

Centre No.						Paper Reference					
						<b>6</b>	<b>6</b>	<b>8</b>	<b>9</b>	<b>/</b>	<b>0</b>

Surname	Initial(s)
Signature	

Paper Reference(s)

**6689/01**

# Edexcel GCE

## Decision Mathematics D1

### Advanced/Advanced Subsidiary

Tuesday 9 June 2015 – Morning

### Answer Book

**Do not return the question paper with the answer book**

Examiner's use only

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Team Leader's use only

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Question Number	Leave Blank
1	
2	
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7	
Total	

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**P44424A**

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P 4 4 4 2 4 A 0 1 2 0

**Turn over**

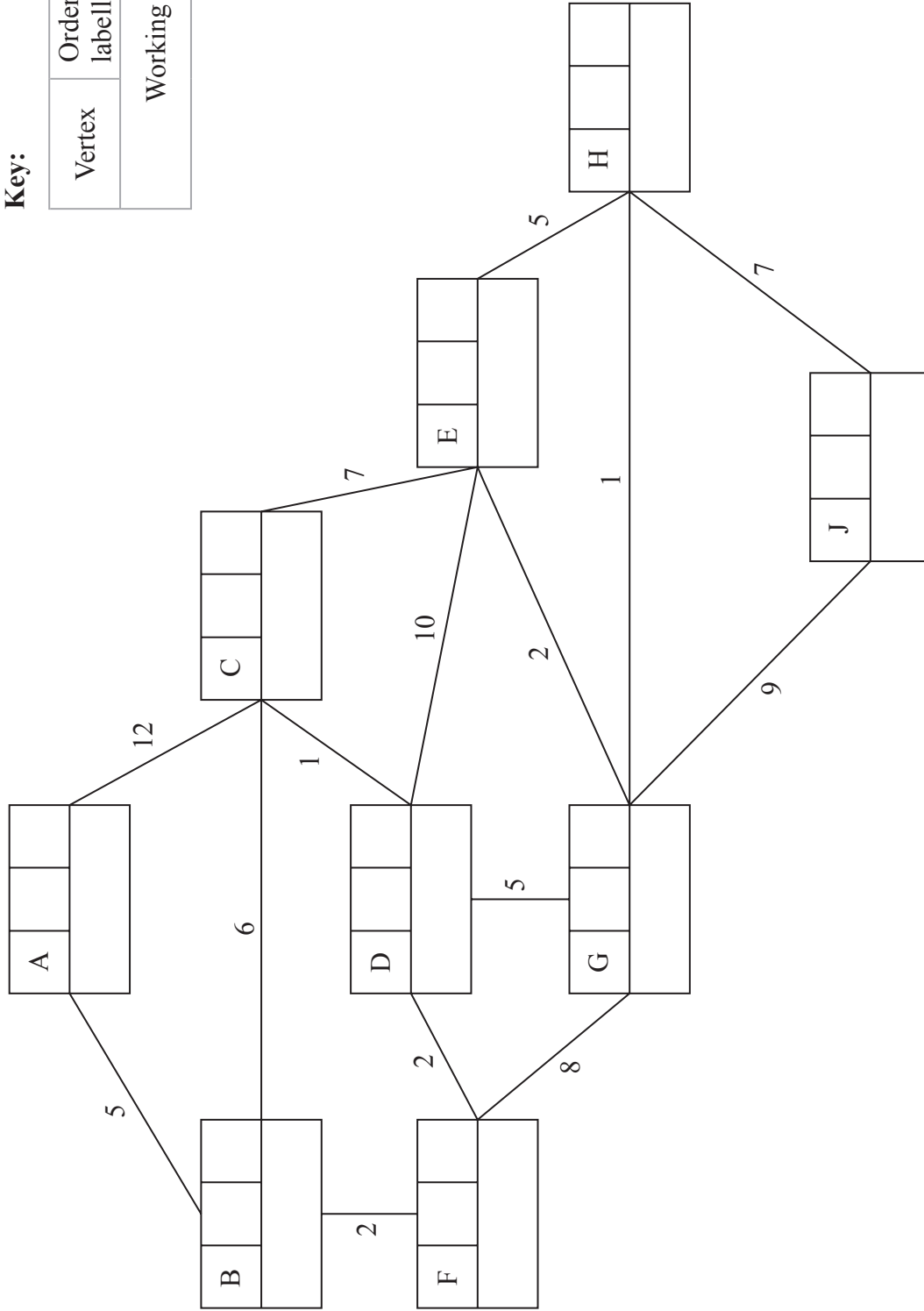
**PEARSON**







3.



**Key:**

Vertex	Order of labelling	Final value
Working values		

Shortest route: \_\_\_\_\_

Length of shortest route: \_\_\_\_\_



Leave  
blank

Question 3 continued

Blank lined area for writing answers.

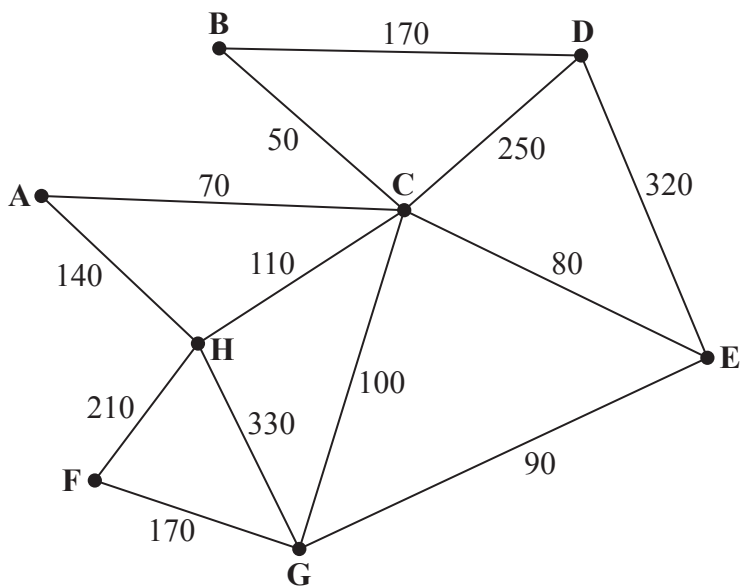
(Total 10 marks)

Q3

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4.



**Figure 4**

[The total weight of the network is 2090]

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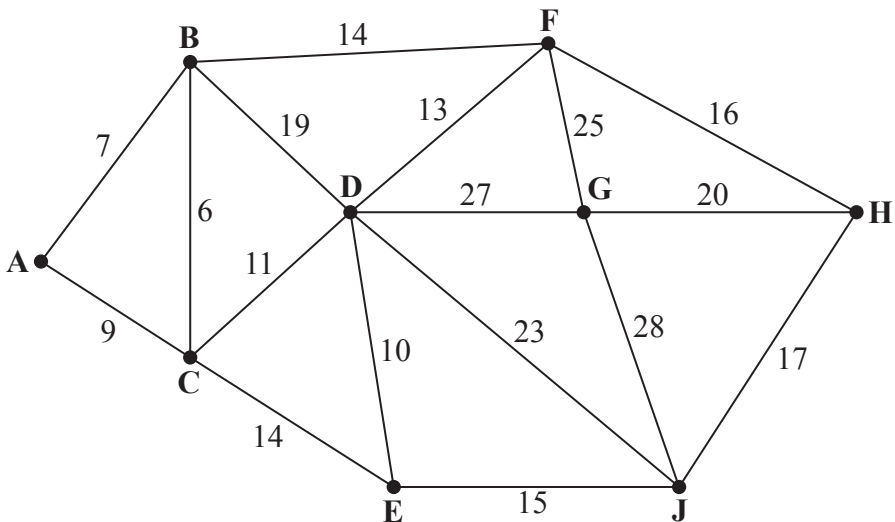


Figure 5

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Question 5 continued

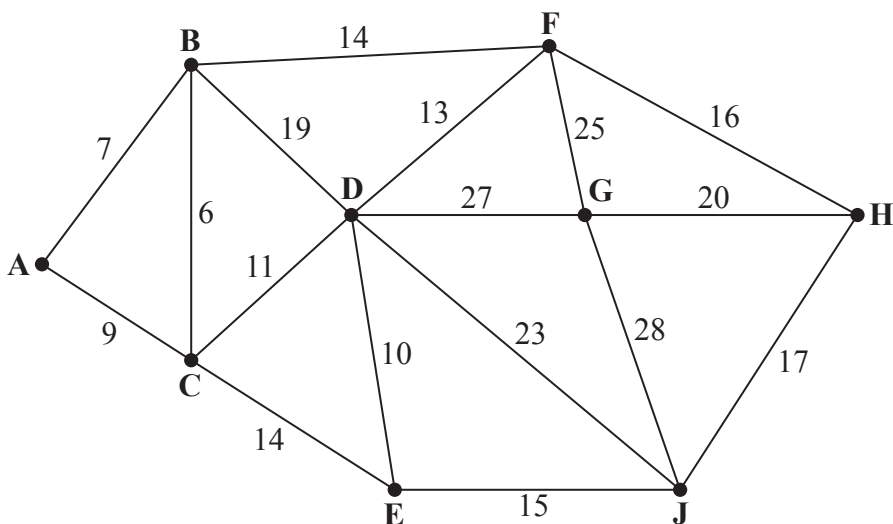


Figure 5

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(Total 10 marks)

Q5	







7. (a) and (b)

Key:

Early event time
Late event time

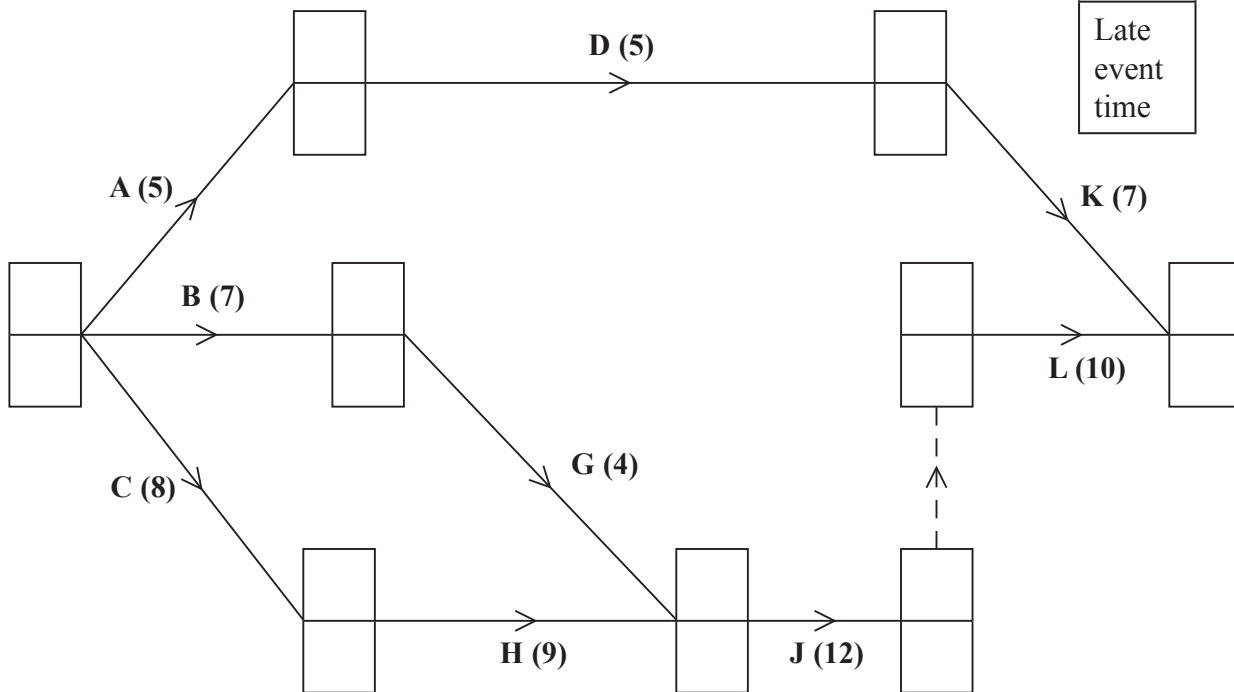


Diagram 1

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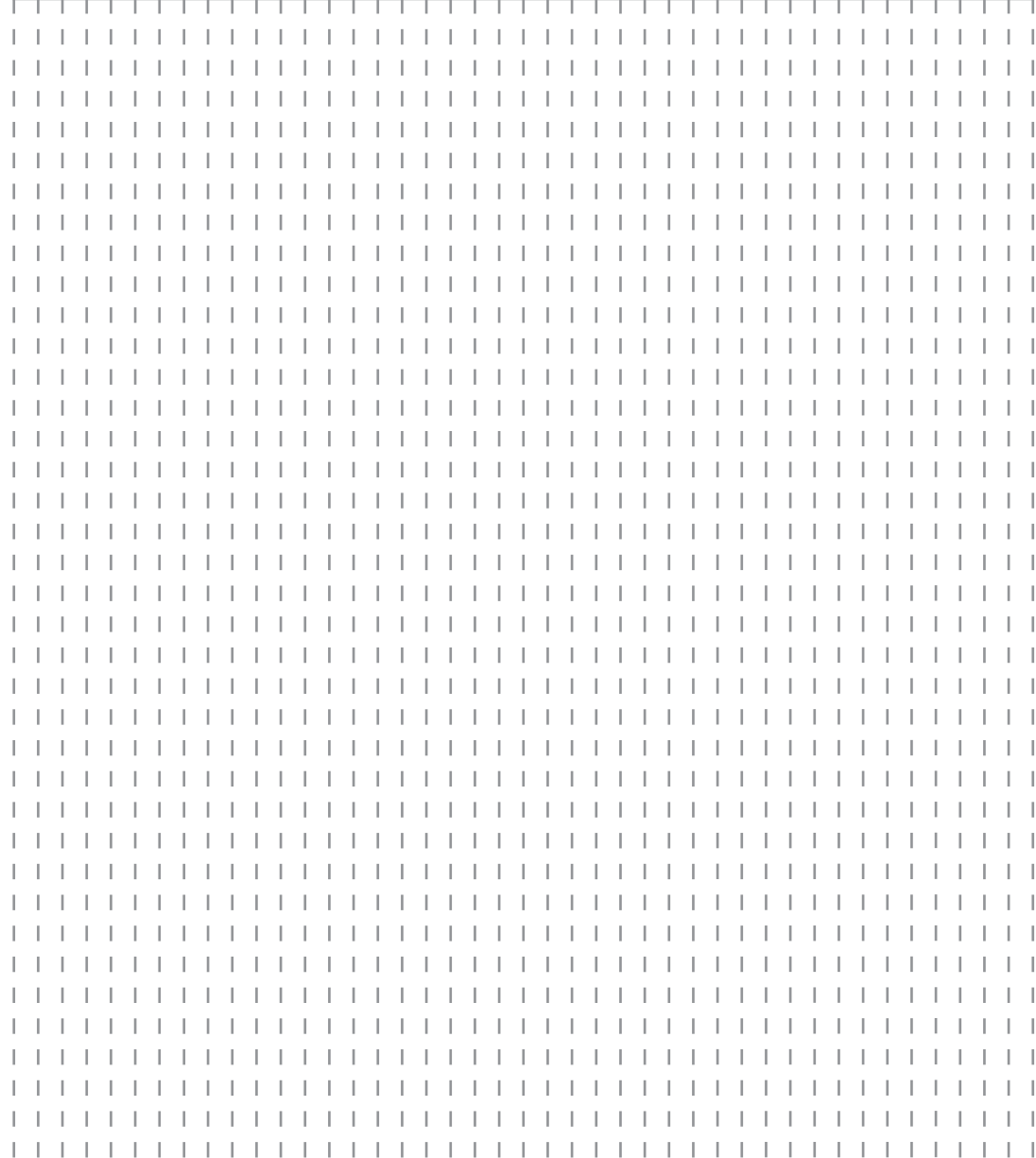
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**Question 7 continued**

(c) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(d)

**0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42**



**Q7**

**(Total 13 marks)**

**TOTAL FOR PAPER: 75 MARKS**

**END**

