



## SIDDAGANGA INSTITUTE OF TECHNOLOGY, TUMKUR-03

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NETWORK PROGRAMMING LAB (7CSL01)

Student Name:	USN:	Batch No:	Date:	
<b>Evaluation:</b>				
Observation writing and File maintenance (10 Marks)	Clarity in concepts (05 Marks)	Implementation and execution of the program (10 Marks)	Viva (10 Marks)	Total (35 Marks)
Sl.No	Name of the Faculty In-Charge			Signature
1.				
2.				

### Question No. B4

Simulate an Ethernet LAN using n nodes and set multiple traffic nodes and determine the collision across different nodes.

#### Pre-requisites:

##### Ethernet

Ethernet is the traditional technology for connecting wired local area networks (LANs), enabling devices to communicate with each other via a protocol. An Ethernet cable is used to connect one or more devices to the LAN.

#### Write a TCL(Tool command language) Script.

1. Declare a network simulator.
2. Create and open a tracefile and a NAM trace file in write mode which is used to store and display the output.
3. Create n nodes.
4. Create LAN and setup the link.
5. Attach these Protocols to their respective nodes.
6. Declare the required Applications and attach them with their protocols.
7. connect source and destination nodes.
8. Define a 'finish' procedure.
  - o Dump all traces and close the files.
  - o Execute NAM animation file.
  - o Check the events in trace file.
  - o For all the events 'c' (c denotes collided packets), count number of packets.
9. Schedule the events.
10. Start network simulation.