

**ADVANCED SUBSIDIARY GCE UNIT
MATHEMATICS (MEI)**

Decision Mathematics 1

ANSWER BOOK

TUESDAY 23 JANUARY 2007

4771/01

Afternoon
Time: 1 hour 30 minutes

Candidate
Name

Centre
Number

--	--	--	--	--

Candidate
Number

--	--	--	--

INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the spaces provided.
- Write your answers in the spaces provided on the answer book. If extra space is required use the blank pages making sure that you label your work clearly.

This answer book consists of **8** printed pages and **4** blank pages.

1 (i)

(ii)

(iii)

(iv)

(v)

2 (i)

Original list	109	32	3	523	58	Comparisons	Swaps

(ii)

--	--	--	--	--

Maximum number of swaps =

(iii)

3 (i)

(ii) Run 1 random numbers 2 2 1 7 6 4 3 4 0 9 6 1 5 8 8

Run 1 outcome

Run 2 random numbers 6 2 3 8 7 4 6 1 0 9 0 6 4 2 5

Run 2 outcome

Run 3 random numbers 5 6 4 9 0 1 8 3 5 4 7 2 1 0 0

Run 3 outcome

Run 4 random numbers 5 3 6 1 0 8 4 7 9 8 2 2 2 7 4

Run 4 outcome

Run 5 random numbers 1 2 1 6 5 0 9 7 7 6 9 8 4 3 3

Run 5 outcome

(iii)

(iv)

4 (i) & (ii)

Project duration:

Critical activities:

(iii)

(iv)

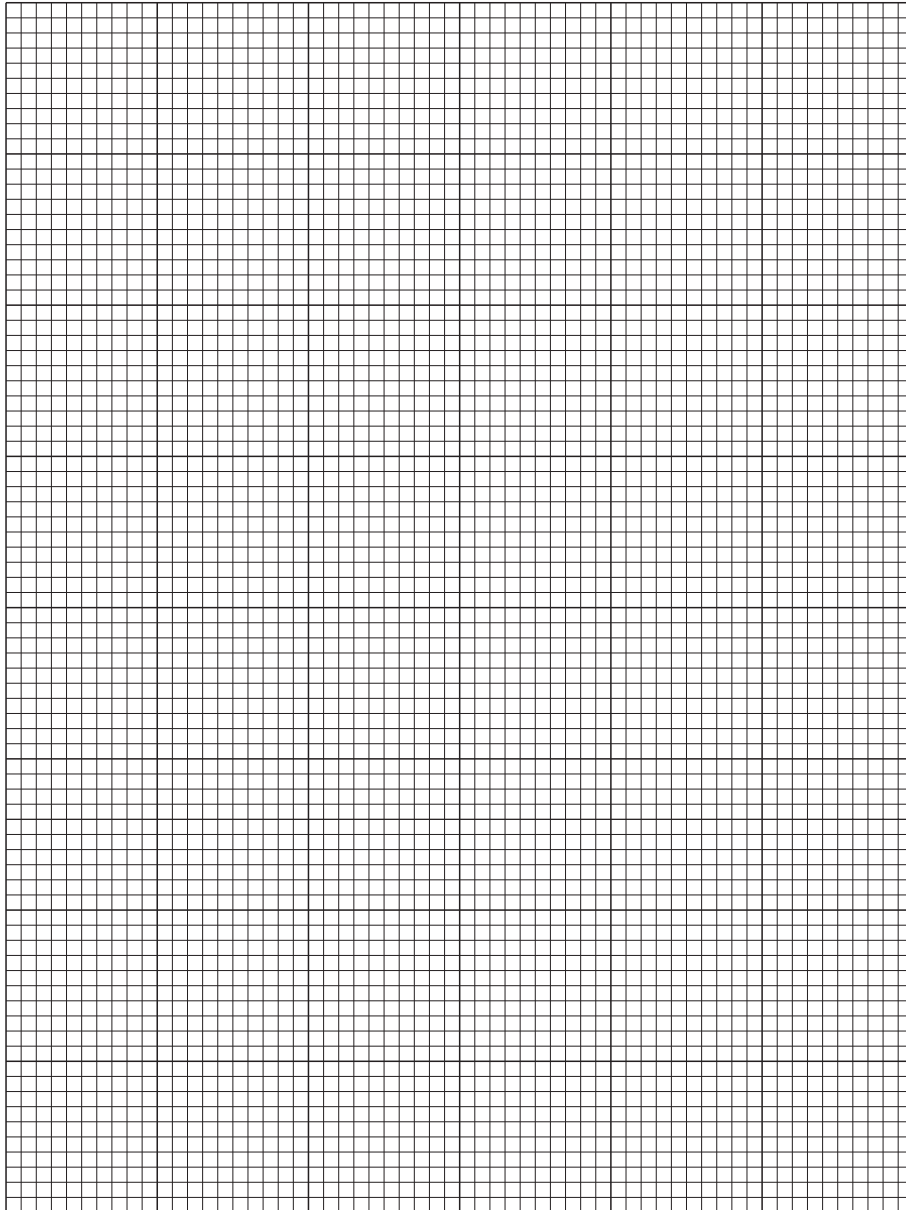
5 (i)

(ii) (See opposite for graph paper.)

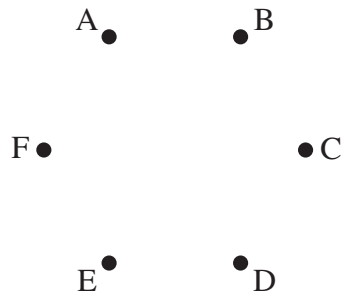
(iii)

(iv)

5 (ii)



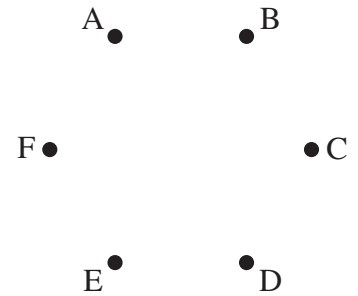
6 (i) Order of arc selection:



Total length of connector =

(ii)

	A	B	C	D	E	F
A						
B						
C						
D						
E						
F						



Total length of connector =

(iii)

9
BLANK PAGE

10
BLANK PAGE

11
BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (OCR) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

OCR is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.