

**ADVANCED GCE
MATHEMATICS**

Decision Mathematics 2

4737

PRINTED ANSWER BOOK

Candidates answer on this printed answer book.

OCR supplied materials:

- Question paper 4737 (inserted)
- List of Formulae (MF1)

Other materials required:

- Scientific or graphical calculator

**Friday 20 May 2011
Afternoon**

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 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. 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.
- Give non-exact numerical answers correct to 3 significant figures unless a different degree of accuracy is specified in the question or is clearly appropriate.

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 reminded of the need for clear presentation in your answers.**
- 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.

1 (i)	<p>Cornflakes (1) • • (A) Adam</p> <p>Rice pips (2) • • (B) Barbara</p> <p>Wheat biscuits (3) • • (C) Charlie</p> <p>Oatie bits (4) • • (D) Donna</p> <p>Choco pips (5) • • (E) Edward</p> <p>Honey footballs (6) • • (F) Fiona</p>
1 (ii)	<p>Cornflakes (1) • • (A) Adam</p> <p>Rice pips (2) • • (B) Barbara</p> <p>Wheat biscuits (3) • • (C) Charlie</p> <p>Oatie bits (4) • • (D) Donna</p> <p>Choco pips (5) • • (E) Edward</p> <p>Honey footballs (6) • • (F) Fiona</p>

1 (iii)	
1 (iv)	

2(i)&(ii)

	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>
<i>P</i>	2	4	2	6	0	4		
<i>Q</i>	3	5	3	5	3	4		
<i>R</i>	6	7	6	6	6	8		
<i>S</i>	4	6	4	4	0	4		
<i>T</i>	1	0	1	4	0	5		
<i>U</i>	3	4	4	4	3	3		
<i>V</i>	7	5	7	6	7	5		
<i>W</i>	4	6	5	4	5	5		

	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>
<i>P</i>								
<i>Q</i>								
<i>R</i>								
<i>S</i>								
<i>T</i>								
<i>U</i>								
<i>V</i>								
<i>W</i>								

	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>
<i>P</i>								
<i>Q</i>								
<i>R</i>								
<i>S</i>								
<i>T</i>								
<i>U</i>								
<i>V</i>								
<i>W</i>								

	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>
<i>P</i>								
<i>Q</i>								
<i>R</i>								
<i>S</i>								
<i>T</i>								
<i>U</i>								
<i>V</i>								
<i>W</i>								

2 (iii)

	A	B	C	D	E	F	G	H
P	4	2	4	0	6	2	2	2
Q	2	0	2	0	2	1	1	1
R	2	1	2	2	2	0	4	4
S	2	0	2	2	6	2	2	2
T	4	5	4	1	5	0	1	1
U	1	0	0	0	1	1	0	0
V	0	2	0	1	0	2	3	3
W	2	0	1	2	1	1	2	2

	A	B	C	D	E	F	G	H
P								
Q								
R								
S								
T								
U								
V								
W								

Adam =

Barbara =

Charlie =

Donna =

Edward =

Fiona =

Not used = and

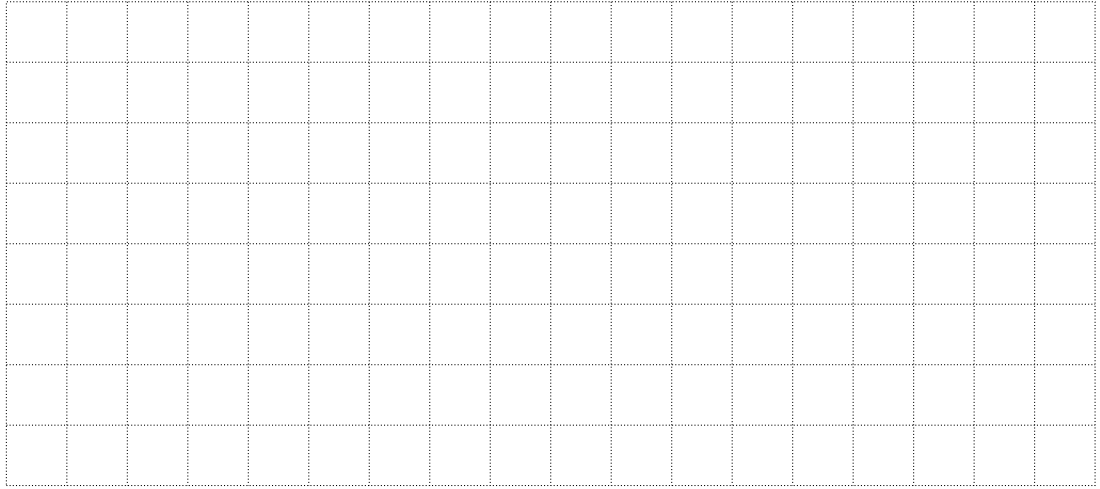
3 (i)																						
3 (ii)	<table border="1"> <thead> <tr> <th colspan="2"></th> <th colspan="2">Weather</th> </tr> <tr> <th colspan="2"></th> <th>Rainy</th> <th>Sunny</th> </tr> </thead> <tbody> <tr> <td rowspan="4" style="vertical-align: middle; padding-right: 10px;">Magazine</td> <td>Activity holidays</td> <td>4000</td> <td>5000</td> </tr> <tr> <td>British beaches</td> <td>1000</td> <td>7000</td> </tr> <tr> <td>Country retreats</td> <td>3000</td> <td>6000</td> </tr> <tr> <td>Dining experiences</td> <td>5000</td> <td>3000</td> </tr> </tbody> </table>			Weather				Rainy	Sunny	Magazine	Activity holidays	4000	5000	British beaches	1000	7000	Country retreats	3000	6000	Dining experiences	5000	3000
			Weather																			
			Rainy	Sunny																		
	Magazine	Activity holidays	4000	5000																		
		British beaches	1000	7000																		
		Country retreats	3000	6000																		
		Dining experiences	5000	3000																		
3 (iii)																						

3 (iv)

3 (v)

4(i) & (ii)

4 (iii)



4 (iv)

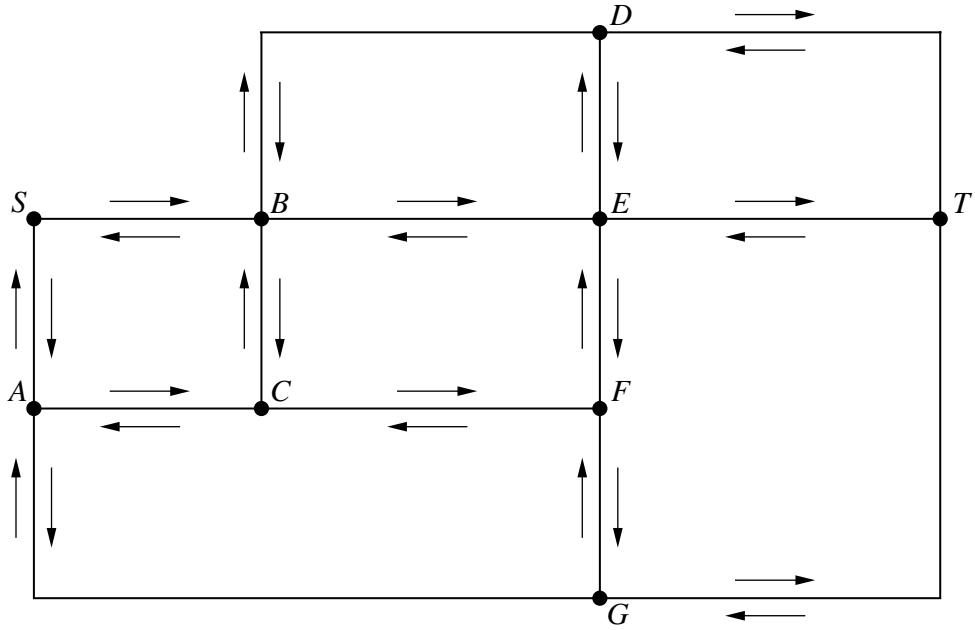
4 (v)

5 (i)	

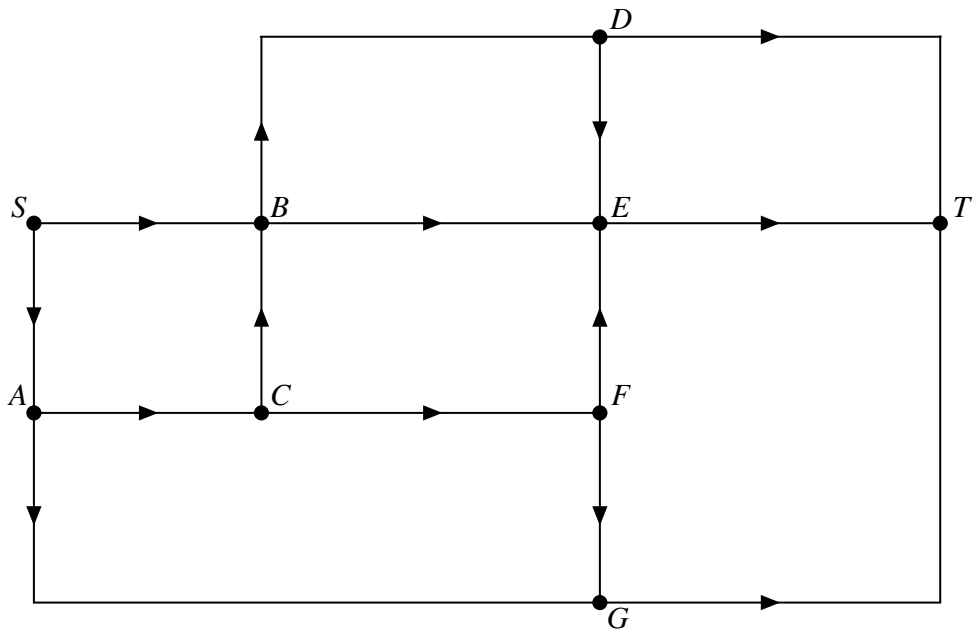
5 (ii)	<i>SA</i> cannot be full because
	<i>ET</i> cannot be full because
	<i>AC</i> and <i>BC</i> cannot both be full because

5 (iii)	

5 (iv),
(v) & (vi)



5 (vii)



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