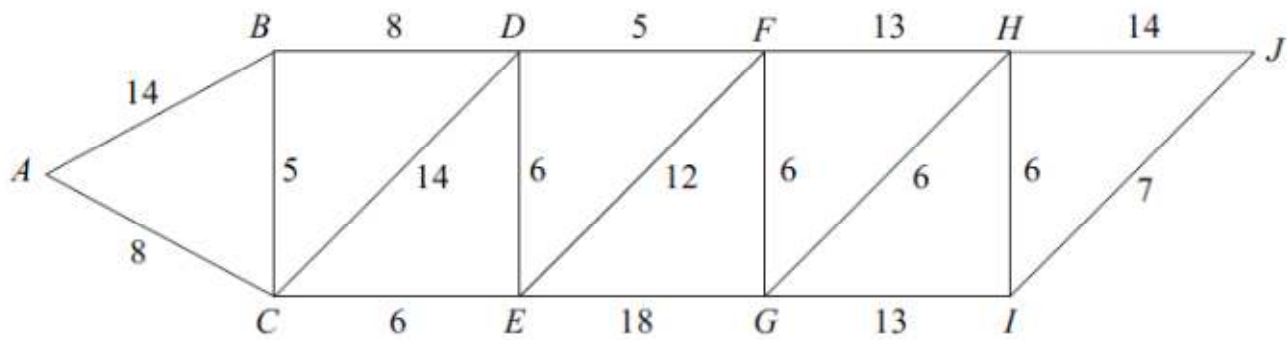# Dijkstra's Algorithm Exam Question D1 (Jan '06)

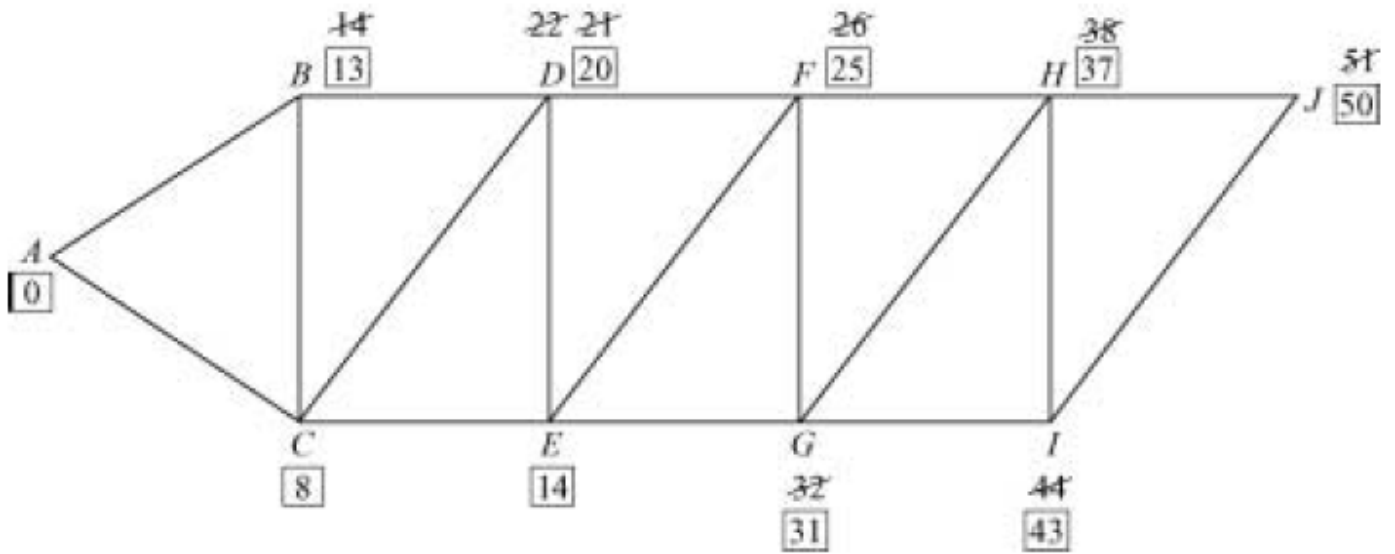5 [**Figure 1**, printed on the insert, is provided for use in this question.]

The network shows the times, in minutes, to travel between 10 towns.

(a) Use Dijkstra's algorithm on **Figure 1** to find the minimum time to travel from A to J.

(6 marks)

(b) State the corresponding route.

(1 mark)

Dijkstra's Algorithm Exam Question Solution D1 (Jan '06)

5.
a)

B ~~14~~ 13   D ~~22~~ ~~21~~ 20   F ~~26~~ 25   H ~~38~~ 37   J ~~51~~ 50

A 0

C 8   E 14   G ~~32~~ 31   I ~~44~~ 43

Minimum travel time: 50 minutes.

b)
Route: A C E D F G H I J