6690

Edexcel GCE

Decision Mathematics D2

Advanced/Advanced Subsidiary

May 2003

Answer Booklet

1. (*a*)

(*b*) ....

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2. (*a*) ....

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(*b*)

Order of arc selection:

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(*c*) ....

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(*d*) ....

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New upper bound:...

Tour:...

You may not need to use all these grids

3. (*a*)

	Talk I	Talk II	Talk III	Talk IV
Clive				
Julie				
Nicky				
Steve				

	Talk I	Talk II	Talk III	Talk IV
Clive				
Julie				
Nicky				
Steve				

	Talk I	Talk II	Talk III	Talk IV
Clive				
Julie				
Nicky				
Steve				

	Talk I	Talk II	Talk III	Talk IV
Clive				
Julie				
Nicky				
Steve				

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Earliest time meeting could end:..

(*b*)

	Talk I	Talk II	Talk III	Talk IV
Clive				
Julie				
Nicky				
Steve				

4.

	B plays I	*B* plays II	*B* plays III
A plays I	2	−1	3
A plays II	1	3	0
A plays III	0	1	−3

(*a*) ....

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(*b*) ....

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(*c*) ....

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(*d*)

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5.

	Airport *D*	Airport *E*	Airport *F*	Cars available
Garage *A*	£20	£40	£10	6
Garage *B*	£20	£30	£40	5
Garage *C*	£10	£20	£30	8
Cars required	6	9	4	

(*a*)

	Airport *D*	Airport *E*	Airport *F*
Garage *A*			
Garage *B*			
Garage *C*			

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(*b*) ....

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(*c*) ....

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You may not need to use all of these grids

5. (*continued*)

	Airport *D*	Airport *E*	Airport *F*
Garage *A*			
Garage *B*			
Garage *C*			

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	Airport *D*	Airport *E*	Airport *F*
Garage *A*			
Garage *B*			
Garage *C*			

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	Airport *D*	Airport *E*	Airport *F*
Garage *A*			
Garage *B*			
Garage *C*			

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6.　(*a*) ....

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(*b*)

Stage	Demand	State	Action	Destination	Value
1 (Nov)	2	0 (in stock)	(make) 2	0	200
		1 (in stock)	(make) 1	0	240
		2 (in stock)	(make) 0	0	80
2 (Oct)	5	1	4	0	590 + 200 = 790
		2	3	0	
			4	1	
		3	2		

Production schedule

Month	August	September	October	November
Number of cycles to be made				

Cost..

(*c*) ....

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END