

Workbook

Data Structure Algorithm & Implementation (CT – 157)



Name _____

Roll No. _____

Batch _____

Year _____

Department _____

Workbook

Data Structure Algorithm & Implementation
(CT – 157)



Prepared by
Engr. Sana Fatima
Lecturer- SE

Approved by
Chairman

Department of Software Engineering

Table of Contents

S. No.	Object	Page No.	Signature
01	To learn the basic concepts of Data Structure & Algorithms		
02	Array data structures & Operations i. Insertion ii. Deletion iii. Traversing		
03	Searching Algorithms i. Linear Search ii. Binary Search		
04	Sorting Algorithms i. Bubble Sort Algorithm ii. Quick Sort Algorithm		
05	Stack data structure & Operations i. Push ii. Pop		
06	Expression Evaluation through Stack Data Structure i. Infix ii. Postfix iii. Prefix		
07	Queue data structure & Operations i. Enqueue ii. Dequeue		
08	Recursive Algorithms (Recursion) Tower of Hanoi Problem		
09	Tree data structure & Operations i. Insertion ii. Deletion		
10	Tree Traversal Algorithms i. Inorder ii. Preorder iii. Postorder		
11	Graph data structure & Operations i. Adjacency List ii. Adjacency Matrix		
12	Graph Traversal Algorithms i. DFS ii. BFS		
13	Rat in a Maze Path finding problem		
14	N-Queen Problem		

