

 NIET Greater Noida GET FUTURE READY Estd 2001 AN AUTONOMOUS INSTITUTE	ASSIGNMENT 1 DATA STRUCTURE (ACSE-0301)	SESSION-2022-23
		SEM-3 rd (ODD)

Assignment Given Date: 21/09/2022 Assignment Submission Date: 24/09/2022	Maximum Points: 50
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Note: Write solution of each question in clear handwriting.

Q. No.	Question Statement	Pts	CO	BLOOM'S KNOWLEDGE LEVEL
1	Explain the asymptotic notations with suitable example.	2.5	1	K2
2	Write down the algorithm for Insertion Sort along with its complexity.	2.5	1	K2
3	Define Hashing and Hash Table. List different types of hash Function. Explain any Hash Function with example.	5	1	K2
4	Find the address of integer type element A [2, 1] in Row and Column Major Order Array of size 3x3, if the base address is 2000.	5	1	K4
5	Define Searching. Differentiate between Linear and Binary Search.	5	1	K3
6	Write down the algorithm for Merge Sort. Implement merge sort on 95,6,46,15,57,35,46,4,0	10	1	K4
7	Write down the algorithm for Binary Search. Implement Binary Search on 6, 14, 20, 28, 43, 45, 72. Search given item 45 in the array.	10	1	K4
8	Implement Bubble sort on the given Array. 74,56,45,36,16. Show all passes and their steps.	10	1	K4