

(i) In order (left, root, right)

A, K, B, J, C, I, L, D, E, F, H, G.

(ii) Preorder (Root, left, right)

L, K, A, J, B, C, I, H, F, D, E, G.

(iii) Postorder (left, right, root)

L, K, A, J, B, C, I, H, E, D, F, G.

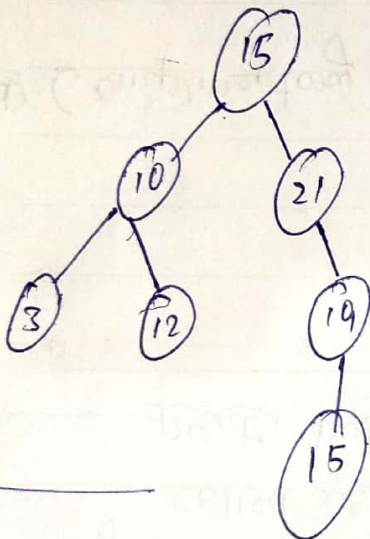
(iv)

Breadth-first order

L, K, I, H, A, J, E, F,

G, B, C, D.

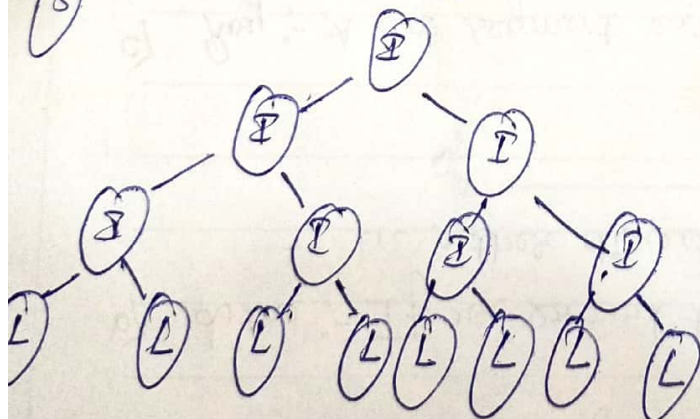
(5)



The difference between the height of left subtree & height of left subtree & height of right subtree is 0.

∴ The tree is AVL.

(8)



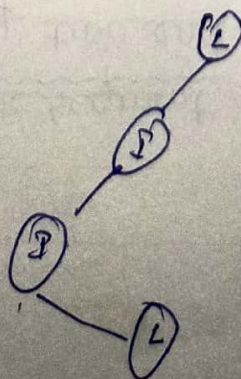
No. of nodes = 4

Internal nodes = 3

leaf nodes = 1

L → Leaf node.

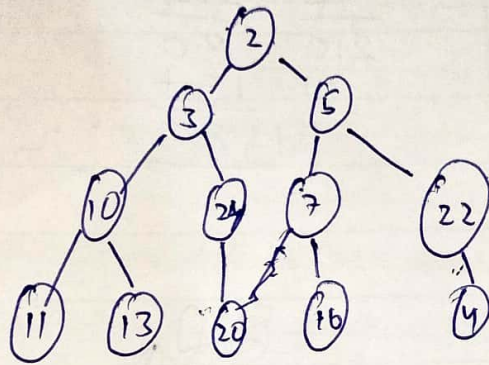
I → Internal node.



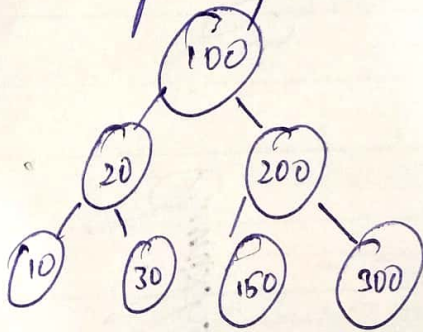


④ False, the first node that is printed in preorder traversal is root, Root is greater than nodes in the left subtree

⑤ [2, 3, 5, 10, 24, 7, 22, 11, 13, 20, 16, 4]



⑥ Postorder (left, right, root)



⑦ Inorder (left, root, right)

