



GTU SEM 3 (IMP)

Subject Code:BE030000081

DATA STRUCTURE

45+ Marks Confirm

**"Stack will
definitely come!"**

GTU Data Structures (DS)

SPECIALLY SEM 3

First Session: Must Prepare

Theory Questions (7 marks each):

1. Stack Operations (PUSH, POP, PEEP)
(GUARANTEED!)
2. Queue Operations (INSERT, DELETE, DISPLAY)
3. Binary Search Tree Construction
4. Infix to Postfix Conversion
5. Linked List Operations (Singly)
6. Binary Tree Construction from Traversals
7. Hashing & Collision Resolution
8. Minimum Spanning Tree (Prim's/Kruskal's)

Short Questions (3-4 marks):

9. Primitive vs Non-Primitive Data Structures
10. Time Complexity & Asymptotic Notation
11. Doubly Linked List (Insert/Delete Algorithm)
12. BFS vs DFS
13. Quick Sort
14. Bubble Sort
15. AVL Tree

Second Session: Very Important

16. Priority Queue & Circular Queue
17. Tower of Hanoi
18. Binary Search
19. File Organization
20. Dijkstra's Shortest Path
21. Insertion Sort
22. Merge Sort
23. Selection Sort
24. Sparse Matrix
25. Static vs Dynamic Memory Allocation

ALL THE BEST
THANK YOU