C. U. SHAH UNIVERSITY
Wadhwan City

FACULTY OF:- Computer Science
DEPARTMENT OF: - Master of Computer Applications
SEMESTER: -I
CODE: - 5CS02MPD1
NAME – PROGRAMMING TECHNIQUE-IV (DS)

Teaching and Evaluation Scheme

Subject Code	Name of the Subject	Teaching Scheme (Hours)				Credits	Evaluation Scheme							Total
							Theory				Practical (Marks)			
		Th	Tu	Pr	Total		Sessional Exam		University Exam		Internal		University	
							Marks	Hrs	Marks	Hrs	Pr/Viva	TW	Pr	
5CS02MPD1	PROGRAMMING TECHNIQUE-IV (DS)	-	-	4	4	2	-	-	-	-	20	-	80	100

PRACTICAL LIST:

1	Write a program to perform the following operation on stack: 1.push 2.pop 3.empty 4.full 5.peep
2	Write a program to convert infix arithmetic operation (parentheses/unparentheses) into postfix notation
3	Write a program to evaluate a postfix expression
4	Write a program to create simple Queue to perform following operation 1. Insert an Element 2. Remove an Element and implement queue using an array
5	Write a program to create Circular Queue to perform following operation 1. Insert an Element 2. Remove an Element and implement queue using an array
6	Write a program to perform the following operation on Priority Queue 1. Insert Element 2. Delete Element
7	Write a Program to implement Double ended queue (Input Restricted)
8	Write a Program to implement Double ended queue (Output restricted)
9	Write a program to create a singly linked list in LIFO fashion.
10	Write a program to create a singly linked list in FIFO fashion.
11	Write program perform the following operations on a singly linked list. 1. Insert an element 2. Delete an element

	3. Find the sum of elements of the list 4. Count number of the nodes in the linked list 5. Search a given elements in the linked list. 6. Reverse the linked list. 7. Make a copy of the given linked list 8. Concatenate two linked list 9. Merge two linked list. 10. Find the union of the two given linked list 11. Find the intersection of the two given linked list.
12	Write a program to add two polynomials in two variables.
13	Write a program to Subtract two polynomials in two variables.
14	Write a program to Multiply two polynomials in two variables.
15	Write a Program to implement Sparse Matrix(Using Array)
16	Write a program to create a binary search tree and print's its element in Inorder, Preorder, Postorder
17	Write a program to delete an element from a binary search tree
18	Write a program to create a graph in a adjacency list structure. (Node directory structure) traverse it in DFS and BFS
19	W.A.P to sort a given list using (1) Insertion Sort (2) Bubble Sort
20	W.A.P to sort a given list using (1) Selection Sort (2) Merge Sort