

<b>Candidate Forename</b>		<b>Candidate Surname</b>	
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<b>Centre Number</b>						<b>Candidate Number</b>				
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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.**

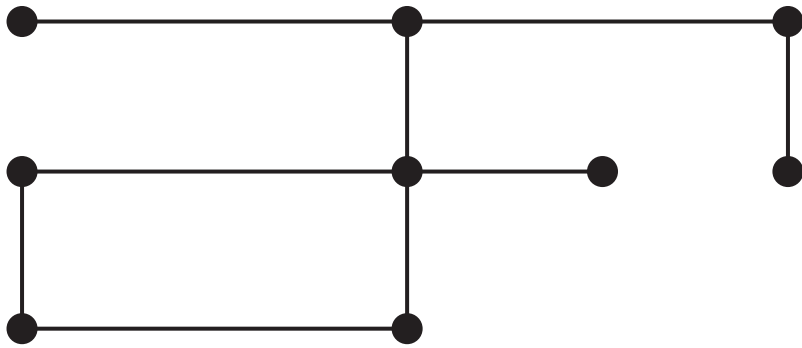
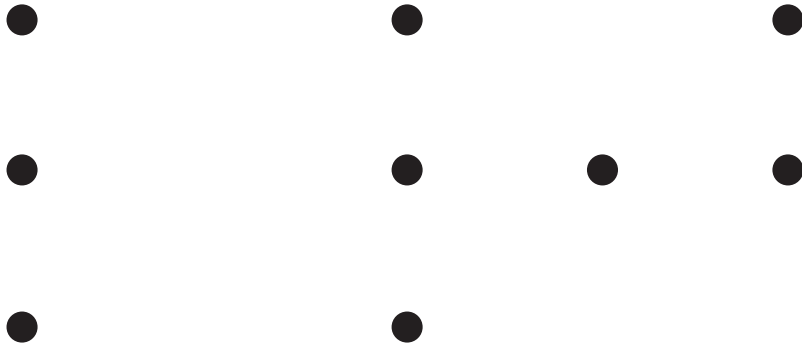
- **The number of marks is given in brackets [ ] at the end of each question or part question on the Question Paper.**
- **You are advised that an answer may receive NO MARKS unless you show sufficient detail of the working to indicate that a correct method is being used.**
- **The total number of marks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

**1 (i) & (ii)**

<b>0</b>	<b>0</b>
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**Critical activities:** \_\_\_\_\_

**2 (i)**

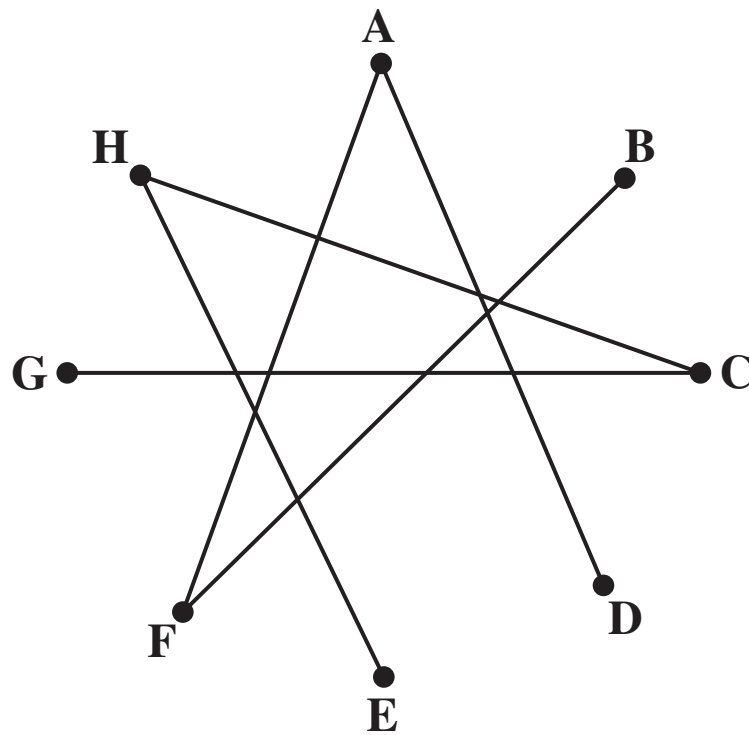


**(ii)**

3. (i)

(ii)

(iii)

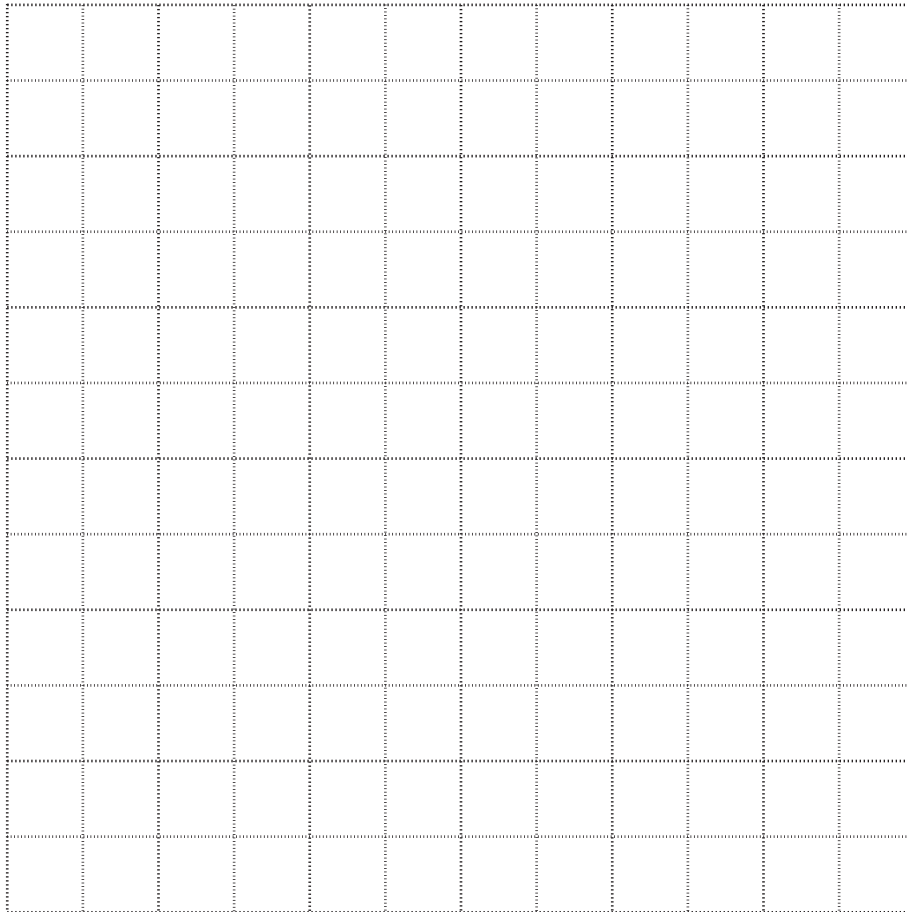


Number of arcs added = \_\_\_\_\_

**(iv)**

**4 (i)**

**(ii)**





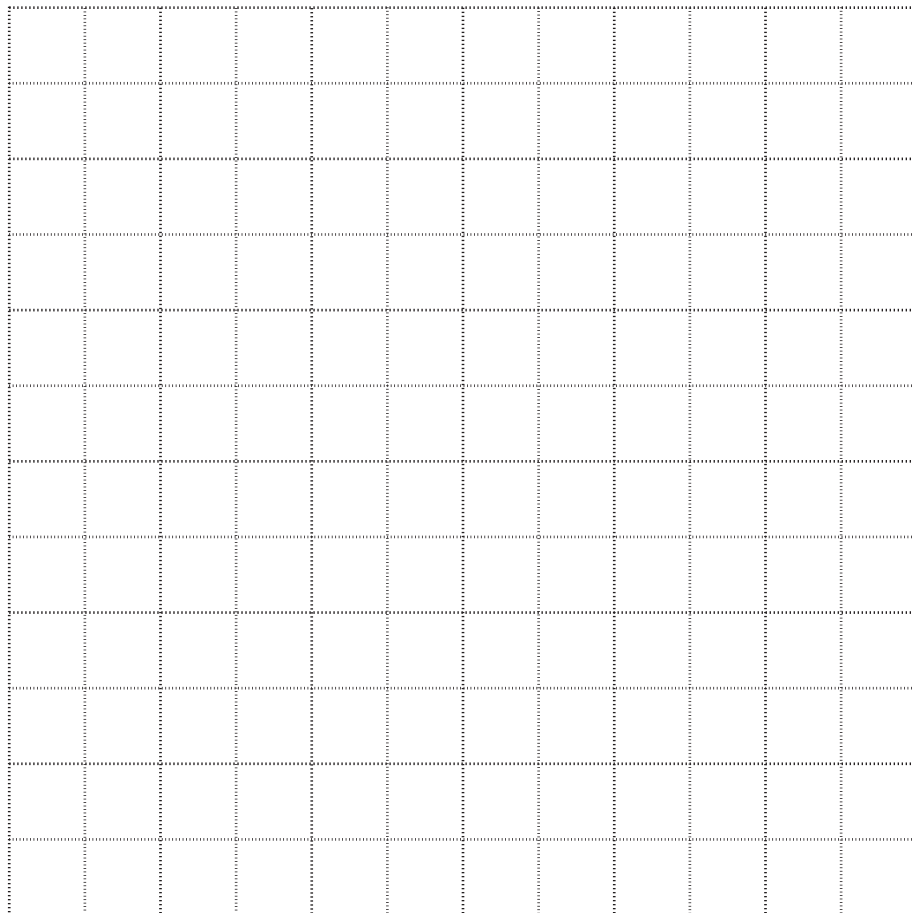
**(iii)**

**(iv)**

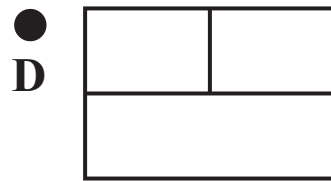
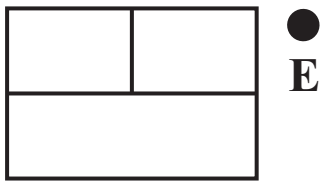
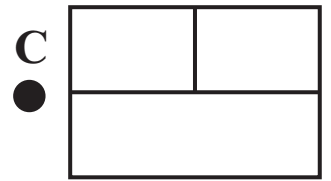
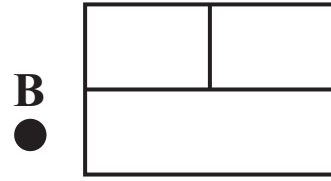
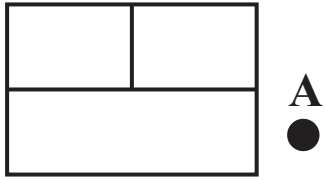
**(v)**

**(vi)**

**SPARE GRAPH PAPER FOR QUESTION 4**



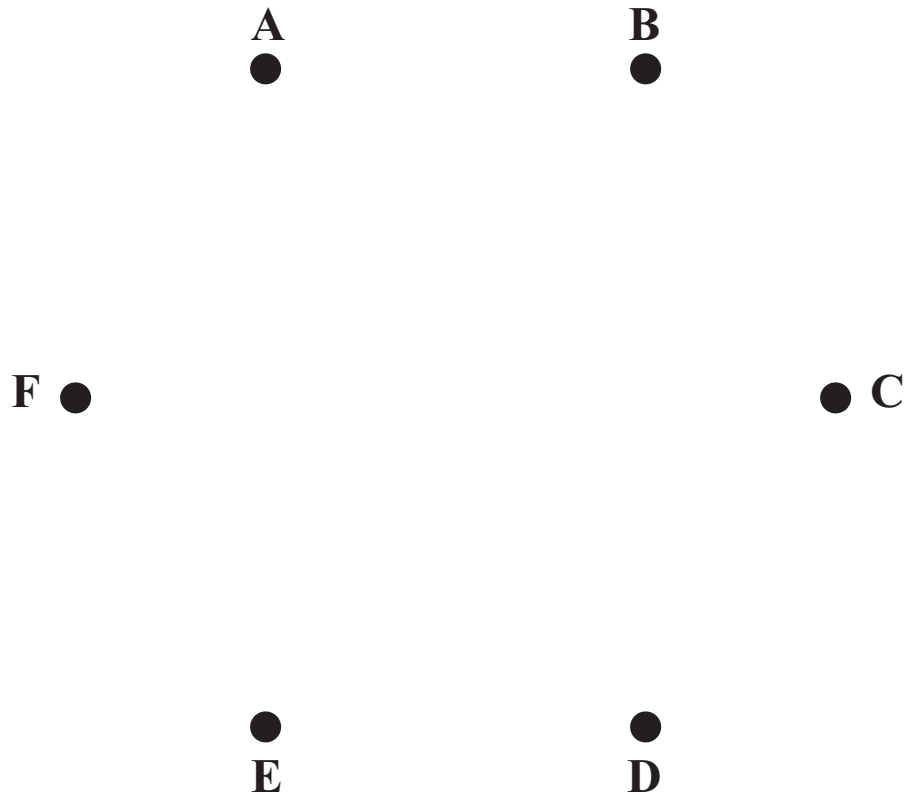
**5 (i) & (ii)**



**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)**

<b>apple no.</b>	<b>random number</b>	<b>fall?</b>
<b>1</b>		
<b>2</b>		
<b>3</b>		
<b>4</b>		
<b>5</b>		
<b>6</b>		

**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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