



	OR		
7	Define a Max heap. Construct a max heap for the following: 12,15,9,8,10,18,7,20,25. [10M]	3	L2
8	Given the values {2341, 4234, 2839, 430, 22, 397, 3920} a hash table of size 7 and a hash function $h(x) = x \text{ mod } 7$ , show the resulting table after inserting the values in the given order with each of the following collision strategies. (i) separate chaining (ii) linear probing (iii) double hashing with second hash function $h_1(x) = (2x - 1) \text{ mod } 7$ . [10M]	4	L3
	OR		
9	Write an algorithm and explain the working of merge sort for the following data: 10,15,0,17,20,25,30,16,70,6. [10M]	4	L3
10	Illustrate the BFS and DFS with suitable examples. [10M]	5	L2
	OR		
11	Build an AVL tree with the following values: {15, 20, 24, 10, 13, 7, 30, 36, 25, 42, 29} [10M]	5	L4