

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: [Marks 5]

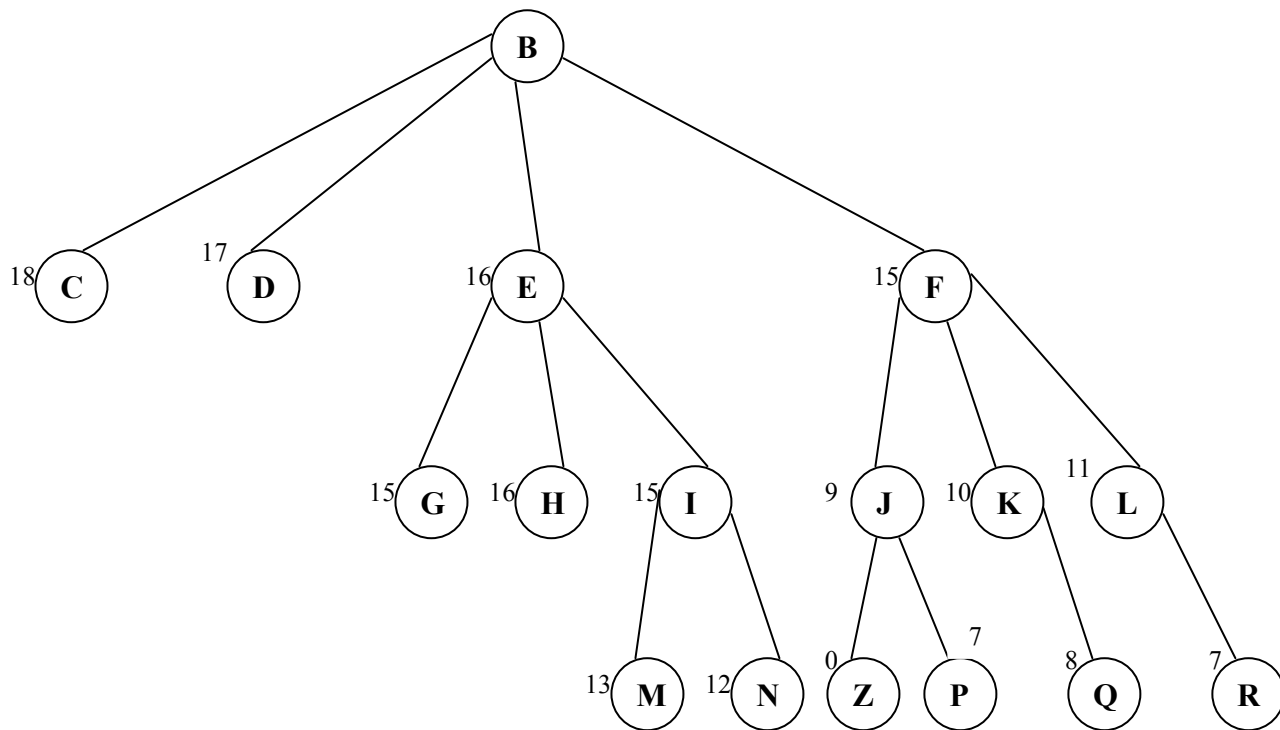
“If we use both crossover and mutation in Genetic Algorithm, then this strategy always makes us closer to our desired solution”. Do you agree with the given statement or not? Give reason to support your answer.

Question 2: [Marks 15]

Apply

- 1) Beam Search (with $k = 2$)
- 2) Hill Climbing Procedure
- 3) Best First Search

On the given tree 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 'B' to the goal node 'Z' in the form of list of nodes or highlighted path for each search strategy.

3) Also show the available option of nodes at each step for each search strategy. If you will not show the available options at each step then your marks will be deducted.

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 7th November 2011