Virtual University	Assignment No. 01 SEMESTER SPRING 2011 CS607- Artificial Intelligence	Total Marks: 20 Due Date: 18/4/2011

Instructions

Please read the following instructions carefully before submitting assignment:

It should be clear that your assignment will not get any credit if:

- **The assignment is submitted after due date.**
- **The submitted assignment does not open or file corrupt.**
- **The assignment is copied.**
- **There is not mentioned the student Id in the assignment File or name of file is other than student ID.**

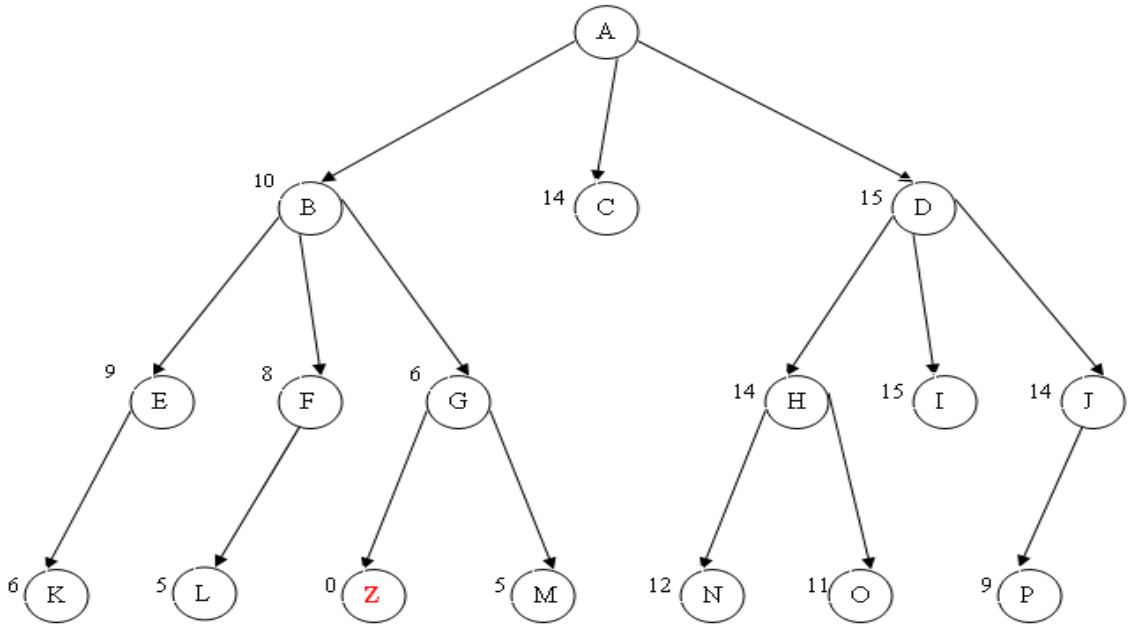
GOOD LUCK

Marks: 20

Question # 1:

Apply the 'Beam Search' (with k = 2) on the tree given below to reach the goal 'Z'.

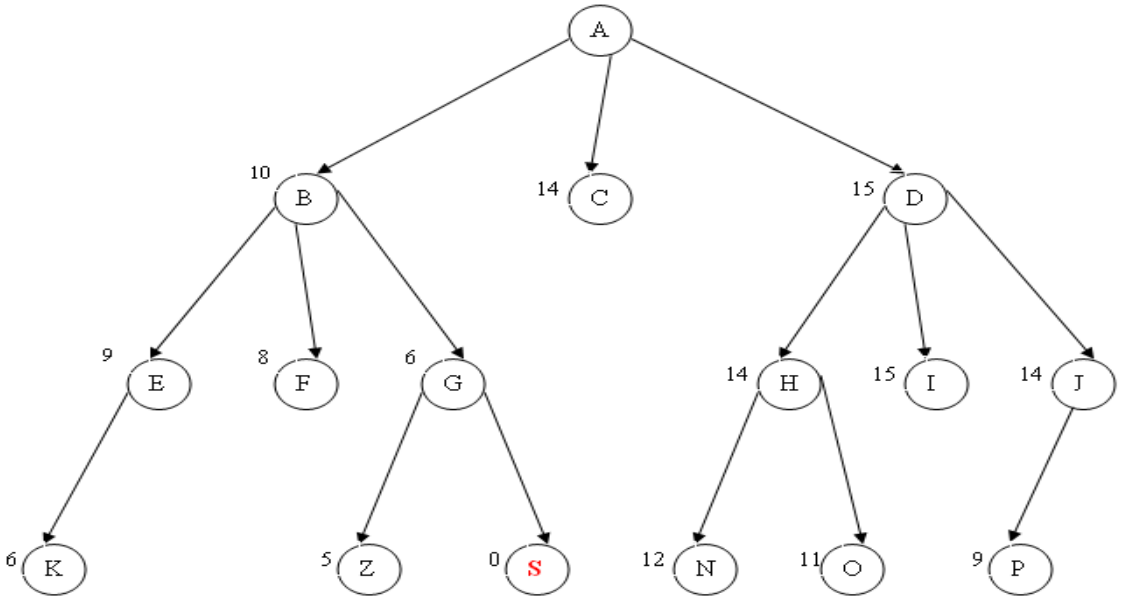
Note: 1) Distance of all the nodes from goal node is written adjacent to each node.
2) Show all the steps and give the final path from start node 'A' to the goal node 'Z' in the form of list of nodes or highlighted path. **[Marks 7]**



Question # 2:

Apply 'Hill Climbing Procedure' on the given tree to reach the goal 'S'.

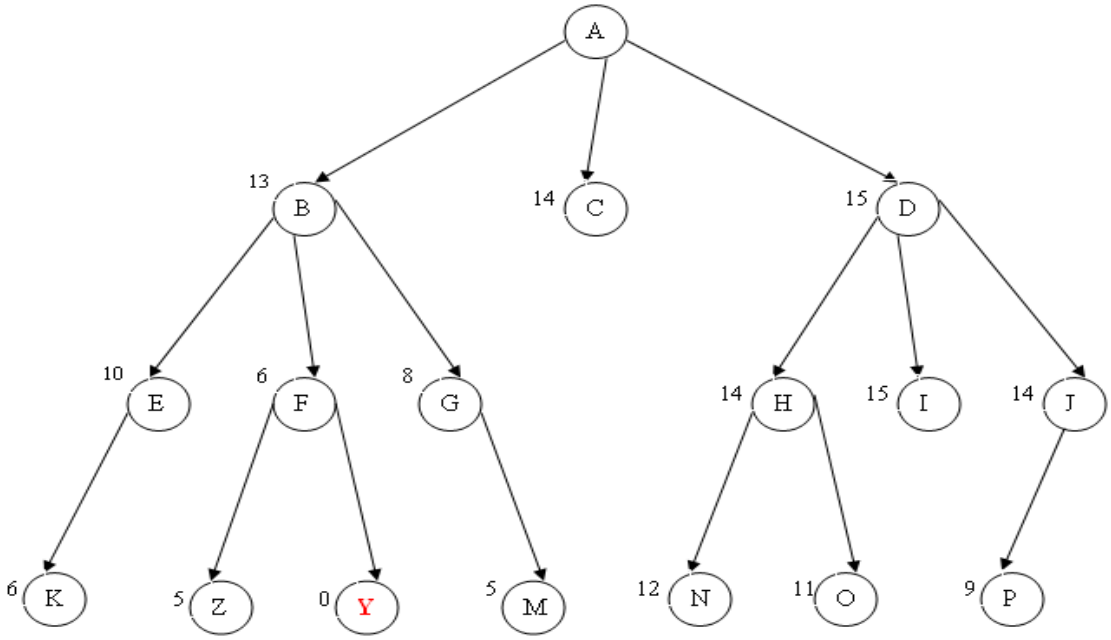
Note: 1) Distance of all the nodes from goal node is written adjacent to each node.
2) Show all the steps and give the final path from start node 'A' to the goal node 'S' in the form of list of nodes or highlighted path. **[Marks 7]**



Question # 3:

Apply 'Best First Search' on the tree given below to reach the goal 'Y'.

Note: 1) Distance of all the nodes from goal node is written adjacent to each node.
2) Show all the steps and give the final path from start node 'A' to the goal node 'Y' in the form of list of nodes or highlighted path. **[Marks 6]**



Uploading Instructions:

Upload your assignment as a word file. It should have name [YourRollNo.doc]

Deadline

Your assignment must be uploaded/submitted at or before Monday April 18, 2011.