

# The LNM Institute of Information Technology, Jaipur

## Computer Networks Lab

### Lab Assignment 6

**Objective:** Implementation of Routing Algorithm

**Task 1: Routing Algorithm: Distance Vector Routing**

Implement distance vector routing algorithm in the topology defined in task 1 of Lab 5.

1. **Initialization:** each node knows only distance vector with its immediate neighbours
2. **Sharing:** each node shares the distance vector table with their neighbours.
  1. Create R\_PDU as packet type for distance vector exchange between nodes
3. **Updating:** calculate the distance for each destination using Bellman-Ford algorithm and update the routing table, add a new node, modify the existing record if needed.

