



भारतीय सूचना प्रौद्योगिकी संस्थान भागलपुर
INDIAN INSTITUTE OF INFORMATION TECHNOLOGY BHAGALPUR
(An Institute of National Importance under Act of Parliament)

Department of Computer Science and Engineering

Branch: B. Tech (CSE/ECE/MAE/MNC)


Course Name: Data Structure

Maximum Time: 2 hours

Semester: 2nd

Course Code: CS116

Date: 17/01/2025

1. Implement the linked list using structure, which contains the five nodes and each node are taken from the user side.
2. Perform the various operations on linked list such as:
 - a. Traversing the entire linked list and print the data elements of linked list
 - b. Identify the length of linked list
 - c. on operation at the beginning, at the end, at middle, at the given specific position, and after the given position.
 - d. Perform deletion operation at the beginning, at the end, at middle, at the given specific position, and after the given position.
 - e. Perform the sorting operation on the linked list.
 - f. Identify the duplicate elements that is present in the linked list.
 - g. Count total number of even and odd elements that is stored in linked list.