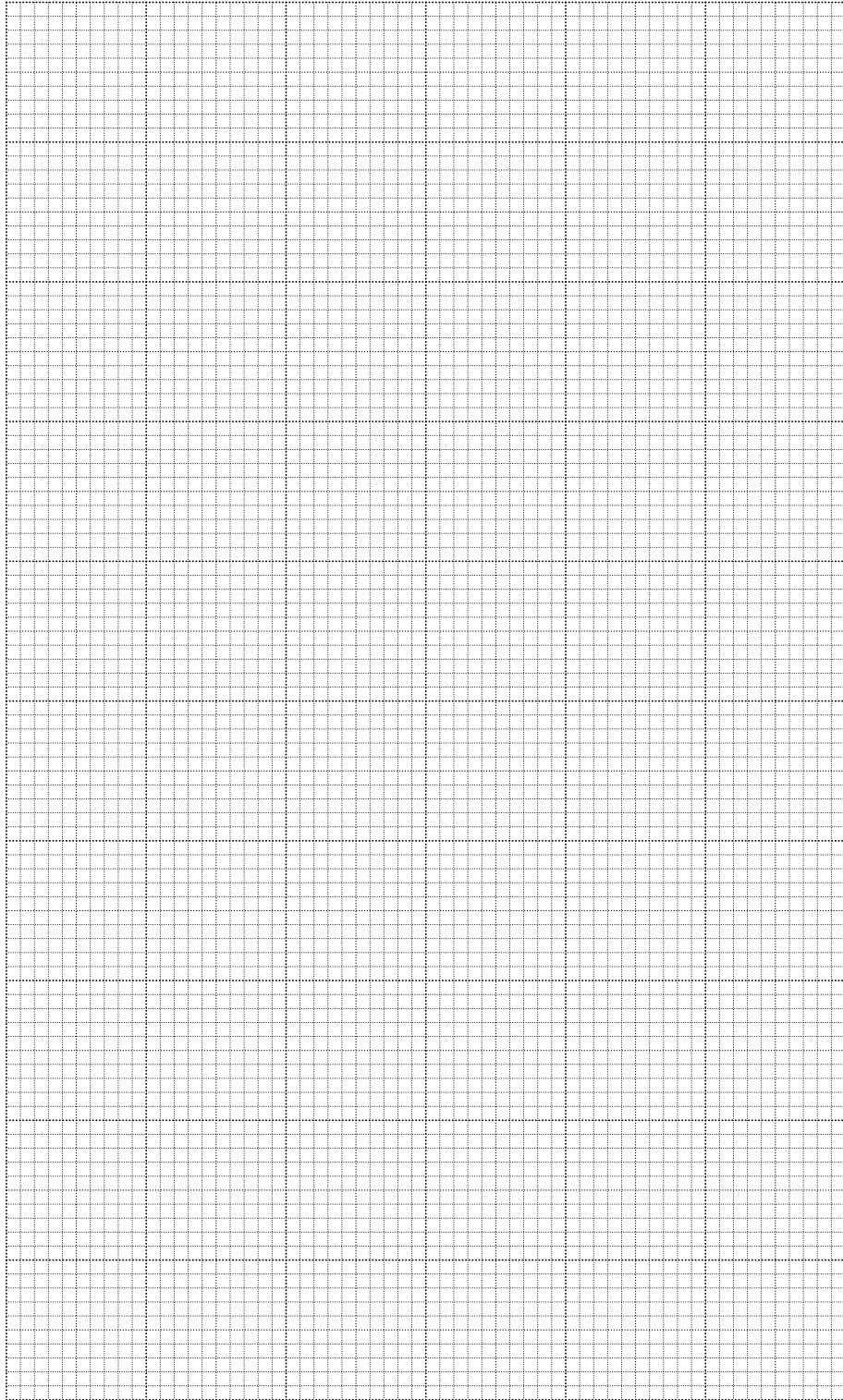
● D

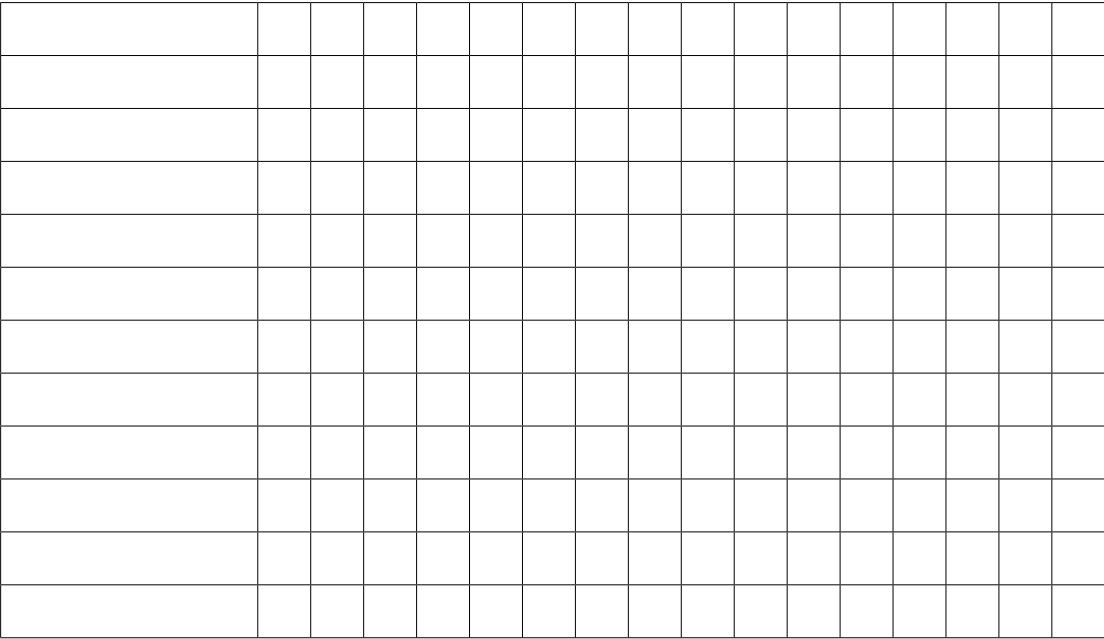
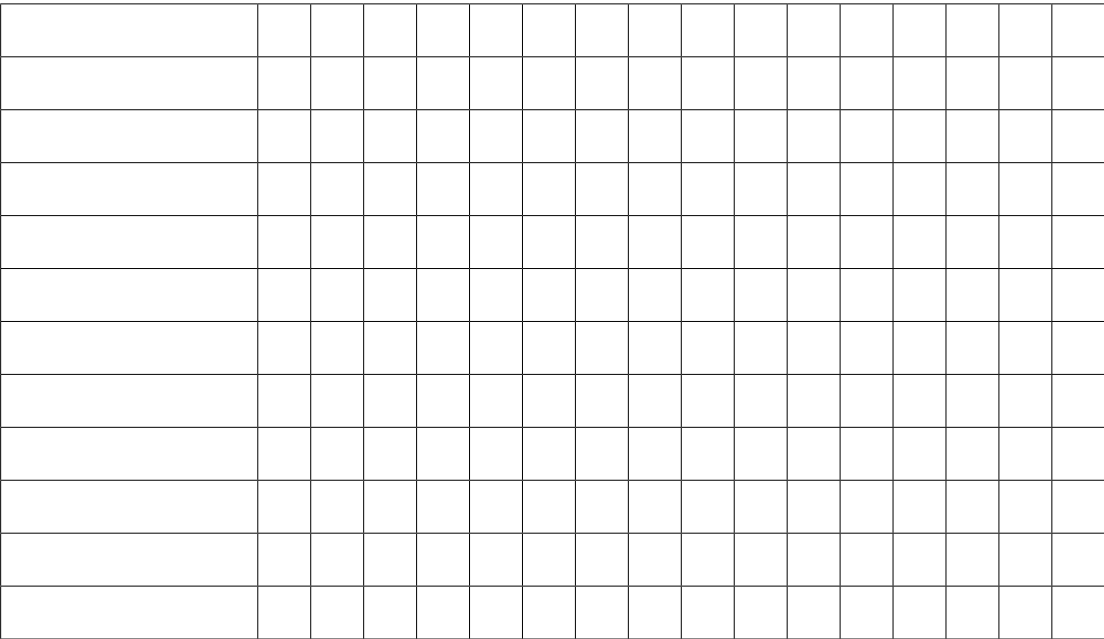
4(b)(ii)	
4(b)(iii)	
4(b)(iv)	

**5 (i) &
(ii)**

6 (i)	
6 (ii) Random digits: 3 0 8 6 0 0 1 2 8 6	
6 (iii)	
6 (iv) Random digits: 2 0 8 9 1 7 9 1 2 3 0 6 5 2 6	

3 (ii) Spare copy of graph paper for question 3 (ii)



5 (iii)	Spare copy of the diagram for question 5 (iii) 
5 (iv)	Spare copy of the diagram for question 5 (iv) 

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