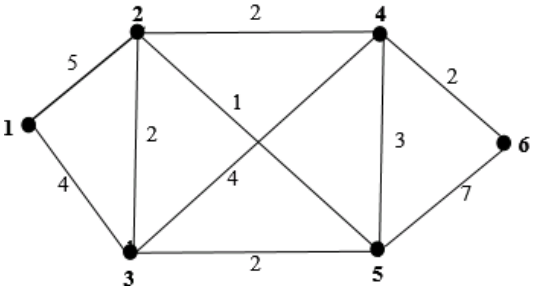
Step-1

Consider the following 6-node network with the corresponding path lengths.



Step-2

Let us find the shortest spanning tree by using algorithm 1 as explained below.

Algorithm 1:

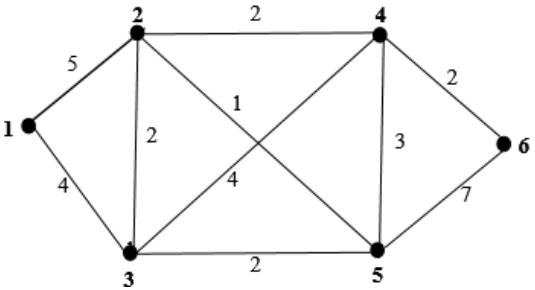
Start from any node and add the shortest edge that connects the current tree to a new node.

Using the algorithm, select the following path.

1-3, 3-2, 2-5, 5-4, 4-6.

Step-3

The corresponding spanning tree is shown below.



Step-4

Let us find the shortest spanning tree by using algorithm 2 as explained below.

Algorithm 2:

Accept edges in increasing order of length, rejecting edges that complete a loop.

Using the algorithm, select the following path.

2-5, 4-6, 2-4, 3-2, 1-3.

Step-5

The corresponding spanning tree is shown below.