

Candidate Forename		Candidate Surname	
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Centre Number						Candidate Number				
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**OXFORD CAMBRIDGE AND RSA EXAMINATIONS
ADVANCED SUBSIDIARY GCE**

4771

MATHEMATICS (MEI)

Decision Mathematics 1

PRINTED ANSWER BOOK

MONDAY 25 JANUARY 2010: Morning

DURATION: 1 hour 30 minutes

SUITABLE FOR VISUALLY IMPAIRED CANDIDATES

Candidates answer on this Printed Answer Book

OCR SUPPLIED MATERIALS:

Question Paper 4771 (inserted)

MEI Examination Formulae and Tables (MF2)

OTHER MATERIALS REQUIRED:

None

READ INSTRUCTIONS OVERLEAF

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.**
- **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.

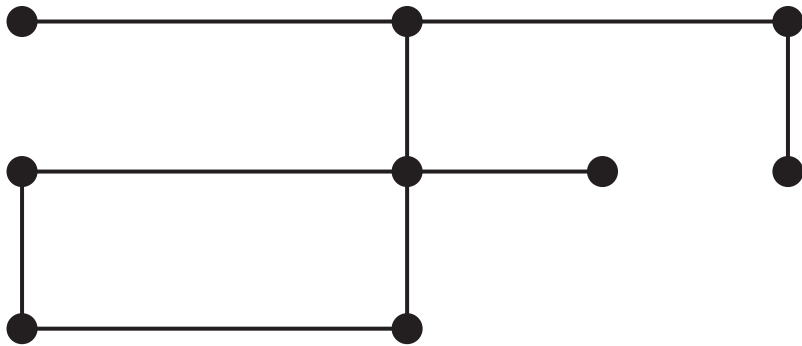
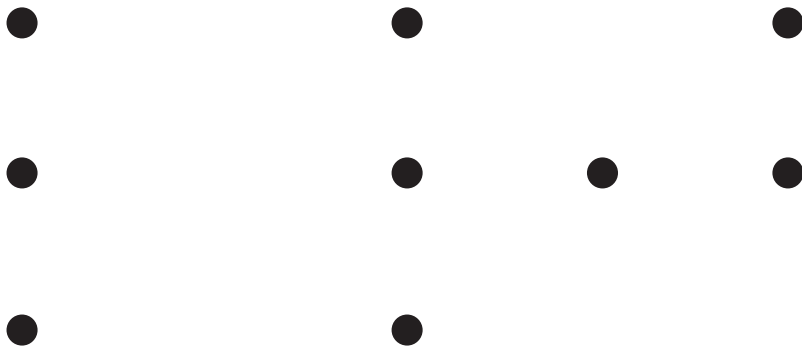
- **The number of marks is given in brackets [] at the end of each question or part question on the Question Paper.**
- **You are advised that an answer may receive NO MARKS unless you show sufficient detail of the working to indicate that a correct method is being used.**
- **The total number of marks for this paper is 72.**

1 (i) & (ii)

0	0
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Critical activities: _____

2 (i)

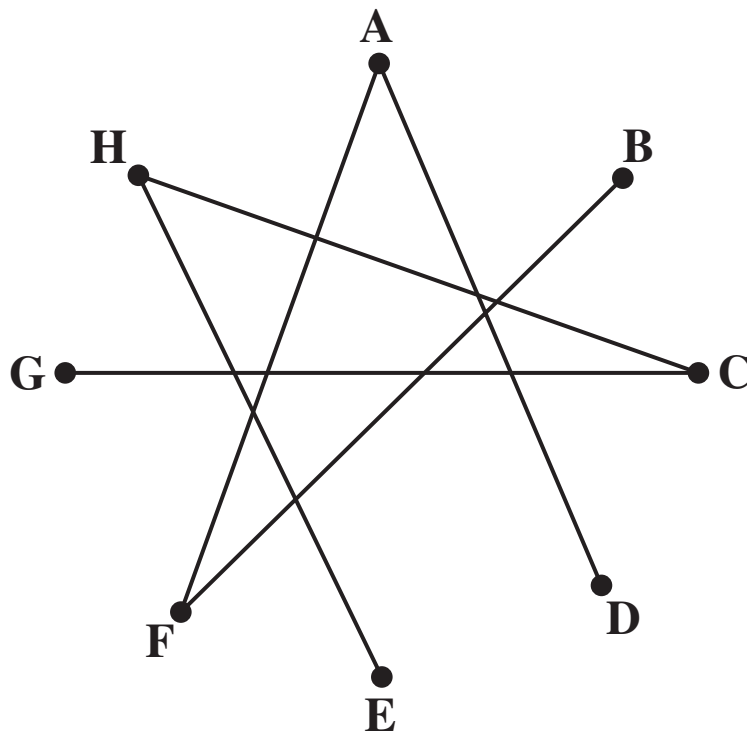


(ii)

3. (i)

(ii)

(iii)

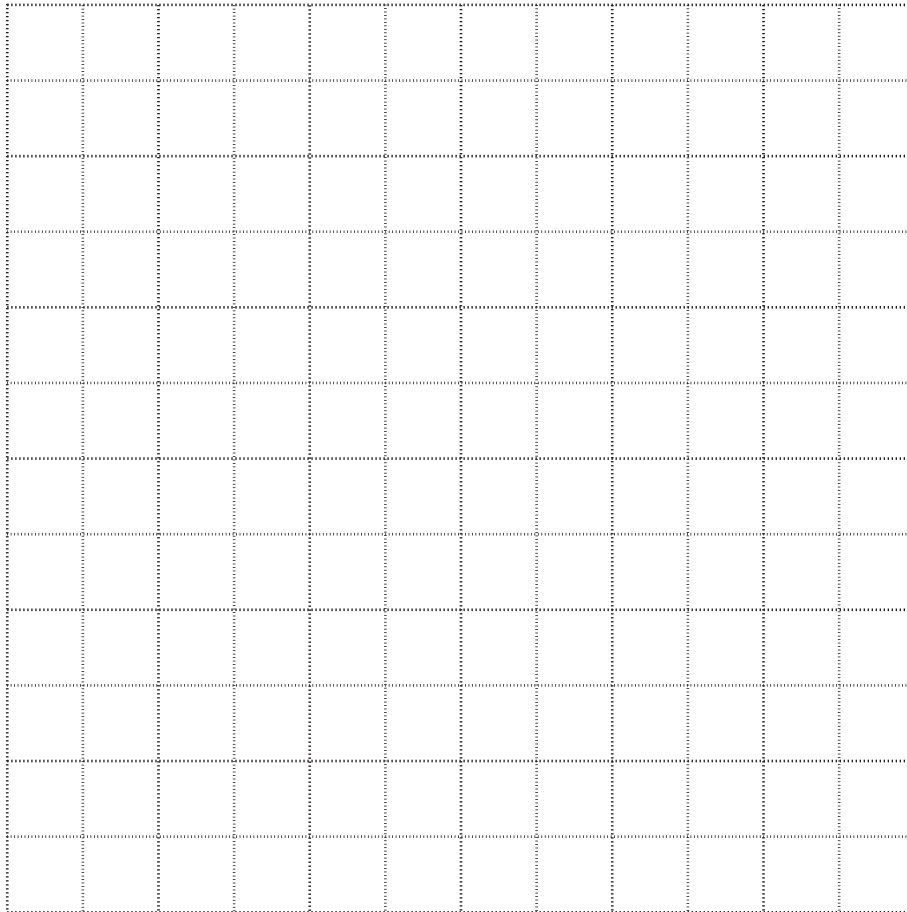


Number of arcs added = _____

(iv)

4 (i)

(ii)



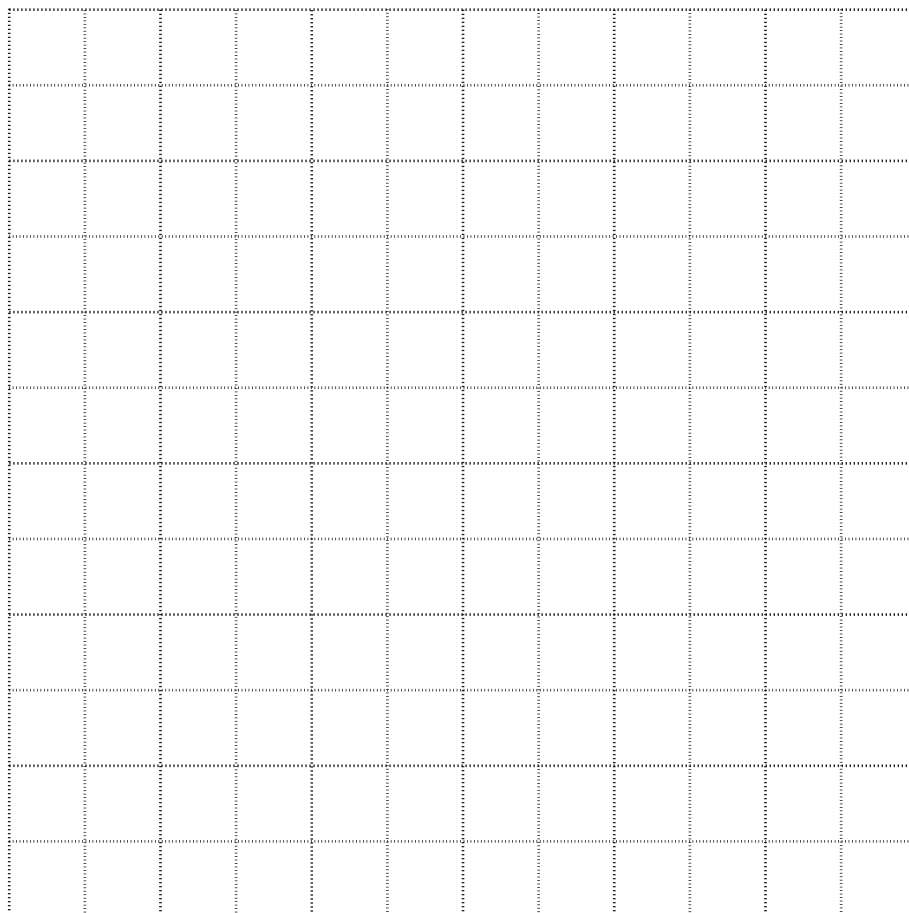
(iii)

(iv)

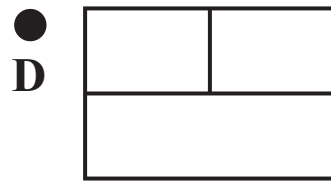
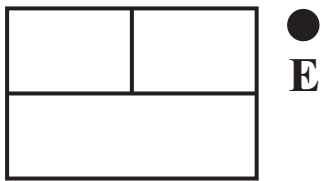
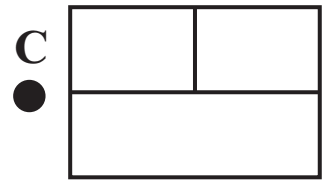
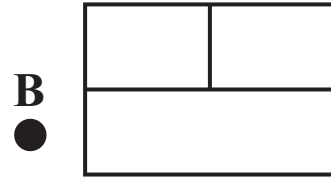
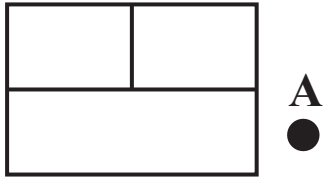
(v)

(vi)

SPARE GRAPH PAPER FOR QUESTION 4



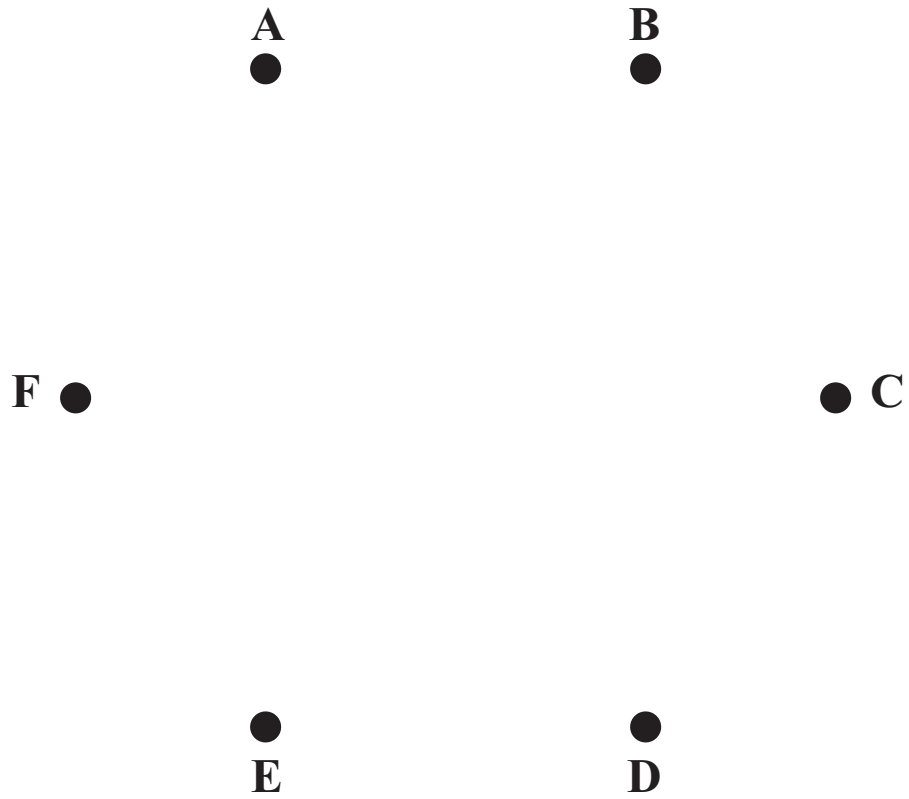
5 (i) & (ii)



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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