**MULTICAST OPTIMIZATION – Formula**

* : whole set of nodes ( is the source node for group g)
* : whole set of edges
* set of destinations belonging to group g (d is one node) (D is collection of all groups)
* edge between nodes

it denotes whether edge for group g is selected into the path -> belongs to the tree (if =1) or not (if =0)

* : cost of edge between nodes

• Number of multicast group (g) can be set to 5, and h can be set to 2 or 3 (it must be smaller than number of group in order to be effective)

* Network flow between nodes , a sequence of packets from a source computer to a destination for group g:

Connected network

Objective function :

*s.t.*