# COLLEGE OF ENGINEERING CHENGANNUR

(Managed by IHRD, A Govt of Kerala Undertaking) Chengannur, Alappuzha Dist. PIN: 689121



### 20MCA135 DATA STRUCTURES LAB

## LAB RECORD

DEPARTMENT OF COMPUTER ENGINEERING

# COLLEGE OF ENGINEERING CHENGANNUR

(Managed by IHRD, A Govt of Kerala Undertaking) Chengannur, Alappuzha Dist. PIN: 689121



## 20MCA135 DATA STRUCTURES LAB

Name:						
Branch:						
Semester: R	coll No.:					
CERTIFIED BONAFIDE RECORD WORK DONE BY						
Reg. No.:						
	STAFF IN CHARGE					
External Examiner	Internal Examiner					

SL. No.	Name of the Program	Date	Page No.	Teacher's Sign/ Remarks
1	FAMILIARIZE GCC	03/10/2024	1	
2	FAMILIARIZE GDB	03/10/2024	3	
3	FAMILIARIZE GPROF	03/10/2024	4	
4.1	SIMPLE ARRAY OPERATIONS - SUM OF ELEMENTS IN AN ARRAY	03/10/2024	5	
4.2	SIMPLE ARRAY OPERATIONS - LINEAR SEARCH	03/10/2024	7	
5.1	SORTING ALGORITHMS – MERGE TWO SORTED ARRAYS	17/10/2024	9	
5.2	SORTING ALGORITHMS – BUBBLE SORT	17/10/2024	12	
6	STACK IMPLEMENTATION USING ARRAY	17/10/2024	14	
7	CIRCULAR QUEUE USING ARRAY	24/10/2024	17	
8	SINGLY LINKED LIST	24/10/2024	20	
9.1	SINGLY LINKED STACK	01/11/2024	29	
9.2	SINGLY LINKED QUEUE	01/11/2024	35	
10	DOUBLY LINKED LIST	08/11/2024	40	
11	IMPLEMENTATION OF SET OPERATIONS	21/11/2024	47	
12	DISJOINT SET OPERATIONS	21/11/2024	52	
13	BREADTH-FIRST SEARCH (BFS)	28/11/2024	54	
14	DEPTH-FIRST SEARCH (DFS)	28/11/2024	56	
15	TOPOLOGICAL SORT	05/12/2024	58	
16	KRUSKAL'S ALGORITHM	12/12/2024	60	
17	PRIM'S ALGORITHM	12/12/2024	63	