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Agnel Charities'

Fr. C. RODRIGUES INSTITUTE OF TECHNOLOGY

DEPARTMENT: _____

LABORATORY CONTINUOUS ASSESSMENT FORMAT

First / Second Half of _____

Course Name: Networking lab	
Name of the Teacher: Prof. Smita Rokhade	
Name of the Student: Vinayak Datta Gaonkar	
Roll No: 502116	**Semester:** 4
Batch: B 2	**Practical No:** 3
Date of Practical: 1/2/2022	**Date of Report Submission:** 8/2/2022
Title: Design of Star network topology with respect to no. of nodes & physical layer	
Course Outcome: Demonstrate & measure distributed network Scenarios & their performance	

ASSESSMENT

Sr. No.	Parameter for Assessment	Marks	Rubrics		
1.	**Practical Performance / Active Participation (03Marks)**	2	Above Average (03)	Average (02)	Below Average (01)
2.	**Report Presentation (02 Marks)**	2	Above Average (02)	Average (01)	Below Average (00)
3.	**Understanding (03 Marks)**	2	Above Average (03)	Average (02)	Below Average (01)
4.	**Regularity in Submission (02 Marks)**	2	Timely (02)	Late (01) (≤ 2 Weeks from the date of Practical)	Very Late (00) (> 2 Weeks from the date of Practical)

Total Marks (10): 08

Teacher's Signature: SR 8/2 **Date:**

Name - Vinayak .D. Gavali
Date : 2-03-2021
Branch - IT
Sub: NL

Experiment - 3.

Aim: Design of Specific network topology with respect to number of nodes and physical layer.

objective: Design and run simulation scenario using NS2 Simulator and visualise NAM

Course outcome: Demonstrate and measure different network scenarios and their performance

Theory : Any two nodes in network can be connected duplex line and link characteristics include bandwidth delay and queue type.

STEP -BY STEP WIRED NETWORK

Step 1: Creating Simulator Objective
The network Simulator Script starts with simulator instance Set ns [new Simulator]

ns is defined to handle Simulator object [ns command] is used for functions belonging to Simulator class.

Step 2: Tracing

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DEPARTMENT: _____

LABORATORY CONTINUOUS ASSESSMENT FORMAT

First / Second Half of _____

Course Name:	Networking lab
Name of the Teacher:	Prof. Smita Rukhande
Name of the Student:	Vinayak Datta Gaikwad
Roll No: 5020116	**Semester:** 4
Batch: B2	**Practical No:** 3
Date of Practical: 1/2/2022	**Date of Report Submission:** 8/2/2022
Title:	Design of Specific network topology with respect to no. of nodes & physical layer
Course Outcome:	Demonstrate & measure diff. network Scenarios & their performance

ASSESSMENT

Sr. No.	Parameter for Assessment	Marks	Rubrics		
1.	Practical Performance / Active Participation (03Marks)	2	Above Average (03)	Average (02)	Below Average (01)
2.	Report Presentation (02 Marks)	2	Above Average (02)	Average (01)	Below Average (00)
3.	Understanding (03 Marks)	2	Above Average (03)	Average (02)	Below Average (01)
4.	Regularity in Submission (02 Marks)	2	Timely (02)	Late (01) (≤ 2 Weeks from the date of Practical)	Very Late (00) (> 2 Weeks from the date o Practical)

Total Marks (10): 08

Teacher's Signature: SSR 8/2 **Date:**

Name - Vinayak ... [illegible]
Date : 2-03-2021
Branch - IT
Sub : NL

Experiment - 3.

Aim: Design of Specific network topology with respect to number of nodes and physical layer.

Objective: Design and run simulation scenario using NS2 simulator and visualize NAM

Course outcome: Demonstrate and measure different network scenarios and their performance

Theory: Any two nodes in network can be connected using duplex link and link characteristics including bandwidth, delay and queue type.

STEP - BY STEP WIRED NETWORK

Step 1: Creating Simulator object line
The network simulator script starts with simulator instance set ns [new Simulator]

ns is defined to handle simulator object [ns command] is used for functions belonging to simulator class.

Step 2: Tracing

Source Code:

```
Set ns [new Simulator]
Set nf [open S1-nam w]
$ ns namtrace-all $ns
Set tf [open S1.tr w]
$ ns trace-all $ tf
proc finish {} {
global ns nf tf
$ns flush-trace
close $nf
close $tf
exec nam S1.nam &
exit 0
}
Set n0 [$ ns node]
Set n1 [$ ns node]
$ns duplex-link $n0 $n1 2mb 10ms DropTail
Set udp0 [new Agent/UDP]
$ns attach-agent $n0 $ udp0
Set cbr0 [new Application/Traffic/CBR]
$cbr0 attach-agent $udp0
Set null0 [new Agent/Null]
$ns attach-agent $n2 $null0
$ns connect $ udp0 $ null0
$ns at 0.5 "$ cbr0 Start"
$ns at 4.5 "$ cbr0 Stop"
$ns at 5.0 "finish"
$ ns run
```