

GRAPH THEORY: CLASS 12

1) Consider the network below:

- a) Find the minimum capacity of any cut in the network.
- b) Find the maximum possible value of any flow in a network.
- c) Use The max-flow min-cut theorem to verify your results in part a) and b).

2) Consider the network with several sources and sinks below:

- a) Find the minimum capacity of any cut in the network.
- b) Find the maximum possible value of any flow in a network.
- c) Use The max-flow min-cut theorem to verify your results in part a) and b).

3) Consider the bipartite graph G below:

- a) Find the minimum vertex cover in G .
- b) Find the maximum number of matching.
- c) Use The Konig's theorem to verify your results in part a) and b).