Prescribed List of Practicals

Department of Software Engineering

Name of Teacher	Engr. Mariam Memon				
Course Name	Data Structures & Algorithms		**Course Code**	SW212	
Batch	19SW(I,II,III)	**Year**	3rd	**Semester**	3rd
Credit Hours	3 hours/week		**Total Marks**	50	
Semester Start Date	10th Jan 2021		**Semester End Date**		

#	Lab Hand-out Title	Learning Outcome	Taxonomy Level
1	To become familiar with conditional and control structures in Java.	Efficiently use conditional structures and loops	P4
2	Implementation of Objects and classes.	Implement polymorphism, inheritance and encapsulation.	P4
3	Implementation of Arrays in Java	Implement various algorithms on arrays	P4
4	Implementation of Search Algorithms.	Apply linear and binary search algorithms on arrays.	P4
5	Implementation of Linked list.	Implement various algorithms on linked data structure	P4
6	Implementation of Stacks.	Implement stack data structure with its operations.	P4
7	Implementation of Queues.	Implement queues with its operations	P4
8	Implementation of Hash Tables.	Implement hash table with its operations.	P4
9	Implementation of Merge sort & Heap sort.	Apply merge and heap sort algorithms on a list of items	P4
10	Implementation of Bubble sort, Quick Sort and insertion sort.	Apply bubble, quick and insertion sort algorithms on a list of items	P4
11	Implementation of Recursion.	Program recursive functions	P4
12	Implementation of Trees.	Implement tree structure and its operations	P4
13	Implementation of Graph.	Implement graph data structure in Java	P4
14	Implementation of Binary tree traversals.	Work with binary tree traversals.	P4
15	Case study	Present your project	P4

Signature

Signature of Teacher		*Dated*:
Remarks of DMRC		*Dated*:
Signature of Chairman		*Dated*: