



Tuesday 10 June 2014 – Morning

AS GCE MATHEMATICS

4736/01 Decision Mathematics 1

PRINTED ANSWER BOOK

Candidates answer on this 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.** 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

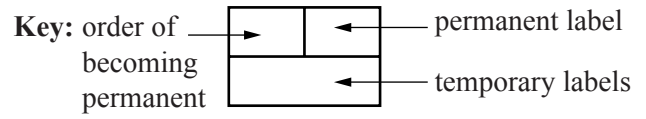
This information is the same on the Printed Answer Book and the Question Paper.

- 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.

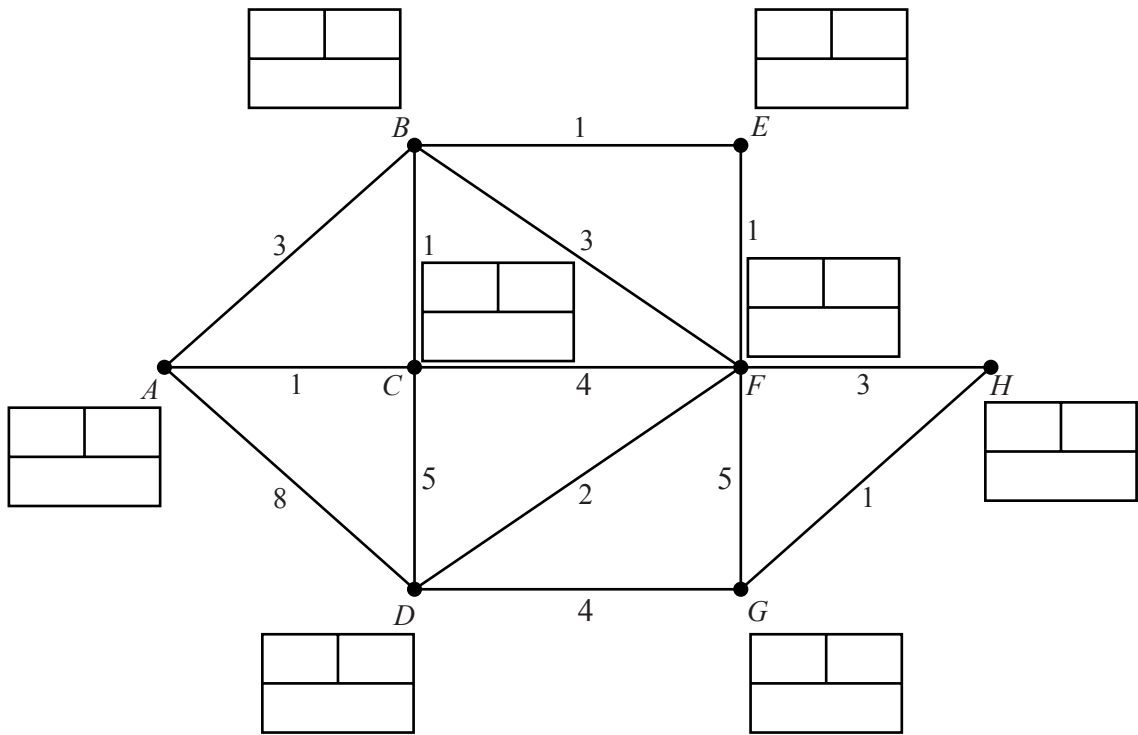
1 (i)	120 120 120 100 150 200 250 150 200 250 120
1 (ii)	
1 (iii)	

2 (i) (a)	
2 (i) (b)	
2 (ii)	

4(i) A spare copy of this diagram can be found on page 12.



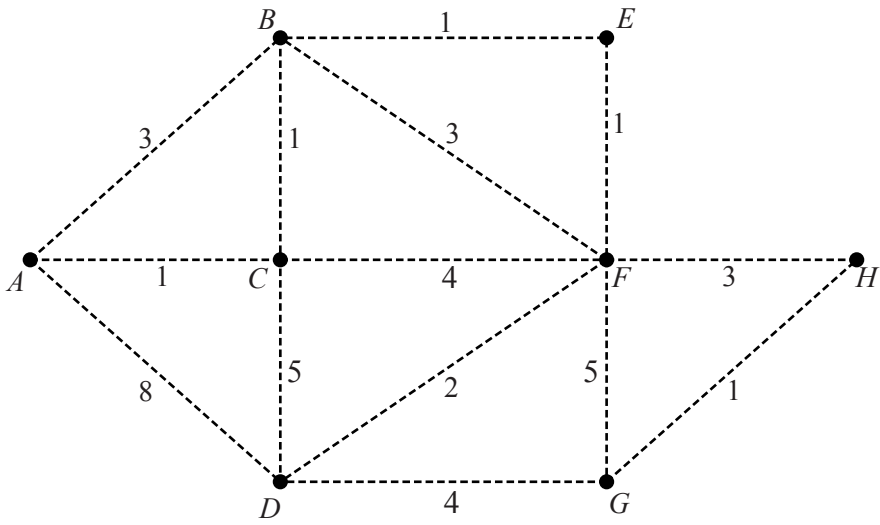
Do not cross out your working values (temporary labels)



Shortest distances from A (in metres)

<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>

4 (ii)	
4 (iii)	
4 (iv)	

5(i)(a)	
5(i)(b)	
5(ii)	<p data-bbox="256 667 943 703">A spare copy of this diagram can be found on page 12.</p>  <p data-bbox="245 1317 1469 2036"></p>

5 (iii) (a)	
5 (iii) (b)	
5 (iv)	
5 (v)	
5 (vi)	

6 (i)	
6 (ii)	
6 (iii)	
6 (iv)	

PLEASE DO NOT WRITE IN THIS SPACE

6(v)

Initial tableau

P	a	b	c	s	t	u	v	RHS	
1	-8	-7	-4	0	0	0	0	0	row 1
0	10	8	5	1	0	0	0	400	row 2
0	0	2	5	0	1	0	0	70	row 3
0	2	4	1	0	0	1	0	176	row 4
0	5	1	3	0	0	0	1	80	row 5

After one iteration

P	a	b	c	s	t	u	v	RHS	
									row 1'
									row 2'
									row 3'
									row 4'
									row 5'

row 1' =

row 2' =

row 3' =

row 4' =

row 5' =

6(vi)

--

6(vii)

--

6(viii)

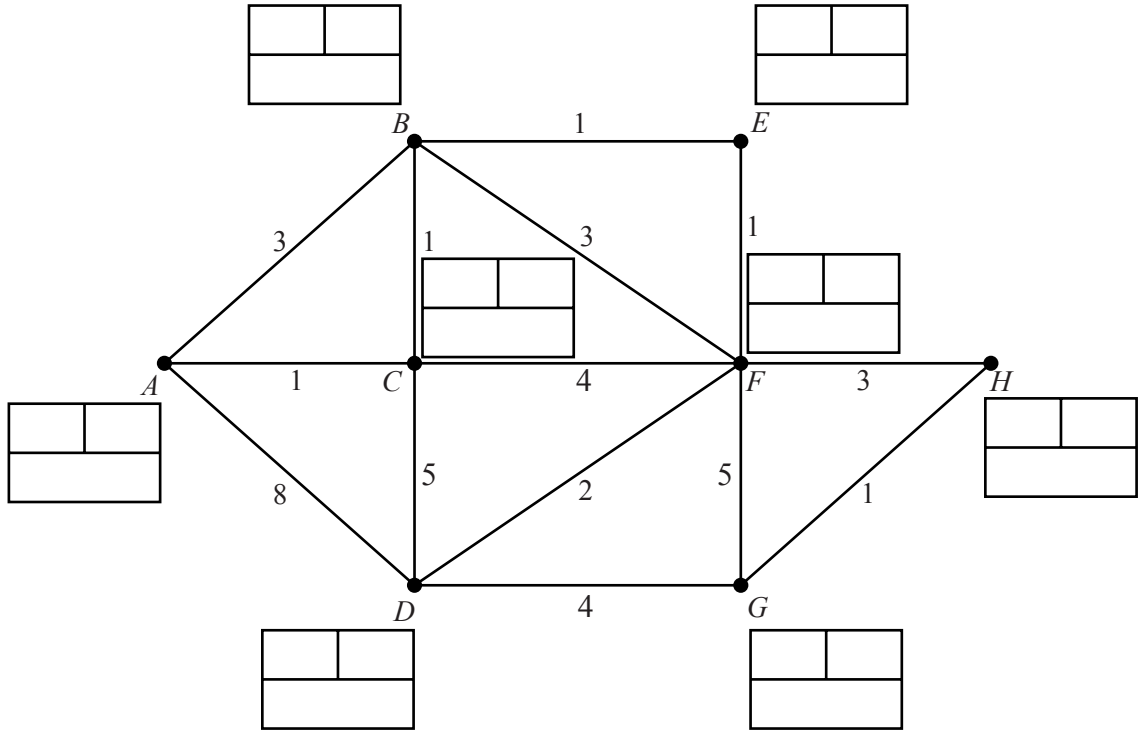
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4(i) Spare copy of diagram for question 4(i)

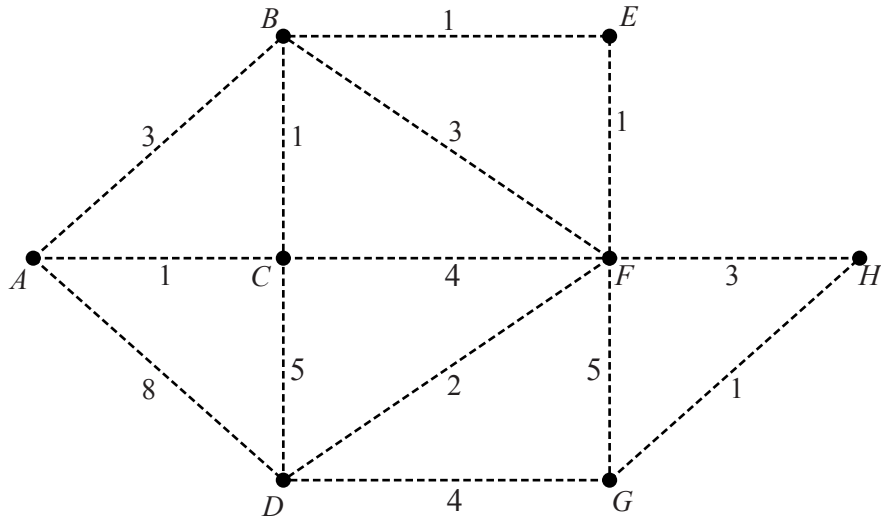
Key: order of becoming permanent

		← permanent label
		← temporary labels

Do not cross out your working values (temporary labels)



5(ii) Spare copy of diagram for question 5(ii)



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