OCR
RECOGNISING ACHIEVEMENT

ADVANCED SUBSIDIARY GCE UNIT **4736/01**

MATHEMATICS

Decision Mathematics 1 INSERT for Questions 5 and 6

THURSDAY 14 JUNE 2007 Afternoon

Time: 1 hour 30 minutes

Candidate Name									
Centre Number						Candidate Number				

INSTRUCTIONS TO CANDIDATES

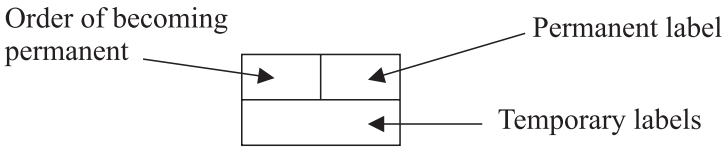
- Write your name, centre number and candidate number in the boxes above.
- This insert should be used to answer Questions **5** and **6**.
- Write your answers to Questions **5** and **6** in the spaces provided in this insert, and attach it to your answer booklet.

This document consists of **4** printed pages.

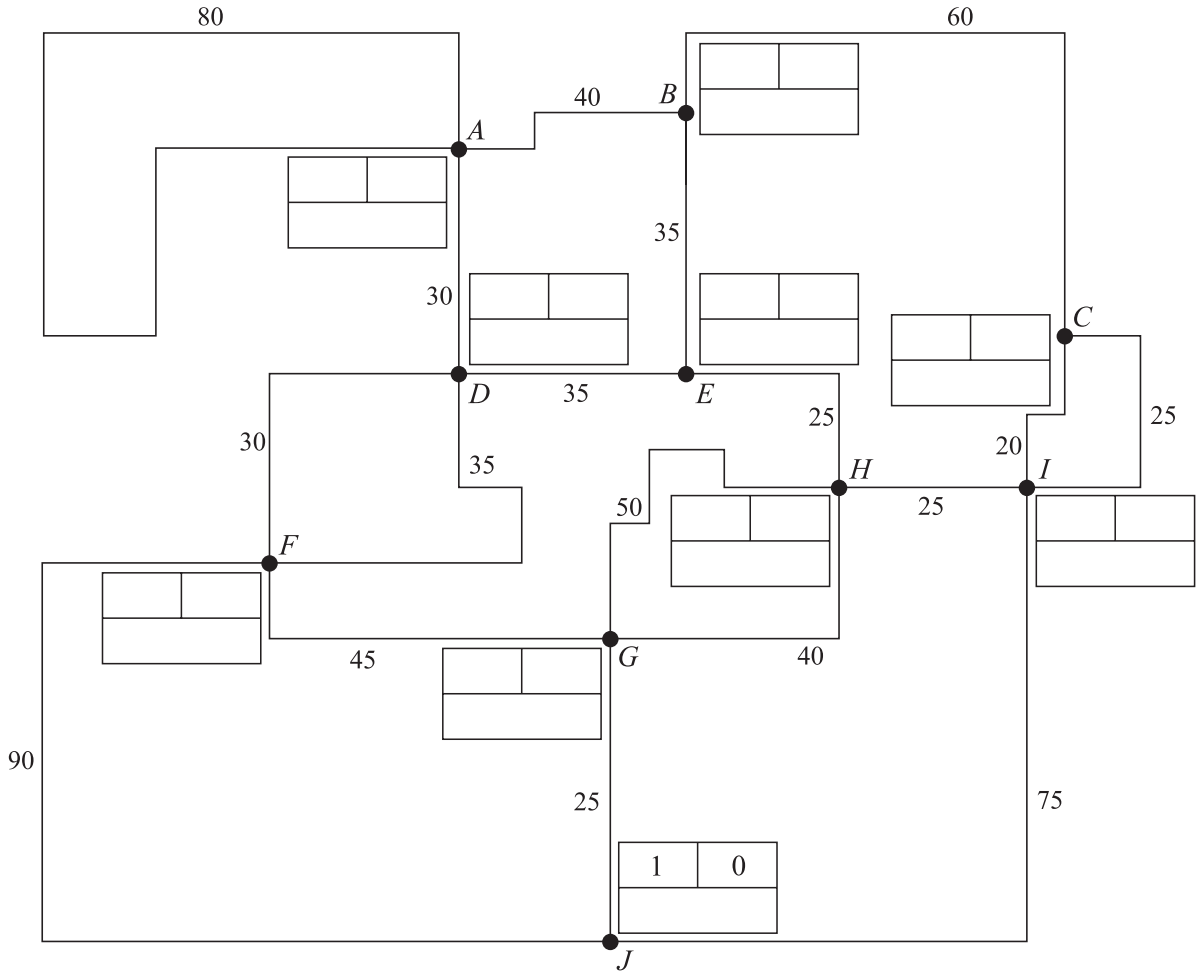
[Turn over

5 **(i)**

Key:



Do not cross out your working values (temporary labels)



Shortest path from *J* to *B*: .....

Length of path: ..... metres

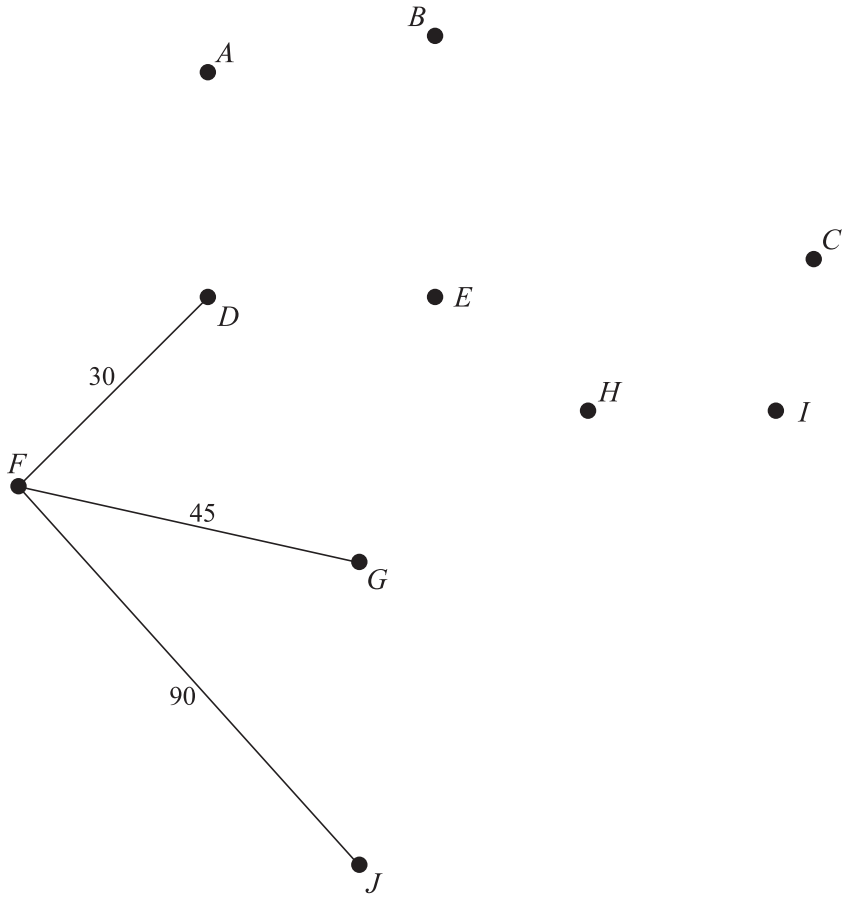
(ii) .....

.....

.....

Length of shortest route that starts and ends at *J* and covers every arc = ... metres

(iii)



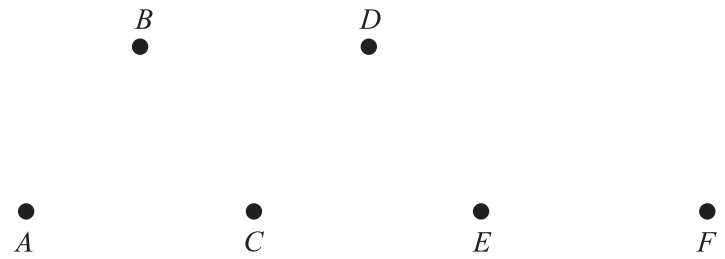
.....

6 (i)

	A	*B*	*C*	*D*	*E*	*F*
A	–	6	3	–	–	–
B	6	–	5	6	–	14
C	3	5	–	8	4	10
D	–	6	8	–	3	8
E	–	–	4	3	–	–
F	–	14	10	8	–	–

Order in which rows were deleted: *A* .....

Minimum spanning tree:



Total weight: ..... miles

(ii) .....

.....

Lower bound: ..... miles

(iii) Cycle: .....

.....

Upper bound: ..... miles