K J Somaiya College of Engineering, Mumbai-400077
(An Autonomous College Affiliated to University of Mumbai)

Department of Computer Engineering

List of Experiments

Subject: Data Structure

Year : 2018-2019 (First Term) Semester –III

Course Outcome	After successful completion of the course students should be able to
CO1	Explain the different data structures used in problem solving
CO2	Use linear and non-linear data structure in domain like compiler construction, DBMS etc
CO3	Demonstrate sorting and searching methods.
CO4	Choose the appropriate data structure for specified problem definition

Sr. No	Topic	CO Mapping
1.	Implementation of different operations on linked list – concatenate, reverse, count no. of nodes	2
2.	Implementation of polynomials operations (addition, subtraction) using link list	2
3.	Implementations of Infix to Postfix Transformation and its evaluation program	1
4.	Implementation of double ended queue menu driven program	1
5.	Implementation of BST& Binary tree traversal techniques.	3
6.	Implementation of construction of expression tree using postfix expression.	1
7.	Implementation of Graph menu driven program (DFS and BFS).	3
8.	Implementation of Selection, Insertion Sort menu driven program.	3
9.	Implementation of Hashing using collision resolution methods linear and quadratic probing.	3
10	Implementation of priority queue program using Heap	2
11	Implementation of Data structure for problem definition (Student experiment).For example Identify the appropriate data structure to check whether a string is palindrome or not. Justify the same. Write a program to for this operation	4

Student can perform experiment as per their choice other than this with prior permission

Subject In-charge: Prof Kavita Kelkar,
Prof.Saideepthi Pabba