



**VIT**<sup>®</sup>  
Vellore Institute of Technology  
(Deemed to be University under section 3 of UGC Act, 1956)

Vellore – 632014, Tamil Nadu, India  
**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING**  
**FALL SEMESTER 2022-2023**

**LAB ASSESSMENT -II**

**SLOT: B2/TB2**

Course Code	:	BCSE202P
Course Name	:	DATA STRUCTURES AND ALGORITHMS LAB

---

1. Illustrate Queue operation and circular queue operation. The assessment should include the following things .
  - a. Algorithm
  - b. Source Code
  - c. Input and Output
2. Illustrate the following Operations on Linked List, The assessment should include the following things
  - a. Algorithm
  - b. Source Code
  - c. Input and Output

**a. Single Linked List**

- i. Create
- ii. Insertion at beginning
- iii. Insertion after position
- iv. Delete- 3 Cases( Beginning, End, after Position)
- v. Display
- vi. Count
- vii. Search
- viii. Reverse

**b. Double Linked List**

- i. Create
- ii. Insertion at beginning
- iii. Insertion after position

- iv. Delete- 3 Cases( Beginning, End, after Position)
- v. Display
- vi. Count
- vii. Search
- viii. Reverse

**c. Circular Linked List**

- i. Create
- ii. Insertion at beginning
- iii. Insertion after position
- iv. Delete- 3 Cases( Beginning, End, after Position)
- v. Display

**d. Linked List Application**

- i. Polynomial Addition
- ii. Polynomial Subtraction
- iii. Polynomial Multiplication

\*\*\*\*\*