1 Lecture - CS301

Important Mcqs

1. **Which data structure follows the "last-in-first-out" (LIFO) principle?** a. Queue b. Stack c. Linked List d. Tree Solution: b
2. **Which data structure allows for efficient insertion and deletion operations in the middle?** a. Array b. Stack c. Queue d. Linked List Solution: d
3. **Which data structure is used to represent hierarchical relationships?** a. Array b. Stack c. Queue d. Tree Solution: d
4. **Which data structure is used to find the shortest path between two nodes in a network?** a. Array b. Stack c. Queue d. Graph Solution: d
5. **Which data structure stores elements in a non-linear and hierarchical manner?** a. Array b. Stack c. Queue d. Tree Solution: d
6. **Which data structure follows the "first-in-first-out" (FIFO) principle?** a. Queue b. Stack c. Linked List d. Tree Solution: a
7. **Which data structure is used to reverse the order of elements in a sequence?** a. Array b. Stack c. Queue d. Linked List Solution: b
8. **Which data structure is used to implement a symbol table?** a. Array b. Stack c. Queue d. Hash table Solution: d
9. **Which data structure is used to sort elements in a sequence?** a. Array b. Stack c. Queue d. Heap Solution: d
10. **Which data structure is used to store and access elements based on a key-value pair?** a. Array b. Stack c. Queue d. Dictionary Solution: d