



Decision Mathematics 1

TUESDAY 23 JANUARY 2007

Afternoon
Time: 1 hour 30 minutes

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- 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.

HN/4

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[Turn over

1 (i)

(ii)

(iii)

(iv)

(v)

2 (i)

Original list	109	32	3	523	58	Comparisons	Swaps

(ii)

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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)

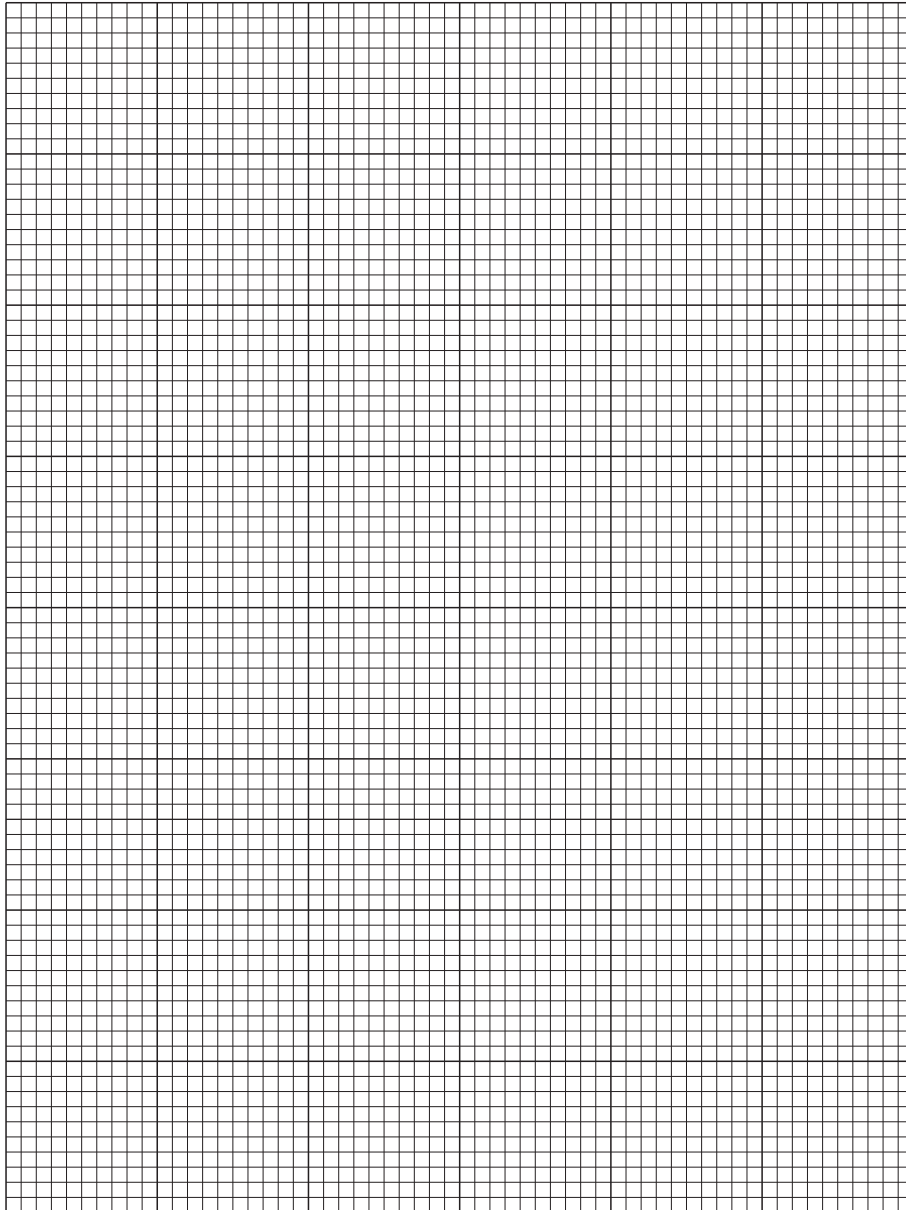
5 (i)

(ii) (See opposite for graph paper.)

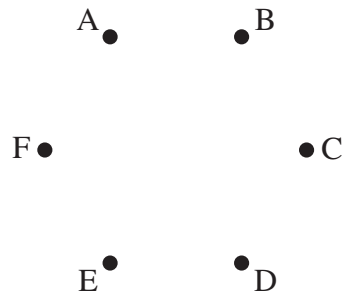
(iii)

(iv)

5 (ii)



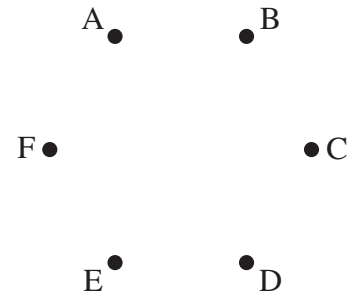
6 (i) Order of arc selection:



Total length of connector =

(ii)

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



Total length of connector =

(iii)