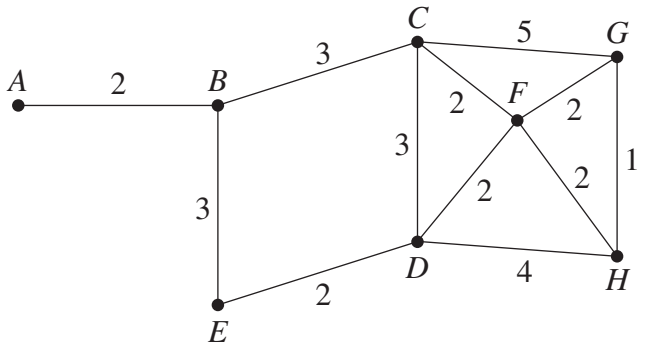
Question 18 (4 marks)

The diagram represents a network with weighted edges.



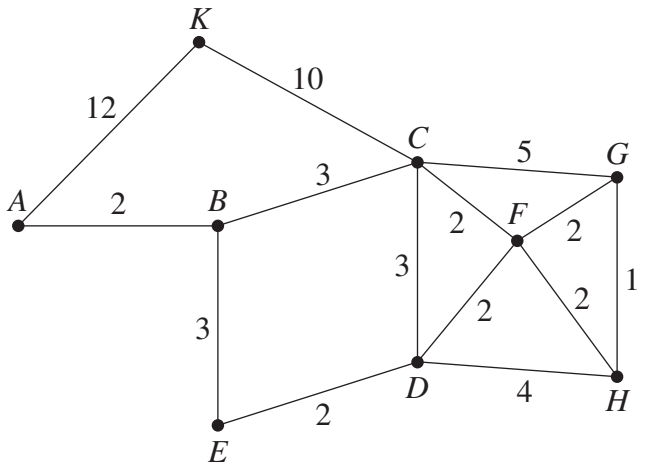
(a) Draw a minimum spanning tree for this network in the space below and determine its length. **3**

Minimum length of spanning tree = ...

Question 18 continues on page 13

Question 18 (continued)

(b) The network is revised by adding another vertex, K. Edges AK and CK have weights of 12 and 10 respectively, as shown. **1**



What is the length of the minimum spanning tree for this revised network?

.....

.....

.....

End of Question 18

Please turn over