C-12.20

Consider the weighted graph $G = (V, E)$, where V is the set of stations and E is the set of channels between the stations. Define the weight $w(e)$ of an edge $e \in E$ as the bandwidth of the corresponding channel.

Given below are two ways of solving the problem:

1. At every step of the greedy algorithm for constructing the minimum spanning tree, instead of picking the edge having the least weight, pick the edge having the greatest weight.
2. Negate all the edge-weights. Run the usual minimum spanning tree algorithm on this graph. The algorithm gives us the desired solution.