

A) (i) state what you understand by recursion.

(ii) Write an algorithm for finding solution to the Tower's of Hanoi problem. Explain the working of your algorithm (with 4 disks) with diagrams.

B) (a) State the meanings or definitions of the following terms in relation to trees:

(i) level of a node; (ii) height of a tree; (iii) path length of a tree

C)

a) In less than ten lines compare the use of a linked list with arrays in the implementation of data structures.

b) With the aid of diagrams explain how an item can be deleted from a doubly linked list.