5.						4.	$\dot{\omega}$	2.		$\sim$	1
5. Derive the time complexity for DFS in a Graph.	Node4	Node3	Node2	Node1	Graph	Find minimal spanning tree for the following graph	Prove that build max heap takes only O(n) time complexity.	Derive the worst case time complexity of Quicksort. $\sqrt{}$	one single list? Wh	Given (logn) sorted lists, each of size (n/logn). What is the total time required to merge them into	
	50	10	10	0	Nodel	ning tree for the follo			one single list? Where n denotes any positive number greater than 100.	lists, each of size (r	
a Graph.	30	40	0	10	Node2	wing graph	(n) time complexity.	of Quicksort. M	sitive number greater	$\sqrt{\log n}$ . What is the to	
	20	0	40	10	Node3				r than 100.	otal time required to	•
(5 Marks)	0	20	30	50	Node4	(5 Marks)	(S Marks)	(5 Marks)	Olli III Se usus	merce them into	•