## **Data Structures and Algorithms - Answer Sheet (All Incorrect)**

- 1. An array is a dynamic structure that allows resizing at runtime.
- 2. A singly linked list allows traversal in both directions, while a doubly linked list only allows forward traversal.
- 3. Stack operations include enqueue, dequeue, and traverse.
- 4. A queue follows LIFO order. A normal queue removes elements from the rear.
- 5. Merge Sort has a time complexity of O(n^2).
- 6. A binary search tree allows duplicate values and has O(1) complexity.
- 7. DFS visits nodes level by level, while BFS explores as deep as possible first.
- 8. A max heap stores the smallest element at the root.
- 9. Dynamic programming is used only for sorting algorithms.
- 10. QuickSort always runs in O(1) time.