



Oxford Cambridge and RSA

Friday 24 May 2024 – Afternoon

AS Level Further Mathematics A

Y534/01 Discrete Mathematics

Printed Answer Booklet

Time allowed: 1 hour 15 minutes

You must have:

- Question Paper Y534/01 (inside this document)
- the Formulae Booklet for AS Level Further Mathematics A
- a scientific or graphical calculator



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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First name(s)

Last name

INSTRUCTIONS

- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided in the **Printed Answer Booklet**. If you need extra space use the lined pages at the end of the Printed Answer Booklet. The question numbers must be clearly shown.
- Answer **all** the questions.
- Where appropriate, your answer should be supported with working. Marks might be given for using a correct method, even if your answer is wrong.
- Give non-exact numerical answers correct to **3** significant figures unless a different degree of accuracy is specified in the question.
- The acceleration due to gravity is denoted by $g \text{ m s}^{-2}$. When a numerical value is needed use $g = 9.8$ unless a different value is specified in the question.

INFORMATION

- The total mark for this paper is **60**.
- The marks for each question are shown in brackets [].
- This document has **12** pages.

ADVICE

- Read each question carefully before you start your answer.

2

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DO NOT WRITE ON THIS PAGE

1(a)	
1(b)	
1(c)	
1(d)	
1(e)	

2(a)

Pay-off for player 1

		Player 2				
		C	D	E	H	I
Player 1	A	4	1	3	2	2
	B	0	2	1	2	1
	F	0	1	1	2	3
	G	2	0	3	3	3
	J	1	2	3	0	2

Play-safe strategy for player 1 is

2(b)

Pay-off for player 2

		Player 2				
		C	D	E	H	I
Player 1	A	2	2	0	1	1
	B	3	1	2	1	2
	F	3	2	2	1	0
	G	1	3	0	0	0
	J	2	1	0	3	1

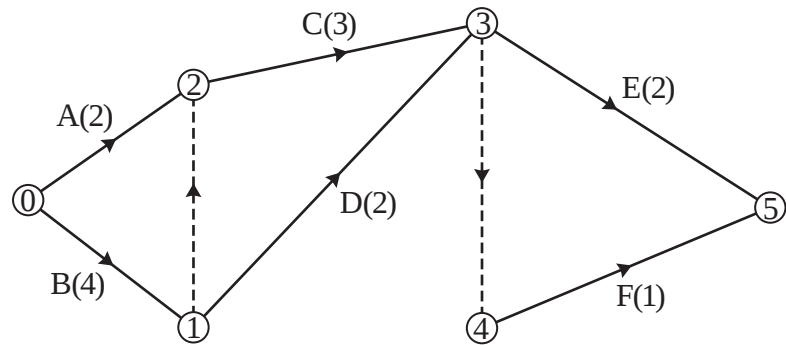
2(c)

3(a)	
3(b)	
3(c)	

4(a)

4(b)

4(c)



Minimum project completion time =

Activity	A	B	C	D	E	F
Float						

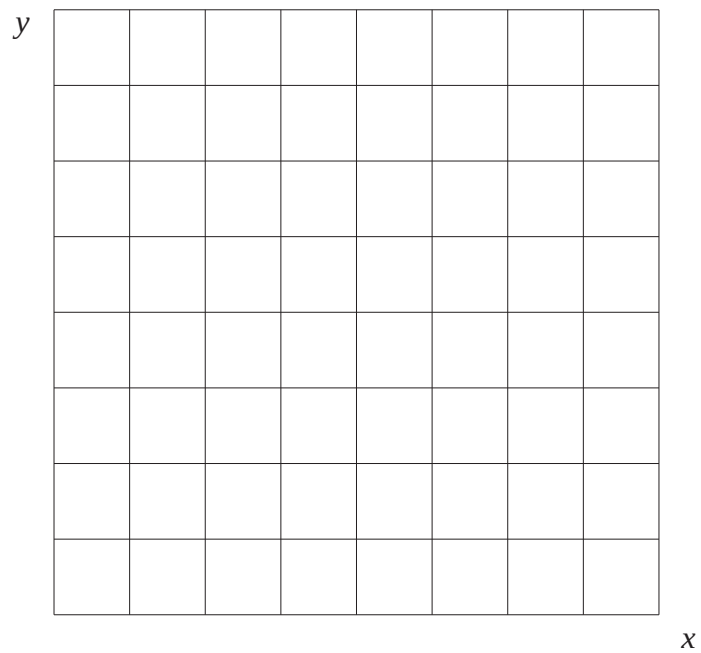
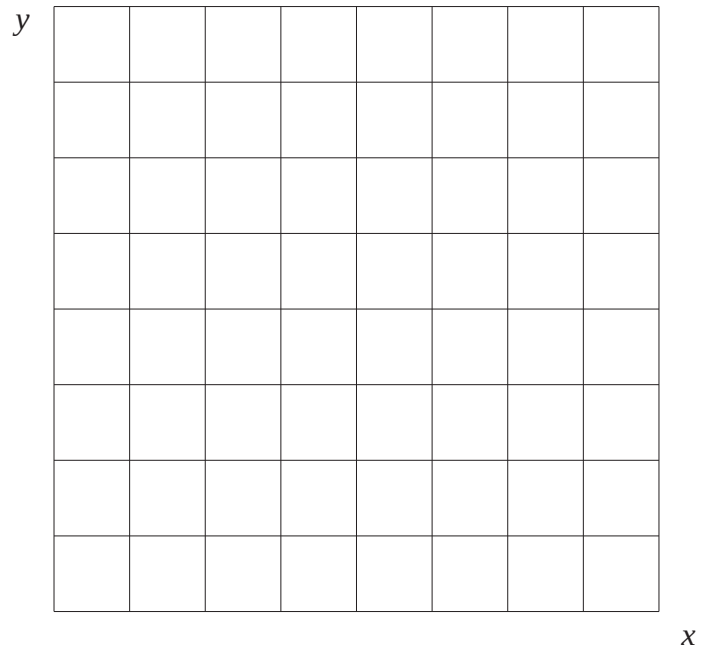
4(d)

4(e)

5(a)	
5(b)	
5(c)	
5(d)	

6(a)	
6(b)	

Grids for working



10

7(a)	8 5 4 7 3 3
	Bin 1:
	Bin 2:
7(b)	
7(c)	8 5 4 7 3 3
	Bin 1:
	Bin 2:
	Bin
	Bin
7(d)	
7(e)	
7(f)	
7(g)	

EXTRA ANSWER SPACE

If you need extra space use these lined pages. You must write the question numbers clearly in the margin.

