**Roll No: 5117060**

**EXPERIMENT 09**

**PROBLEM DEFINITION:**

Relatively simple multicast configuration between two nodes.

**Code:**

set ns [new Simulator -multicast on]; # enable multicast routing;

set tracef [open dm.tr w]

$ns trace-all $tracef

set namtracef [open dm.nam w]

$ns namtrace-all $namtracef

set node0 [$ns node] ;# create multicast capable nodes;

set node1 [$ns node]

$ns duplex-link $node0 $node1 1.5Mb 10ms DropTail

set mproto DM ; # configure multicast protocol;

set mrthandle [$ns mrtproto $mproto]; # all nodes will contain multicast protocol agents;

set group [Node allocaddr] ; # allocate a multicast address;

set udp [new Agent/UDP] ;# create a source agent at node 0;

$ns attach-agent $node0 $udp

$udp set dst\_addr\_ $group

$udp set dst\_port\_ 0

set cbr [new Application/Traffic/CBR]

$cbr attach-agent $udp

set receiver [new Agent/LossMonitor]; # create a receiver agent at node 1;

$ns attach-agent $node1 $receiver

$ns at 0.3 "$node1 join-group $receiver $group"

$ns at 2.0 "$node1 leave-group $receiver $group"

$ns at 0.4 "$cbr start"

$ns at 1.5 "$cbr stop"

$ns at 5.0 "finish"

proc finish {} {

global ns tracef namtracef

$ns flush-trace

close $namtracef

close $tracef

exec nam dm.nam &

exit 0

}

$ns run

**Output:**

