SIDDAGANGA INSTITUTE OF TECHNOLOGY, TUMKUR-03

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

NETWORK PROGRAMMING LAB (7CSL01)

Student Name:		USN:	Batch No:	Date:
Evaluation:				

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. B7

Simulate simple ad-hoc network with transmitting nodes and determine the performance with respect to transmission of packets.

Ad Hoc Networking:

1. An ad-hoc network is a local area network (LAN) that is built spontaneously as devices connect. Instead of relying on a base station to coordinate the flow of messages to each node in the network, the individual network nodes forward packets to and from each other.
2. In the Windows operating system, ad-hoc is a communication mode (setting) that allows computers to directly communicate with each other without a router.

Procedure:

3. Declare a network simulator.
4. Create and open a tracefile and a Network animator(NAM trace) file in write mode which is used to store and display the output.
5. Create an object for the Topography class and give the values 1000 1000 in the 'load_flatgrid' function.
6. Configure node to create wireless connection.
7. Pass the value of the number of nodes to the 'create-god' function.
8. Create the nodes.
9. Set the position of the nodes in the X_, Y_ and Z_ variables using 'set' keyword.
10. Set TCP connection for source and destination.
11. Attach application layer protocol over TCP.
12. Set the movement of node using 'at' keyword, specifying the time in seconds and the position in x, y, z values using 'setdest' function.
13. Define a 'finish' procedure.
14. Dump all traces and close the files.
15. Execute NAM animation file.
16. Check the events in trace file.
17. For all the events 'r' (r denotes received packets), count number of packets.
18. Schedule the events.

AKSHAT AGARWAL