

Friday 25 January 2013 – Afternoon

AS GCE MATHEMATICS (MEI)

4771/01 Decision Mathematics 1

PRINTED ANSWER BOOK

Candidates answer on this Printed Answer Book.

OCR supplied materials:

- Question Paper 4771/01 (inserted)
- MEI Examination Formulae and Tables (MF2)

Other materials required:

- Scientific or graphical calculator

Duration: 1 hour 30 minutes



Candidate forename		Candidate surname	
Centre number		Candidate number	

INSTRUCTIONS TO CANDIDATES

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

- The Question Paper will be found in the centre of 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

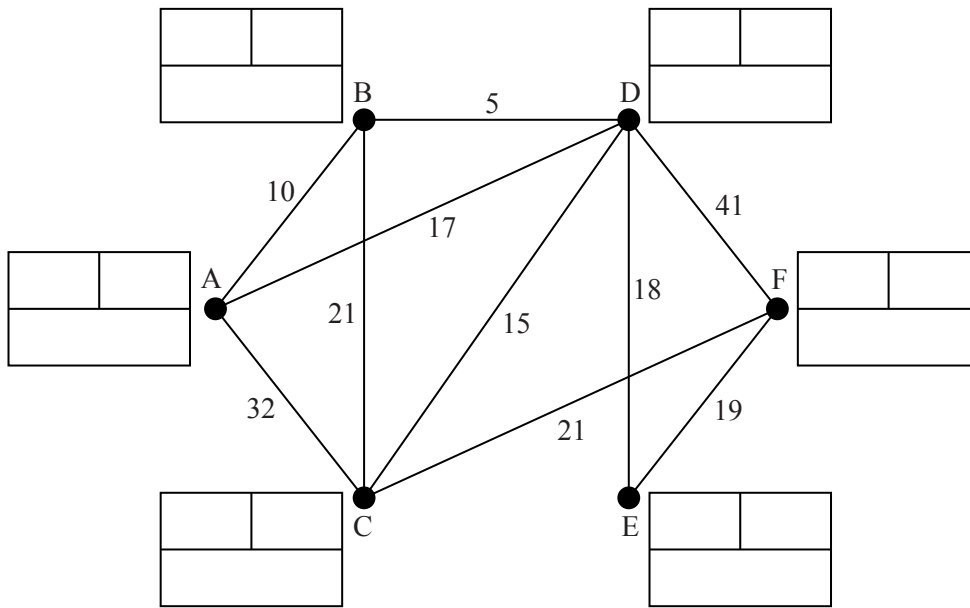
This information is the same on the Printed Answer Book and the Question Paper.

- 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.

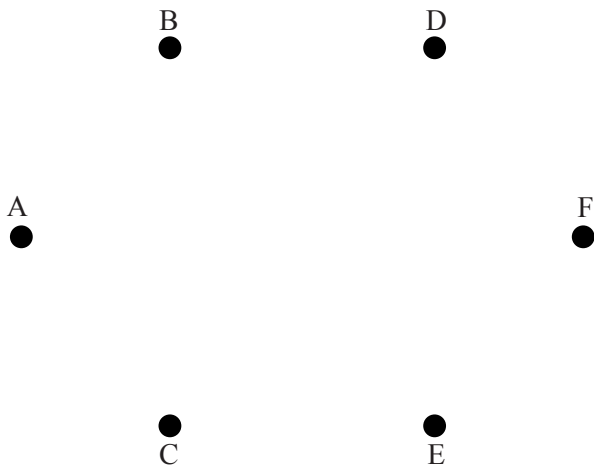
This paper has been pre modified for carrier language

Section A (24 marks)

1 (i)



1 (ii)



2(i)		
2(ii)		
2(iii)	Men	Women
	A ●	● V
	B ●	● W
	Charming ●	● Cinderella
	Darcy ●	● Ugly sister 1
	E ●	● Ugly sister 2
	F ●	● Ugly sister 3
	G ●	● Elizabeth
	H ●	● X
	I ●	● Y
J ●	● Z	
A spare copy of this diagram can be found on page 5.		
2(iv)		

[illegible]

3(ii)																							
2(iii)	Spare copy of diagram for question 2 (iii) <table> <thead> <tr> <th>Men</th> <th>Women</th> </tr> </thead> <tbody> <tr> <td>A ●</td> <td>● V</td> </tr> <tr> <td>B ●</td> <td>● W</td> </tr> <tr> <td>Charming ●</td> <td>● Cinderella</td> </tr> <tr> <td>Darcy ●</td> <td>● Ugly sister 1</td> </tr> <tr> <td>E ●</td> <td>● Ugly sister 2</td> </tr> <tr> <td>F ●</td> <td>● Ugly sister 3</td> </tr> <tr> <td>G ●</td> <td>● Elizabeth</td> </tr> <tr> <td>H ●</td> <td>● X</td> </tr> <tr> <td>I ●</td> <td>● Y</td> </tr> <tr> <td>J ●</td> <td>● Z</td> </tr> </tbody> </table>	Men	Women	A ●	● V	B ●	● W	Charming ●	● Cinderella	Darcy ●	● Ugly sister 1	E ●	● Ugly sister 2	F ●	● Ugly sister 3	G ●	● Elizabeth	H ●	● X	I ●	● Y	J ●	● Z
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I ●	● Y																						
J ●	● Z																						

Section B (48 marks)

**4(i)
& (ii)**

4(iii)	Each cell represents 5 minutes																			
	Kate																			
	Pete																			
	cont.																			
	cont.																			
	cont.																			
	cont.																			
Time to complete =																				
4(iv)																				

PLEASE DO NOT WRITE IN THIS SPACE.

5(i)																								
5(ii)	chair number		1	2	3	4	5	6	7	8	9	10												
	random digits		5	3	0	2	4	7	9	1	1	8												
	number of occupants																							
5(iii)																								
5(iv)	random digit		child (C) or adult (A)																					
			chair 1		chair 2		chair 3		chair 4		chair 5		chair 6		chair 7		chair 8		chair 9		chair 10			
	occ1		6		0		9		6		2		9		1		5		6		2			
	occ2		2		6		5		2		1		1		4		8		1		9			
	occ3		3		7		2		1		3		6		6		5		3		5			
	occ4		3		1		1		2		8		0		6		0		5		1			
	number of children on 10 chairs =																							
	number of adults on 10 chairs =																							
5(v)																								

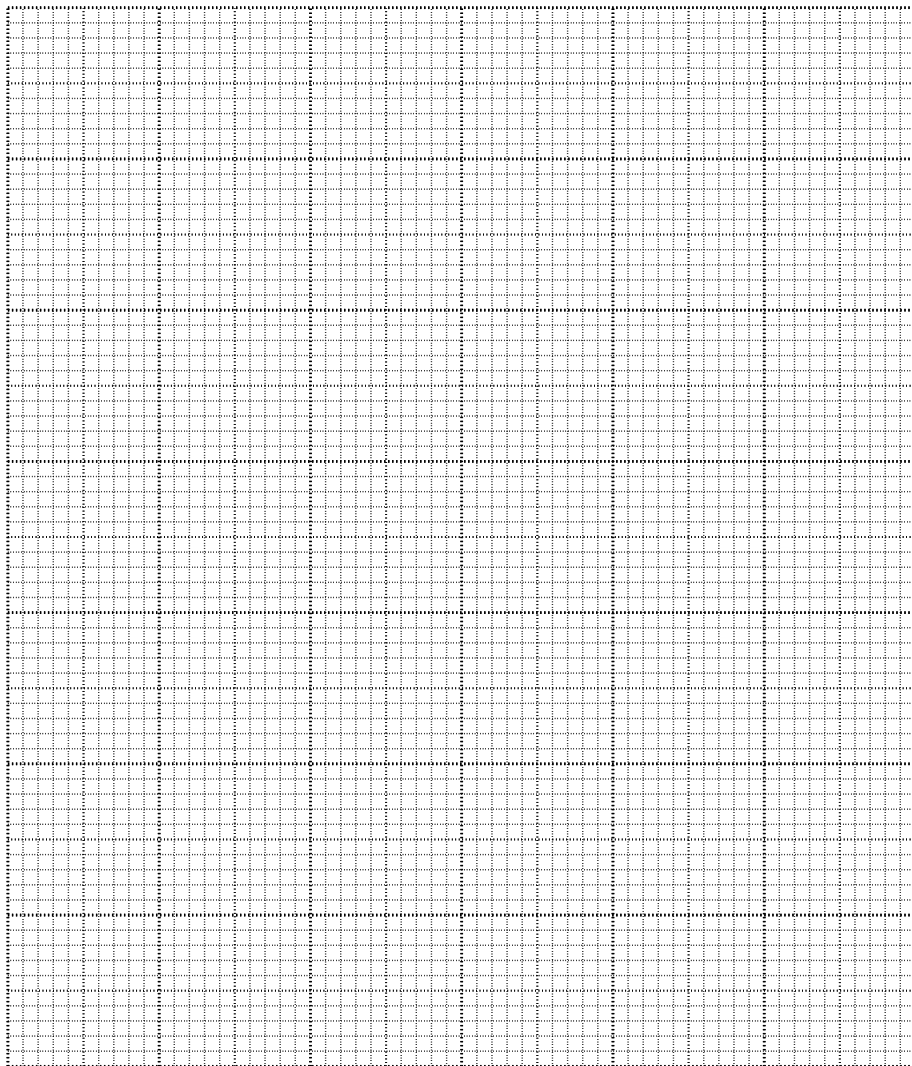
5(vi)										

5(vii)	Random numbers: 23 65 07 99 37 45 47 86 71 17									
	chair number		1	2	3	4	5			
	number of occupants									

5(viii)											
		chair 1		chair 2		chair 3		chair 4		chair 5	
	occ1	1		9		6		8		1	
	occ2	2		2		8		0		8	
	occ3	6		3		2		2		1	
	occ4	4		6		1		9		4	
	number of children on 5 chairs =										
	number of adults on 5 chairs =										
	total number of children on the chairlift =										
	total number of adults on the chairlift =										

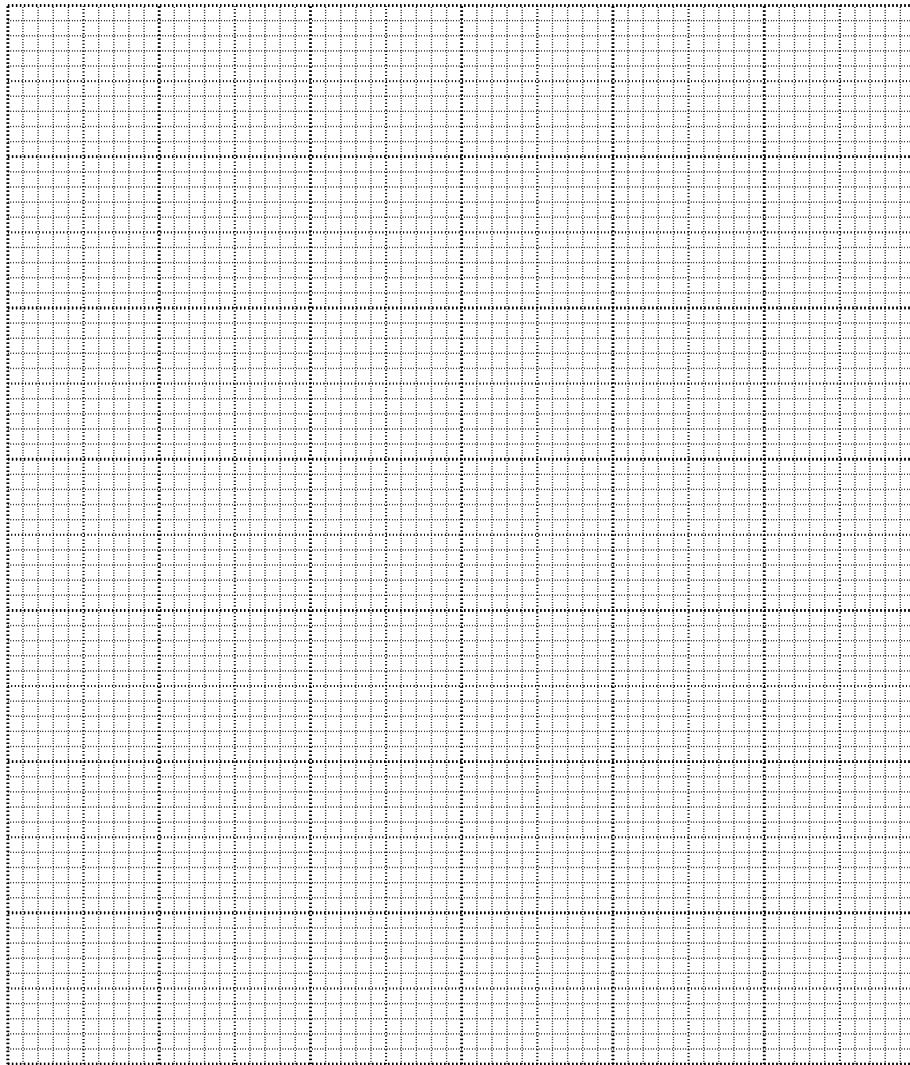
5(ix)										

6(i)



A spare copy of this graph paper can be found on page 12.

6 (ii)	
	6 (iii)

Spare copy of graph paper for 6(i)**Copyright Information**

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