

DISCIPLINE:CSE	SEMESTER:3RD	NAME OF THE TEACHING FACULTY: Amod Bagh
SUBJECT:DS	NO.OF DAYS/PER WEEKCLASS ALLOTTED: 4	NO.OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 ST	1 ST	Explain Data, Information, data types
	2 ND	Define data structure & Explain different operationsExplain Abstract data types
	3 RD	Discuss Algorithm & its complexity
	4 TH	Explain Time, space tradeoff
2 ND	1 ST	Explain Basic Terminology, Storing Strings
	2 ND	State Character Data Type,Discuss String Operations
	3 RD	Discuss String Operations
	4 TH	Give Introduction about array, Discuss Linear arrays, representation of linear arrayIn memory
3 RD	1 ST	Explain traversing linear arrays, inserting & deleting elements
	2 ND	Discuss multidimensional arrays, representationof two dimensional arrays in memory (row
	3 RD	major order & column major order), and pointers Discuss multidimensional arrays, representationof two dimensional arrays in memory (row
	4 TH	major order & column major order), and pointers Discuss multidimensional arrays, representationof two dimensional arrays in memory (row
4 TH	1 ST	Explain sparse matrices.
	2 ND	Explain sparse matrices.
	3 RD	Give fundamental idea about Stacks and queues
	4 TH	Give fundamental idea about Stacks and queues
5 TH	1 ST	Explain array representation of Stack
	2 ND	Explain arithmetic expression ,polish notation &Conversion
	3 RD	Explain arithmetic expression ,polish notation & Conversion
	4 TH	Discuss application of stack, recursion
6 TH	1 ST	Discuss queues, circular queue, priority queues.
	2 ND	Discuss queues, circular queue, priority queues.
	3 RD	Give Introduction about linked list Explain representation of linked list in memory
	4 TH	Discuss traversing a linked list, searching
7 TH	1 ST	Discuss traversing a linked list, searching,
	2 ND	Discuss garbage collection.
	3 RD	Explain Insertion into a linked list, Deletion from a linked list, header linked list
	4 TH	Explain Insertion into a linked list, Deletion from a linked list, header linked list

8 TH	1 ST	Explain Insertion into a linked list, Deletion from a linked list, header linked list
	2 ND	Explain Insertion into a linked list, Deletion from a linked list, header linked list
	3 RD	Explain Basic terminology of Tree
	4 TH	Explain Basic terminology of Tree
9 TH	1 ST	Discuss Binary tree, its representation and traversal, binary search tree, searching,
	2 ND	Discuss Binary tree, its representation and traversal, binary search tree, searching,
	3 RD	Discuss Binary tree, its representation and traversal, binary search tree, searching,
	4 TH	Explain insertion & deletion in a binary search trees
10 TH	1 ST	Explain insertion & deletion in a binary search trees
	2 ND	Explain insertion & deletion in a binary search trees
	3 RD	Explain graph terminology & its representation,
	4 TH	Explain graph terminology & its representation,
11 TH	1 ST	Explain graph terminology & its representation,
	2 ND	Explain Adjacency Matrix, Path Matrix
	3 RD	Explain Adjacency Matrix, Path Matrix
	4 TH	Explain Adjacency Matrix, Path Matrix
12 TH	1 ST	Discuss Algorithms for Bubble sort, Quick sort,
	2 ND	Discuss Algorithms for Bubble sort, Quick sort,
	3 RD	Discuss Algorithms for Bubble sort, Quick sort,
	4 TH	Merging
13 TH	1 ST	Merging
	2 ND	Linear searching, Binary searching
	3 RD	Linear searching, Binary searching
	4 TH	Linear searching, Binary searching
14 TH	1 ST	Discuss Different types of files organization and their access method,
	2 ND	Discuss Different types of files organization and their access method,
	3 RD	Discuss Different types of files organization and their access method,
	4 TH	Discuss Different types of files organization and their access method,
15 TH	1 ST	Introduction to Hashing, Hash function, collision resolution, open addressing.
	2 ND	Introduction to Hashing, Hash function, collision resolution, open addressing.
	3 RD	Introduction to Hashing, Hash function, collision resolution, open addressing.
	4 TH	Introduction to Hashing, Hash function, collision resolution, open addressing.