

Wednesday 20 May 2015 - Morning

A2 GCE MATHEMATICS

4737/01 Decision Mathematics 2

PRINTED ANSWER BOOK

Candidates answer on this Printed Answer Book.

OCR supplied materials:

- Question Paper 4737/01 (inserted)
- List of Formulae (MF1)

Other materials required:

Scientific or graphical calculator

Duration: 1 hour 30 minutes



Candidate forename				Candidate surname					
Centre numb	per					Candidate nu	ımber		

INSTRUCTIONS TO CANDIDATES

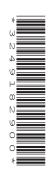
These instructions are the same on the Printed Answer Book and the Question Paper.

- 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.
- Answer all the questions.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- 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)		
	В●	• S
	C •	• M
	D●	• T
	E ●	• W
1 (ii)		
1 ()	В ●	• S
	C ●	• M
	D●	• T
	E ●	• W
1 (iii)		
- ()		
	Beryl Batty is invited on	
	Colonel Chapman is invited on	
	Dimitri Delacruz is invited on	
	Erina El-Sayed is invited on	
1 (iv)		

2 (i)	Activity	Duration (hours)	Immediate predecessors	
	A	4		
	В	5		
	C	4		
	D	2		
	E	4		
	F	3		
	G	2		
	Н	4		
2 (ii)				
	B(5)	C(4) $G(2)$	F(3)	
2 (iii)				
2 (iv)(a)				
2 (iv)(b)				
2 (v)				

3 (i)		S	С	R						
	F	30	75	48						
	G	25	82	45						
	Н	45	76	53						
	I	40	70	45						
			<u> </u>			J			<u> </u>	
		l	ı	I	I	J	I	I	1	
	'	•				-	•	•		
	Swim =				Cycle =	=		Run =		
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3 (ii)										-
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Swim = Cycle = Run =	S	S C	R		
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PLEASE DO NOT WRITE IN THIS SPACE.

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4 (i)	
4 (ii)	
7 (11)	
	(
	(answer space continued on next page)

4 (ii)	(continued)

5 (i)				
5 (ii)				
5 (iii)				
		C	5	
	3		3	
	5	D	2	
	$A \longrightarrow A$	$\bigcap_{i=1}^{D}$		H
	$6 \mathbf{A} 3$	$0 \downarrow 4$ $3 \downarrow 0$	0	3
	S 4	E_1 0 E_2	<u> </u>	$\prod_{T}^{\blacktriangledown}$
	<u>√</u>	-	2	1
	3 7	$3 \downarrow \downarrow 0 \qquad 2 \qquad 0 \downarrow \downarrow 3$	0	7 3
	B $\frac{2}{3}$	F		I
	3	F	3	
	B 3 3 0		-8 -8	
	0	\overline{G}	0	

5 (iv)					
5 (v)					
5 (vi)					
			C		
			<u> </u>		
			†		
	A	<i>D</i>		-	H
	 				+
	S	——	-		T
	+		ı		
	В	F		•	I
			†		
		•	G		

6 (i)							
				C's choice	e		
			1	2	3		
		1				•	
	R's choice	2				-	
		3				-	
			I		I		
6 (ii)							
6 (iii)							
	Play-safe strategy for <i>R</i> is						
	Play-safe strategy for C is						
	If R plays safe, C should choose stra	tegy					

6 (iv)	
6 (v)	
6 (vi)	
0 (1)	

6 (vii)	
6 (viii)	



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