Data structure-7

SL NO	QUESTIONS
1	What is a balanced binary tree?
	A balanced binary tree is where each node except for a leaf node has two children nodes.
2	What is the purpose of a key in a binary tree?
	The key and the search criteria are compared to each other
3	In tree construction which is the suitable efficient data structure? (Array, Linked list, Stack, Queue)
	Linked list is the suitable efficient data structure.
4	In an AVL tree, at what condition the balancing is to be done?
	If the 'pivotal value' (or the 'Height factor') is greater than 1 or less than -1
5	What is a spanning Tree?
	A spanning tree of a connected Graph G can be defined as a minimal set of edges that connected all vertices and contain no cycle.
6	Does the minimum spanning tree of a graph give the shortest distance between any 2 specified nodes
	No. The Minimal spanning tree assures that the total weight of the tree is kept at its minimum. But it doesn't mean that the distance between any two nodes involved in the minimum-spanning tree is minimum.
7	What is almost complete binary tree?
	An almost complete binary tree is a tree if each leaf in the tree is either at level d or at level d-1 and for a right child, there is always a left child, but for a left child there may not be a right child.
8	What are the advantages and disadvantages of B* trees over Binary trees?
	B* trees have better data structure and are faster in search than Binary trees, but it's harder to write codes for B* trees.
9	What is difference between B-tree and B* Tree
	In B+ tree , there is a link between all leaf nodes , that's way easier to traverse. But in B –tree there is no link between all leaf nodes, so if we insert or delete we have to traverse from the root and we have to create a stack.
10	What is the difference between BST and B tree
	BST is binary search tree where each node contains one element and it can be balance or not. But B tree is multi-way tree where is node contains m-1 elements of order m and it is a balance sorted tree.