

OCR

Oxford Cambridge and RSA

Wednesday 15 June 2016 – Morning

AS GCE MATHEMATICS

4736/01 Decision Mathematics 1

PRINTED ANSWER BOOK

Candidates answer on the Printed Answer Book.

OCR supplied materials:

- Question Paper 4736/01 (inserted)
- List of Formulae (MF1)

Other materials required:

- Scientific or graphical calculator

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 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.** If additional space is required, you should use the lined page(s) at the end of this Printed Answer Book. The question number(s) must be clearly shown.
- 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>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>
<i>A</i>	–	5	7	9	8	12
<i>B</i>	5	–	4	6	5	10
<i>C</i>	7	4	–	7	6	8
<i>D</i>	9	6	7	–	5	10
<i>E</i>	8	5	6	5	–	10
<i>F</i>	12	10	8	10	10	–

A
●

B
●

C
●

●
D

●
E

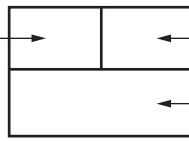
●
F

2 (i)	
2 (ii)	
2 (iii)	
2 (iv)	
2 (v)	
	BIN 1:
	BIN 2:
	BIN 3:
	BIN 4:
2 (vi)	
	BIN 1:
	BIN 2:
	BIN 3:

4 (i)	
4 (ii)(a)	
4 (ii)(b)	
4 (iii)(a)	
4 (iii)(b)	
4 (iv)(a)	
4 (iv)(b)	

5 (i) Key:

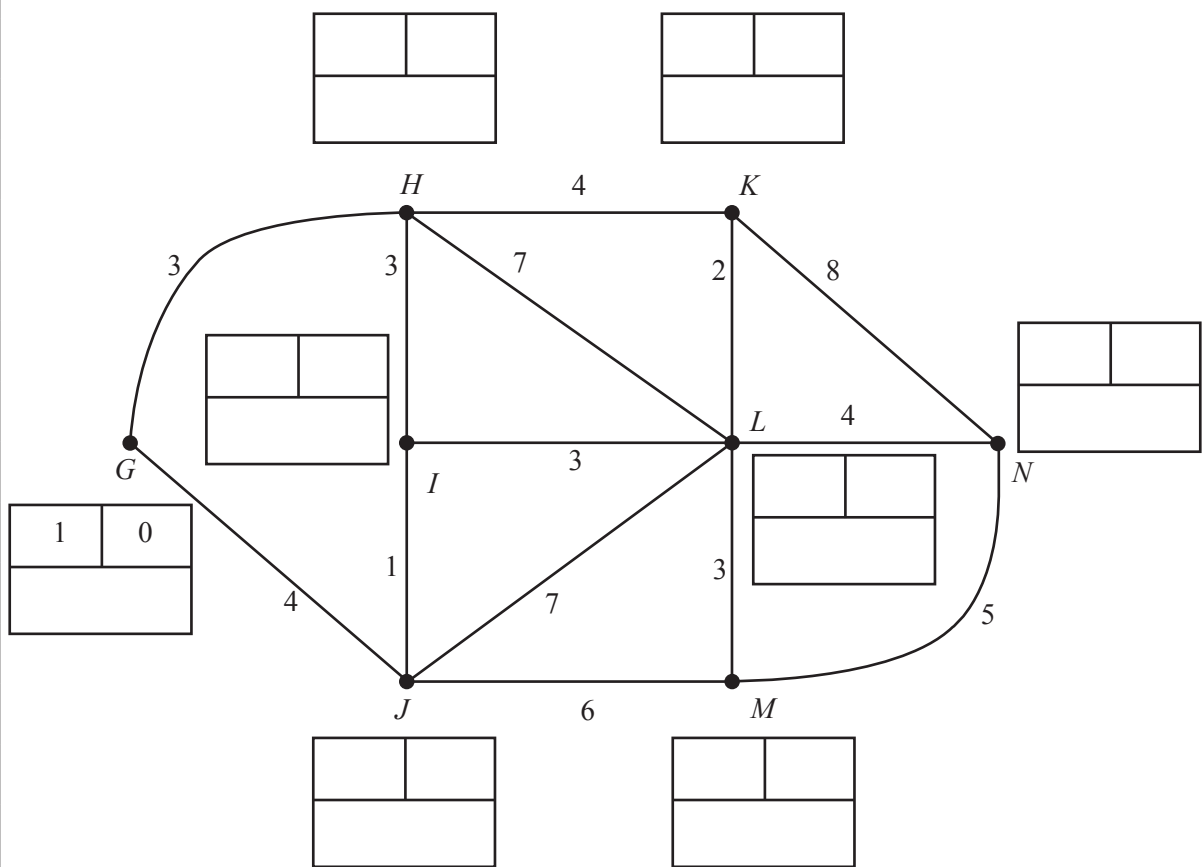
Order of becoming permanent



Permanent label

Temporary labels (working values)

Do not cross out your temporary labels.

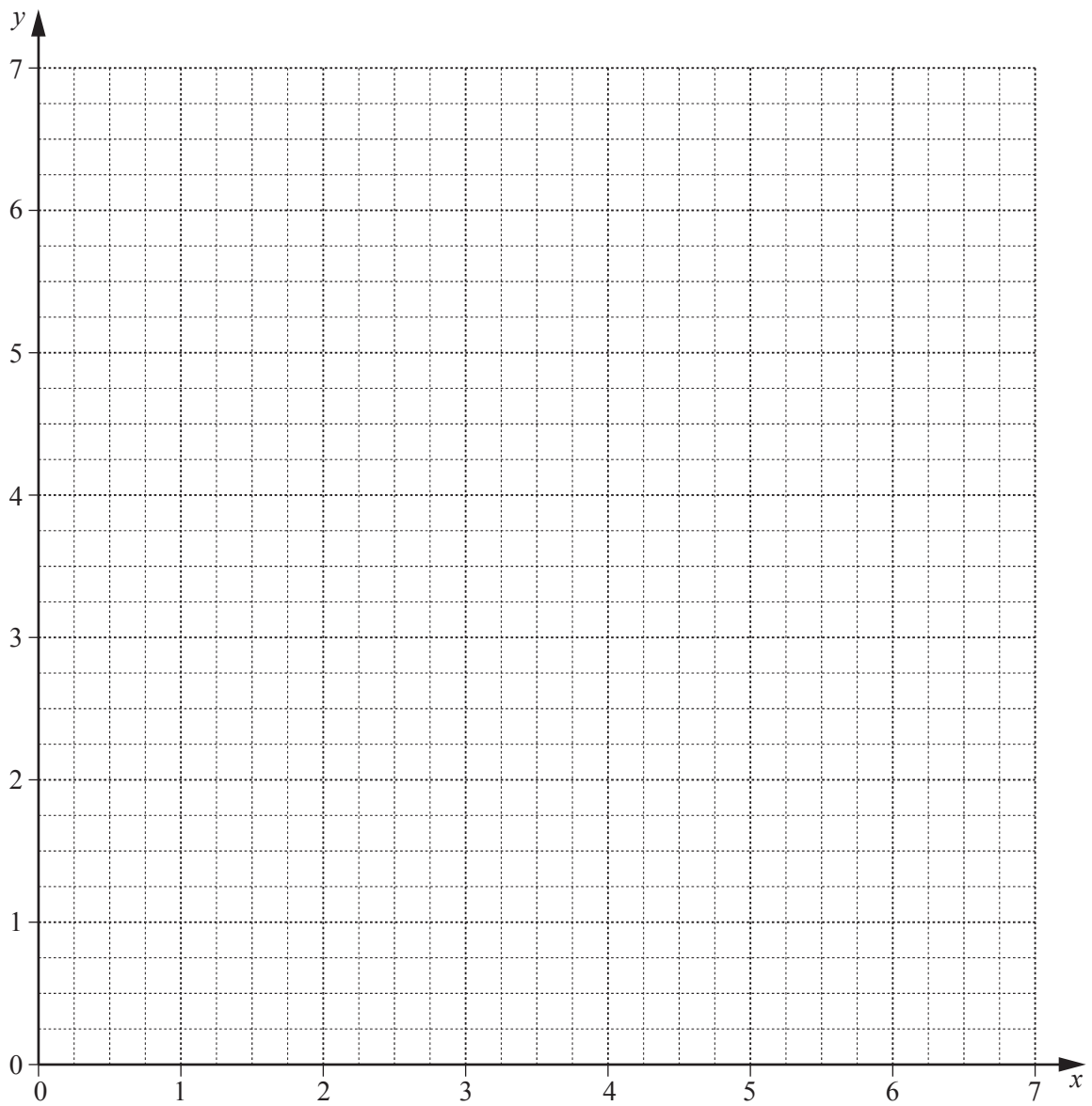


5 (ii)	

5 (iii)	

6 (i)

6 (ii)



6 (iii)	
6 (iv)	

7 (i)	
7 (ii)	$RZ = 8$ $WX = 8$ $SW = 10$ $RS = 12$ $TW = 12$ $YZ = 13$ $WY = 14$
	$RT = 15$ $RW = 15$ $SZ = 16$ $TX = 16$ $XY = 17$ $SX = 18$ $TY = 18$
	$TZ = 18$ $RX = 20$ $RY = 20$ $ST = 20$ $WZ = 20$ $XZ = 22$ $QT = 25$
	$SY = 25$ $QR = 30$ $QZ = 32$ $QS = 35$ $QW = 37$ $QX = 40$ $QY = 43$

7 (iii)(a)	
7 (iii)(b)	
7 (iv)	

ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).

A large rectangular area with a vertical solid line on the left side and horizontal dotted lines across the rest of the page, providing space for writing answers.



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