



## 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. B6

Simulate simple ESS with transmitting nodes in wire-less LAN and determine the performance with respect to transmission of packets.

#### ESS(Extended Service Set)

An extended service set (ESS) is one or more interconnected basic service sets (BSSs) and their associated LANs. Each BSS consists of a single access point (AP) together with all wireless client devices (stations, also called STAs) creating a local or enterprise 802.11 wireless LAN (WLAN).

#### Procedure:

1. Declare a network simulator.
2. Create and open a tracefile and a Network animator(NAM trace) file in write mode which is used to store and display the output.
3. Create an object for the Topography class and give the value 1000 x 1000 in the 'load\_flatgrid' function.
4. Configure node to create wireless connection.
5. Pass the value of the number of nodes to the 'create-god' function.
6. Create the nodes.
7. Set the position of the nodes in the X\_, Y\_ and Z\_ variables using 'set' keyword.
8. Set TCP connection for source and destination.
9. Attach application layer protocol over TCP.
10. Set the movement of node using 'at' keyword, specifying the time in seconds and the position in x, y, z values using 'setdest' function.
11. 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 'r' (r denotes received packets), count number of packets.
12. Schedule the events.