

**ADVANCED SUBSIDIARY GCE  
MATHEMATICS (MEI)**  
Decision Mathematics 1

**4771**

**PRINTED ANSWER BOOK**

Candidates answer on this Printed Answer Book

**OCR Supplied Materials:**

- Question Paper 4771 (inserted)
- MEI Examination Formulae and Tables (MF2)

**Other Materials Required:**

None

**Monday 25 January 2010  
Morning**

**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.

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the spaces provided on the Printed Answer Book.
- **The questions are on the inserted Question Paper.**
- **Write your answer to each question in the space provided in the Printed Answer Book.** If you need more space for an answer use a 4-page answer book; label your answer clearly. Write your Centre Number and Candidate Number on the 4-page answer book and attach it securely to the Printed Answer Book.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Answer **all** the questions.
- Do **not** write in the bar codes.
- You are permitted to use a graphical calculator in this paper.
- Final answers should be given to a degree of accuracy appropriate to the context.

**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 advised that an answer may receive **no marks** unless you show sufficient detail of the working to indicate that a correct method is being used.
- 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.

**BLANK PAGE**

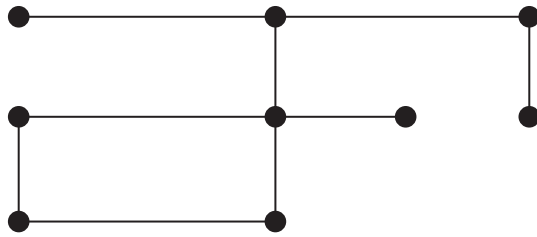
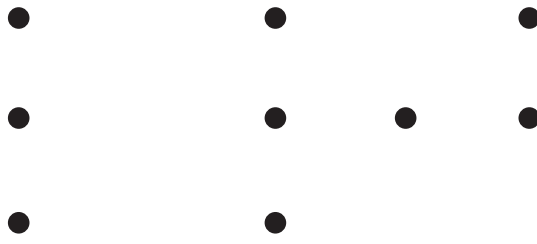
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1 (i) & (ii)

0	0
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Critical activities: .....

2 (i)

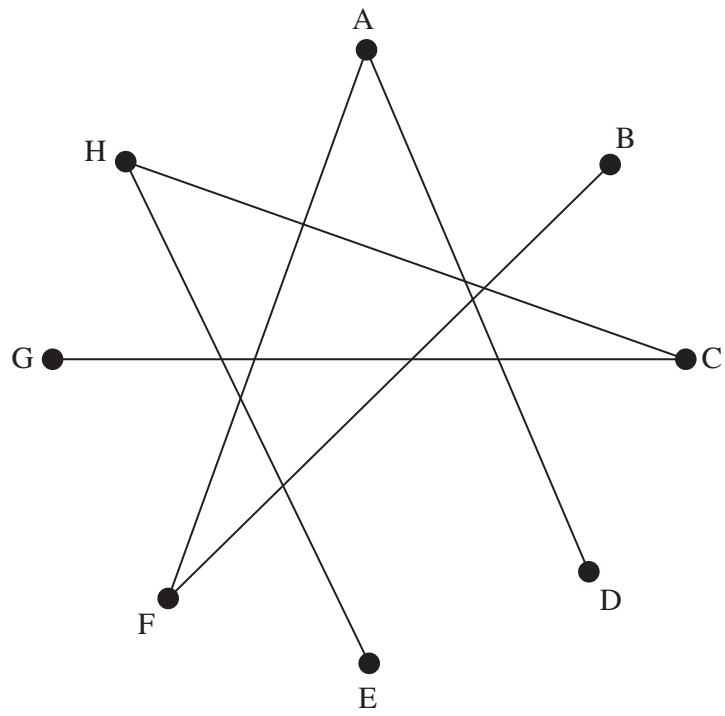


(ii)

3. (i)

(ii)

(iii)

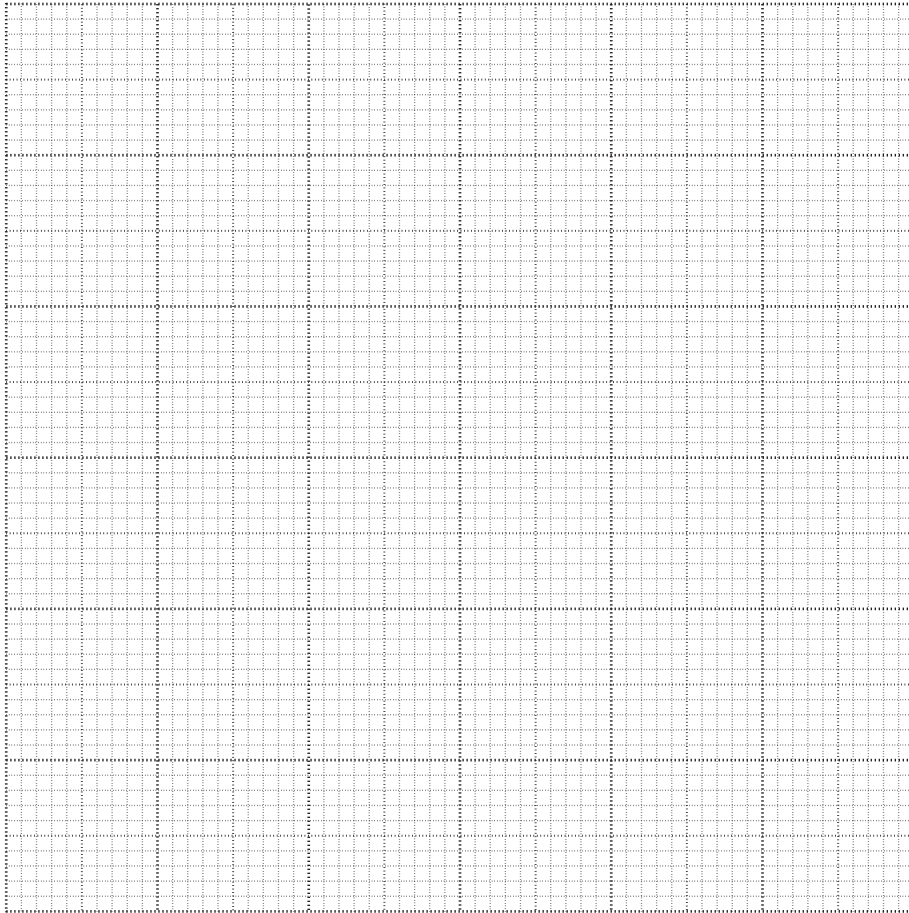


Number of arcs added = .....

(iv)

4 (i)

(ii)



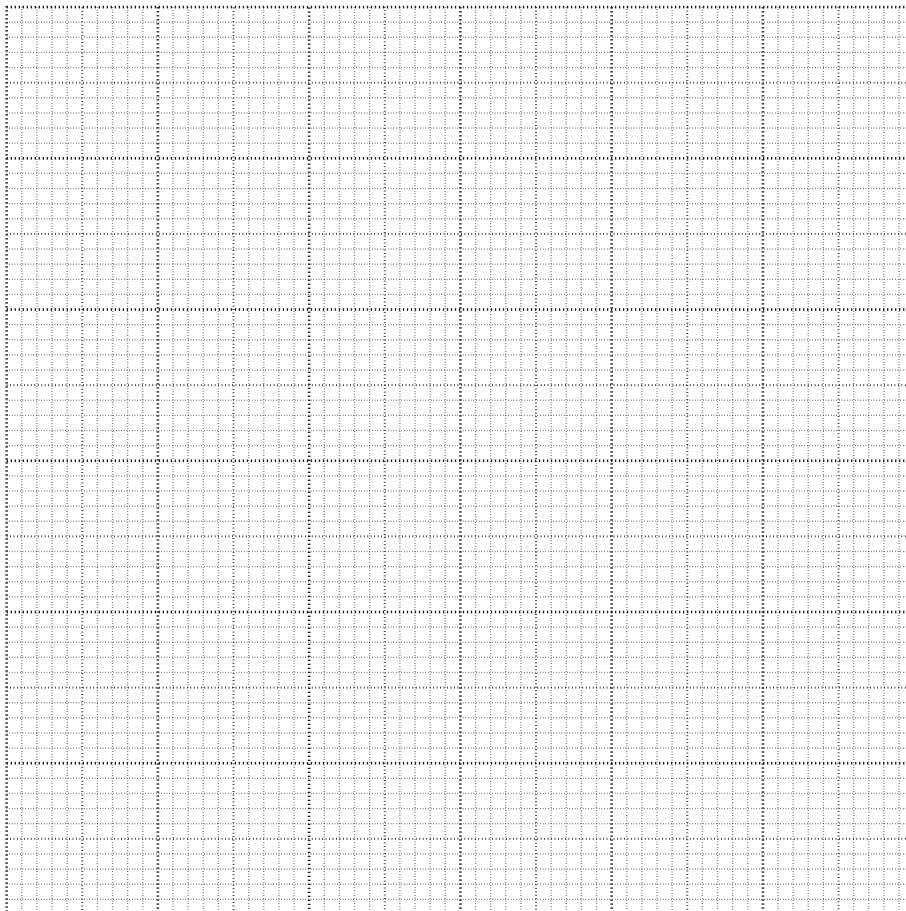
(iii)

(iv)

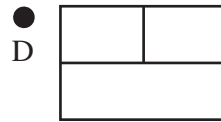
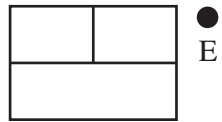
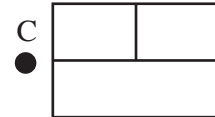
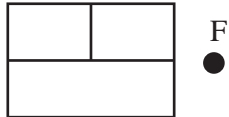
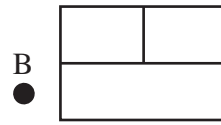
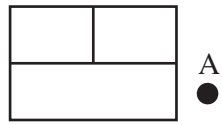
(v)

(vi)

**SPARE GRAPH PAPER FOR QUESTION 4**



5 (i) & (ii)

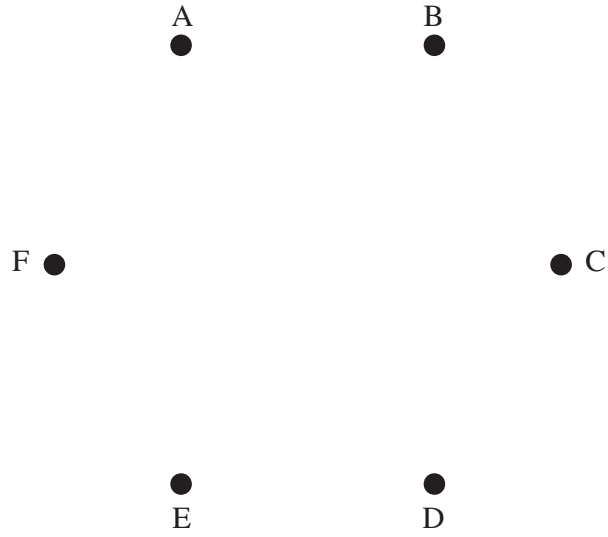


Shortest route from A to F: .....

Length of shortest route: ..... miles



(iii)



Order in which you selected arcs: .....

Total length of connector = ..... miles

(iv) (A)

(B)

6 (i)

Random digits for parts (ii) and (iii)

9 1 3 8 0 2 7 0 1 4 4 8 9 0 3 4 3 4 6 1 9 5 3 4 1

(ii)

apple no.	random number	fall?
1		
2		
3		
4		
5		
6		

Number of apples falling during day 1 = .....

(iii)

The last apple falls during day .....

Random digits for part (iv)

9 1 3 8 0 2 7 0 1 4 4 8 9 0 3 4 3 4 6 1 9 5 3 4 1

(iv)

The last apple falls or is picked during day .....

(v)

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