NETSIM COURSE (2020-2021)

NETSIM is a computer based networking course and it is a skill oriented, value added course designed to make the higher education system more relevant with focus on quality and excellence.

Network programming is a key skill that enhances student's "employability". Apart from simulation, NetSim features a separate "Programming" menu to help students build skills in these basic mechanisms of computer networking. This course allows the students to analyze computer networks with skillful depth, power and flexibility.

The following programs are offers under this course.

1. Certificate course
2. Diploma course
3. Advanced diploma course

Currently we are conducting classes and practical for I year PMCs and II year PMCs students by offering certificate and Diploma Course. Each course is of one year duration. After the completion of each course both theory and practical exams will be conducted and certificates will be issued to the students. From 2015 onwards this course is made compulsory for all I year and II year PMCs students.

NETSIM CERTIFICATE COURSE

Syllabus-Theory   **2hrs/week**

TotalHrs:35

Unit1:Introduction to Networks   **4hrs**

Definition ,criteria's, advantages and disadvantages, network elements models, devices , switching and cabling **,** network components-Hub**,** switch, bridge, NIC**,** Modems .

Unit2:Media and Topologies   **6hrs**

Topology and access methods -bus , star , ring , mesh , their advantages and disadvantages, logical and physical topology

Transmission Types- broadcast and point-point

Communication types-half duplex , full duplex

Network services- Connection oriented and connection less oriented, comparison between them.

Types of network- LAN, WAN, MAN

Unit3:**Cable and media connectors**   **5hrs**

Cable types-CAT3 ,CAT5, crimping , twisted pair (Shielded and un shielded),co-axial cable media connectors – RJ-11, RJ-45, USB, F-Type.

UNIT4:Protocols and standards 8hrs

Layered architecture, OSI and TCP/IP model, MAC addressing, IP addressing-IP ranges and their subnet masks, functions of protocols, standards.

UNIT5:LAN Protocols 10hrs

Ethernet, token ring ,token bus, error and flow control.

Unit6:LAN devices 2hrs

Hub, switch, repeater, bridge, concentrator.

Syllabus-practical

Duration:02hrs **1lab/week**

1. Introduction to networking hardware
2. To crimp and test straight cable
3. Demonstration of straight cable
4. To crimp and test cross over cable
5. Demonstration of cross over cable
6. Introduction and protocols to fix a NIC(network interface card)
7. Configuring the IP address
8. Demonstration
9. Setup domain/workgroup
10. LAN setup

Introduction to networking hardware:

Lab1

Objective: To identify different components used in networks.

Procedure: Different components available in a network are as follows:

1. **NIC (Network Interface Card)**: it serves as a interface between computer and the network cable for sending and receiving data.
2. **RJ45 port**: this is a connector on your computer or a networking device that is used to connect the network cable.
3. **RJ11 connector**: it is a standard modular telephone connector and used for connecting four wires.
4. **RJ45 connector**: it is a standard network cable connector and used for connecting eight wires.
5. **Hub**: it is a central connection point for network cables that connect to computers or devices on a network. Here signal is broadcasted across the network, hence working is delayed.
6. **Switch**: a network switch is a small hardware device that joins multiple computers together within one Local Area Network(LAN). When two devices communicate through a switch, it sends signal directly from one port to other port, instead of transmitting to all ports, like

on a hub.

Different tools:

1. **Modular crimping tool:** it is used to fix the wires into the RJ45 connector.
2. **Sleeve remover(CAT5cable):**it is used to remove protective cover or outer layer of a network cable.
3. **RJ45cable:**these cables are used to connect RJ45 connector.
4. **Network cable tester:** It isusedtotestthecrimpedRJ45cables.

<u>**Network cable:**</u>

Lab2

This is used to connect two network device for communication. There are two types of cable crimping. Each cable contain its own color code.

1. Straight cable
2. Cross cable

Straight cable: this cable is used to connect two different devices such as system-hub or system-switch or vice versa.

Cross over cable: this cable is used to connect two similar devices such as system-system or hub-hub or switch-switch.

1. <u>**To crimp and test straight cable:**</u>
   Objective: to crimp, test and connect PCs with a straight cable.
   Apparatus: RJ45cables(straight cables), crimping tool, network cable tester and sleeve remover.
   Procedure:
   - **Cutting**: this process involves great concentration. One should make sure that the sleeve of the network should be peeled off. Care should be taken for not damaging the wires inside. The length of the cable that should be peeled off should match the length of RJ45 jack.
   - **Crimping**: using the crimping tool, both ends of the RJ45 cable needs to be crimped. Make sure that the cables are fixed inside the jack perfectly and then crimped. At the time of crimping one should be conscious of IEEE standard color code format.

Color code:

Left	Right
Orange white	Orange white
Orange	Orange
Green white	Green white
Blue	Blue
Blue white	Blue white
Green	Green
Brown white	Brown white
Brown	Brown

- **Testing**: the crimped RJ45 cables have to be checked using the testing tool. Insert both the ends into the port available in the tester and turn on the power button. To ensure that the straight cable is properly crimped the LEDs on the tester should glow. The pattern in which the LEDs need to glow is, when LED1 of one end of the cable glows, LED1 of the other end should glow at the same time. Similarly LED2, LED3, LED4, LED5, LED6, LED7, LED8 of both the ends should glow simultaneously. This indicates that the cables are perfect for use.
- **Result**: the given straight cables are crimped, tested and connected successfully.

Lab3

To crimp and test cross over cable:
Objective: to crimp, test and connect PCs with a cross cable.
Apparatus:RJ45cables(crosscables),crimpingtool,networkcabletesterandsleeve remover.
Procedure:
- **Cutting**: this process involves great concentration. One should make sure that the sleeve of the network should be peeled off. Care should be taken for not damaging the wires inside. The length of the cable that should be peeled off should match the length of RJ45 jack.
- **Crimping**: using the crimping tool, both ends of the RJ45 cable needs to be crimped. Make sure that the cables are fixed inside the jack perfectly and then crimped. At the time of crimping one should be conscious of IEEE standard color code format.
  Color code:

Color code		LED's	
Left	Right	Left	Right
Orange white	Green white	1	3
Orange	Green	2	6
Green white	Orange white	3	1
Blue	Blue	4	4
Blue white	Blue white	5	5
Green	Orange	6	2
Brown white	Brown white	7	7
Brown	brown	8	8

- **Testing**: the crimped RJ45 cables have to be checked using the testing tool. Insert both the ends into the port available in the tester and turn on the power button. To ensure that the cross cable is properly crimped the LEDs on the tester should glow. The pattern in which the LEDs need to glow is, LED1 -> LED3, LED2 -> LED6, LED3 -> LED1, LED4 -> LED4, LED5 -> LED5, LED6-> LED2, LED -> LED7,LED8->LED8ofleftandrightrespectively.
- **Result**: the given cross cables are crimped, tested and connected successfully.

Lab4

Introduction and procedure to fix a NIC(network Interface Card)

Objective: to understand what is NIC and how to install the hardware onto a system.

Procedure: NIC is also called as network card or network adopter. It is a piece of computer hardware designed to allow the computers to communicate over a computer network. It allows the users to connect to each other either through wired or wireless network.

A network card typically has a twisted pair port where a network cable is connected and few LEDs to inform the user of whether the network is active.

How to fix a NIC onto a system?

Before installing the NIC, unplug the system to avoid an electrical shock hazard. A NIC is easy to install. The only consideration for installation are that you have an available slot and that the NIC is designed for the slot type you have. Most systems use a PCI(peripheral Component Interface) slot for a NIC.

1. Power of the system
2. Remove the cover of the cabinet of the CPU
3. Remove the cover plate adjacent to the slot for your NIC to be fixed.
4. Align the NIC over the slot with the jack facing the outside of the system
5. Set the NIC into the slot and press down firmly
6. Secure the NIC mounting bracket to the case with a screw
7. Replace the cover
8. Plug-in the system
   This completes the hardware installation.

Note: if the NIC device is not detected by your operating system then install the corresponding software otherwise no need of installation.

Lab5

Configuring the IP address: To install and configure the TCP/IP network protocol on windows 2000, windows XP and windows server 2003.

1. Click **start->settings->control panel**
2. In control panel double click network connections.
3. Double click Local Area Connection(LAN)icon and click properties.
4. Select internet protocol(TCP/IP)and click properties.

5. Select using the following IP address. Check with your network administrator to determine the correct setting for this tab. If your PC does not automatically obtain IP and DNS address, do the following,
    - Enter IP address of your PC(ex:192.168.1.3)
    - The subnet mask is automatically taken(ex: 255.255.255.0)
    - Enter the correct "default gateway/preferred DNS server/alternate DNS server(i.e, these are dependent on the type of internet connection)".
6. Click OK on all LAN properties window.

Setup domain or work group:

Objective: to add system on to a domain/workgroup

Procedure:

1. **Domain:** This is a specific name given to a LAN that includes one or more domain controllers.
    - The advantage is that you have a dedicated server to log or track all users and shares the required file or folders.
    - The disadvantage is that cost and maintenance required to keep this configuration or settings.
    - All the systems in a domain can be forced to follow a set of rules.
2. **Work group:** this has no dedicated server to track users, its all done through each client machine on the LAN. Work group includes shared objects and user logons.
    Steps:
    - Go the **start ->right click on my computer and select properties.**
    - Select the tab computer name in the system property window.
    ➔Click on change button.
3. Under the member of click on either domain or workgroup and then click on OK button.
4. A welcome window appears which specifies the workgroup name click on OK button.
5. Restart the system. View work groups:

- Ping each system from both the workgroups.
- Also access files and folders from system of the same work group.
- Network places: this is where we can find all the systems which are sharing files or folders across the network.
- Go to start ->My network places to view all the systems in the network.
- Click on **"view work group computers"** to view all the systems in work group same as yours

Certificate Course

Sl No	Name
1	AKSHATHA
2	BHAVANA G P
3	BHAVYA M
4	BHOOMIKA
5	BHUMIKA A M
6	CHAITHANYA T S

7	CHANDANA B R
8	CHANDANA H M
9	DIVYA M N
10	G R VIDYASHREE
11	HAMSA R
12	JAMUNA U
13	KAVYA B C
14	KAVYA D
15	KAVYASHREE B N
16	KAVYASHREE D
17	KEERTHANA N K
18	KUSUMA P S
19	LANCHANA T C
20	MADHARA M M
21	MAHALAKSHMI R
22	MONIKA T R
23	NANDINI K V
24	NITHYASHREE S
25	PAVANA D
26	POOJA B S
27	POOJA N
28	POOJASHREE V B
29	R N NAMRATHA
30	RAMYA K
31	RENUKA T D
32	S AFRIN
33	SHRAVANI M
34	SHRUTHI M G
35	SHWETHA S
36	SNEHA S
37	SWATHI S
38	UZMA AFREEN KHAN
39	VARSHITHA K C
40	VIDYASREE D P
41	VINUTHA G B
42	VISHRUTHA G

Time Table :

DAY	TIME
Monday	10:30-12:30
Wednesday	10:30-12:30
Friday	10:30-12:30

NETSIM DIPLOMA COURSE THEORY SYLLABUS

Chapter1:Wireless Communication   **06hr**
Characteristics, Wireless Communication, History, Wireless LAN, WLAN Architecture, CSMA/CD, Wireless Networking Security, WI-FI, Wireless Standard IEEE 802.11, How it works, Wireless Networking Standards, Comparison of Wireless LAN 802.11 Standards.

Chapter 2: Fast Ethernet, Gigabit Ethernet and VLAN   **06hr**
Fast Ethernet, What is Fast Ethernet, Overview, Advantages, Technical overview, Migration, Gigabit Ethernet, GMII(Gigabit Medium Independent Interface),Physical MediaTypes,1000 Base, VLAN, VLAN's Frame Processing, Types of VLAN,VLAN Connections and Limitations.

Chapter 3: Internet Access technologies   **06hr**
Internet, reasons, why people use the internet, Internet Access, Introduction, Common Internet Access, Cable Modem, XDSL, ADSL, installation, Satellite Internet Access, Plain Old Telephone Service, Public switched telephone network, Wireless Internet Access.

Chapter 4: Wide Area Network (WAN) Protocol   **06hr**
WAN, Introduction to WAN, WAN technologies and OSI Reference Models, Comparison of ISDN, Leased lines and Frame Relay, Introduction to the network Layer and Routing Protocols, Routing, Transport Layer, Functions of TCP/IP and UDP ports.

Chapter 5: Wide Area Network (WAN) Devices   **06hr**
Routers, Working of the Router, Functionally of Router, Routing Table, Types of Router, Packet Delivery, Routing Methods, Dynamic Routing, Static Routing, Router Architecture, Router Ports, Switching, Queuing, difference between Router, Switch and Hub, Gateways, ISDN, default Gateways.

Chapter6:Network Performance   **05hr**
Introduction, Network performance Measurement, Performance Measurement Terms, Queuing Models, Components of queuing System, Notation for queues, Simulation, Simulation Models, Steps in simulation, Discrete Event Simulation, Netsim, QOS.

Reference Books:

1. Carrier Oriented program on Computer Networks using NetSim – Study Material Volume – I. Tetcos.

2. Carrier Oriented program on Computer Networks using NetSim – Study Material Volume – II. Tetcos.

3. Netsim Network Simulator for the Ultra computer. By MarcSnir.

4. Tetcos Network Simulator.

NETSIM DPLOMA COURSE PRACTICALS

Duration:02hrs   **1experiment/week**

Experiment 1:
Networking Commands:

1. **Ip config:** It is a Console Command which can be issued to the command line interpreter to display the network settings currently assigned to any or all network adapters in the machine.
   Synatx:
   ipconfig [/allcompartments] [/? | /all | /renew [adapter] | /release [adapter] | /renew6 [adapter] | /release6 [adapter] | /flushdns | /displaydns | /registerdns | /showclassid adapter | /setclassid adapter [classid] | /showclassid6 adapter | /setclassid6 adapter [classid]]

   where adapter Connection name (wildcard characters * and ? allowed, see examples)

/all	Display full configuration information.
/release	Release the IPv4 address for the specified adapter.
/release6	Release theIPv6 address for the specified adapter.

2. **Netstat:** The netstat command is used to display the TCP/IP network protocol statistics and information.
   Syntax:
   NETSTAT[-a][-b][-e][-f][-n][-o][-pproto][-r][-s][-x][-t][interval]

-a	Displays all connections and listening ports.
-e	Displays Ethernet statistics. This option maybe combined with the-soption.
-f	Displays Fully Qualified Domain Names(FQDN)for foreign addresses.

3. **Tracert and traceroute**:The **tracert** command in MS-DOS and Windows(known as **trace route** in Unix-like operating systems) is a useful tool for diagnosing network issues. It allows you to view a listing of how a network packet travels through the network and where it may fail or slow down. Using this information you can determine the computer, or network device causing your connectivity issue.
   Syntax:
   tracert[-d][-hmaximum_hops][-jhost-list][-wtimeout][-R][-Ssrcaddr][-4][-6] target_name

-d	Do not resolve addresses to hostnames.
-h maximum_hops	Maximum number of hops to search for target.
-jhost-list	Loose source route a long host-list(IPv4-only).

Experiment 2:
Networking Commands:

4. **Ping:** Ping is one of the most commonly used network commands that allows you to ping a network IP address. Pinging an IP address helps determine if the network card can communicate in the local network or outside network.

   Syntax:

   ping [-t] [-a] [-ncount] [-lsize] [-f] [-i TTL] [-v TOS] [-r count] [-scount] [[-j host-list] |[-k host-list]] [-w timeout] [-R] [-S srcaddr] [-4] [-6 target_name

-t	Pings the specified host until stopped. To see statistics and continue-Type **Control-Break;** To stop-press Ctrl+C.
-a	Resolve addresses to hostnames.
-n	Count number of echorequests tosend.
-lsize	Send buffer size.

5. **Pathping:** PathpingisanMS-DOSutilityavailableforMicrosoftWindows2000and Windows XP users. This utility enables a user to find network latency and network loss. **Syntax:** pathping[-ghost-list][-hmaximum_hops][-iaddress][-n][-pperiod][-qnum_queries] [-wtimeout][-P][-R][-T][-4][-6] target_name.

-ghost-list	Loose source route a long host-list.
-hmaximum_hops	Maximum number of hops to search for target.
-iaddress	Use the specified source address.

6. **Telnet:** There are also numerous third-party telnet and SSH programs available for connecting to remote computers. Users who use telnet often or want or need additional features should consider a third-party telnet program.

   Syntax:

   ```
   telnethostname
   ```

7. **FTP:** To connect to another computer using FTP at the MS-DOS prompt, command line,or Linux shell type **FTP** and press Enter. Once in FTP, use the **open** command to connect to the FTP server, as shown in the following example.

   Syntax:

   ```
   open
   ftp.example.comget
   myfile.htm
   ```

Experiment 3:

Networking Commands:

8. **Route:** This Command to manually configure the routes in the routing table.
   Syntax:
   ROUTE[-f][-p][-4|-6]command[destination][MASKnetmask][gateway][METRIC metric]
   [IF interface]

-f	Clears the routing tables of all gateway entries. If this is used in conjunction with one of the commands, the tables are cleared before running the command.
-p	When used with the ADD command, makes a route persistent across boots ofthe system. By default, routes are not preserved when the system is restarted. When used with the PRINT command, displays the list of registered persistent routes. Ignored for all other commands, which always affect the appropriate persistent routes.ThisoptionisnotsupportedWindows'95.command

9. **ARP:** Display or manipulate the ARP information on a network device or computer.
   Syntax:
   ARP -s inet_addr eth_adr [if_addr]
   ARP -d inet_addr [if_addr]
   ARP-a[inet_addr][-Nif_addr]

-g	Same as-a
inet_addr	Specifies an Internet address.
-Nif addr	Displays the ARP entries for the network interface specified by if_addr.
-d	Deletes the host specified by inet_addr.

10. **NS lookup**: The ns lookup MS-DOS utility that enables a user to do a reverse lookup on an IP address of a domain or host on a network.
    Syntax:
    nslookup [-opt ...] # interactive mode using default server
    nslookup [-opt ...] - server # interactive mode using 'server'
    nslookup [-opt ...]host # just look up 'host' using default server
    nslookup[-opt...]hostserver#justlookup'host'using'server'

Experiment 4:

Networking Commands:

11. **NBSTAT:** The nbtstat MS-DOS utility that displays protocol statistics and current TCP/IP connections using NBT.

Syntax:

```
nbtstat [ [-a RemoteName] [-A IpAddress] [-c] [-n] [-r] [-R] [-
RR] [-s] [-S] [interval] ]
```

-aRemoteName	Adapter status by name. Lists the name table of the remote Machine identified by machine name *Remote Name*.
-AIpAddress	Adapter status by address. Lists the name table of the remote Machine identified by IPaddress *Ip Address*.
-c	Show cached name table. Lists NBT's cache of remote Machine names and their IP addresses.

12. **Whois:** The whois command available in Unix and Linux variants helps allow a user to identify a domain name. This command provides information about a domain name much like the WHOIS on network solutions. In some cases, the domain information will be provided from Network Solutions.

Syntax:

whois[-h *HOST*] [-p *PORT*] [-aCFHlLMmrRSVx] [-g *SOURCE:FIRST-LAST*][-i *ATTR*][-S *SOURCE*] [-T *TYPE*] *object*

13. **Winipcfg:** The winipcfg command available in Windows allows a user to display network and network adapter information. Here, a user can find such information as an IP address, Subnet Mask, Gateway, etc.
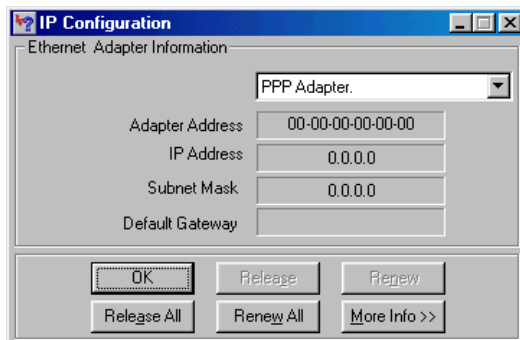
Experiment 5:

Networking Commands:

14. **Simulate a three nodes point** – to – point network with duplex links between them. Set the queue size and vary the bandwidth and find the number of packets dropped.

Soln: Router forwards packets from one network to another network. When arrival rate of packets is greater than the service (departure) rate, packets get buffered (queued). Once the buffer (queue) is completely filled, all arriving packets will be dropped.

In NetSim, Select "Simulation-------→ New→ Internetworks".
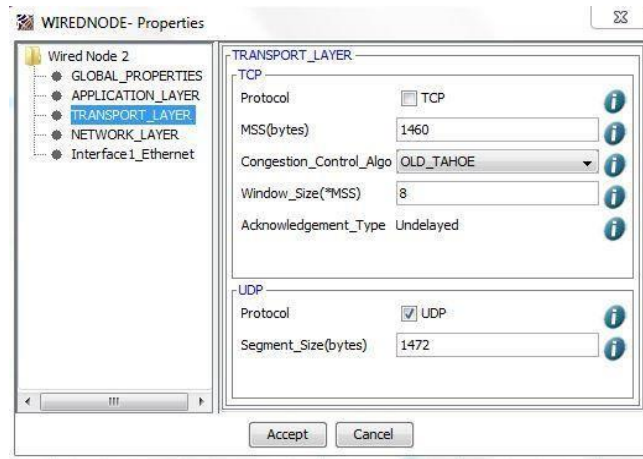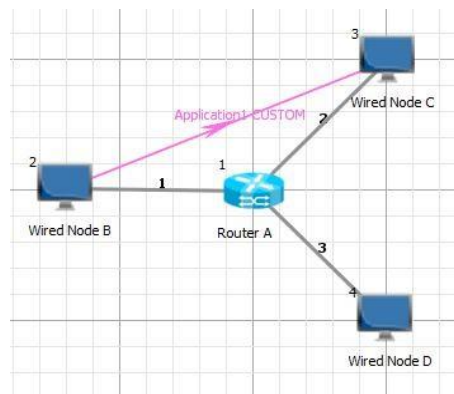
Activities/Programs

- NETSIM inaugural function on 22nd July 2015 for I year and II year PMCs students. This program in inaugurated by **Dr.Prakash B R** ,a chief guest and also addresses the students by giving seminar on topic of "Importance of Networking and Simulation. Principal Prof Nalinakshi V delivered the Presidential speech. IQAC coordinator Dr. Ananda Kumari addresses the students regarding the benefit of the course.

- A guest lecture on **"Networking Concept"** by **Dr. B R Prakash** , Assistant Professor, Dept of MCA, SAHE on 10th January 2018 at 12 pm

- NETSIM certificate distribution ceremony II and III year PMCs students and inaugural functionforfresher'sinseminarhallon28thSeptember2018.Theprogramis inaugurated by **Prof Y M Reddy**, Retd Principal, SSIT Tumkur, Chief guest Prof **Banuprakash C**, Dept of MCA SIT Tumkur and guest **Prof Husna Sulthana,** GFGC Tumkur

Diploma Course

Sl No	Name
1	AKHILA B
2	AMULYA U C
3	ANNAPURNA M
4	BHAVANA B N
5	BHAVANA G R
6	BHAVYA B N
7	BHOOMIKA S R
8	DEEPIKA J
9	DIVYA B
10	GOWTHAMI M S
11	KAVYA A R
12	KAVYASHREE C S
13	KAVYASHREE T S
14	LAKSHMI T L
15	LAVANYA K N
16	LAVANYA M
17	LIKHITHA G V
18	LIKHITHA K
19	MAMATHA K H
20	MANASA T
21	MANJUSHREE
22	NANDINI UMASHANKAR
23	NAVYASHREE M S

24	NITHYASHREE P B
25	PAVITHRA N
26	POOJA M R
27	PRARTHANA K
28	RAKSHITHA B T
29	RAKSHITHA T L
30	SINCHANA T G
31	SINDHU P S
32	SOUNDARYA S S
33	SUMANA N
34	SUNEHA A
35	SUSHMITHA K R
36	TEJASWINI C R

Time table:

DAY	TIME
Tuesday	10:30-12:30
Thursday	10:30-12:30
Saturday	10:30-12:30

Diploma Course - 2020-21

ATTENDANCE REGISTER

B₁ Batch

Name of the Institution ....

Admn.No.	Sl. No.	NAMES	1	2	3	4	5	6	7	8	9	10	11	12
	01	Amulya U·C	1	2	3	4	5							
	02	Annapurna M	1	A	2	3	4							
	03	Bhavana B N	1	2	3	4	5							
	04	Bhavana G R	1	2	3	4	5							
	05	Bhavya B N	1	2	2	3	4							
	06	Bhoomika S R	1	2	3	4	5							
	07	Deepika J	1	2	3	4	5							
	08	Divya B	1	2	3	4	5							
	09	Gowthami M S	1	2	2	3	4							
	10	Kavya A R	1	2	3	4	5							
	11	Kavyashree C S	1	2	3	4	5							
	12	Kavyashree T S	1	2	3	4	4							
	13	Lakshmi T L	1	2	3	4	5							
	14	Lavanya K N	1	2	3	4	5							
	15	Lavanya M	1	2	3	3	4							
	16	Likitha G V	1	2	3	4	5							
	17	Likitha K	1	2	3	4	5							
	18	Mamatha K H	1	2	3	4	5							
	19	Manasa T	A	1	2	2	3							
	20	Manjushree	1	2	3	4	5							
	21	Nandini Umashankar	1	2	3	4	5							
	22	Navyashree M S	1	2	3	4	5							
	23	Nithyashree P B	1	2	3	4	5							

1) No. at the beginning of the month ....
2) Admission during the month ....
3) No. Left during the month ....
4) No. at the end of the month ....
5) No. of working days ....

No. present ....

Initials

I Year BSc (PMCs) – Certification Course 2020

ATTENDANCE REGISTER

B2 – Batch

Name of the Institution ....

Admn.No.	Sl. No.	NAMES	1	2	3	4	5	6	7	8	9	10	11
	01	Pavana D	1	2	3	4	5						
	02	Pooja B S	1	2	2	3	4						
	03	Pooja N	1	2	3	4	5						
	04	Poojashree V B	1	1	2	3	4						
	05	R.N. Namratha	1	2	3	4	5						
	06	Ramya K	1	2	2	3	4						
	07	Renuka T D	1	2	3	4	5						
	08	S Afrin	1	2	3	4	5						
	09	Shravani M	1	2	3	4	5						
	10	Shruthi M G	1	2	3	4	5						
	11	Shwetha S	1	2	3	4	5						
	12	Sneha S	1	2	2	3	4						
	13	Swathi S	1	2	3	4	5						
	14	Uzma Afreen Khan	1	2	3	4	5						
	15	Varshitha K.C	1	2	2	3	4						
	16	Vidyasree DP	1	2	3	4	5						
	17	Vinutha G B	1	2	3	4	5						
	18	Vishrutha G	1	2	3	4	5						

1) No. at the beginning of the month _____
2) Admission during the month _____   No.present
3) No. Left during the month _____
4) No. at the end of the month _____
5) No. of working days _____   Initials

I Year BSc (PMcS) - Certification Course 2020-2

ATTENDANCE REGISTER

Name of the Institution .... B1 - Batch

Admn.No.	Sl. No.	NAMES							7	8	9	10	11	12
	01	Akshatha	1	2	3	4	5	6						
	02	Bhavana G P	1	1	2	3	4	5						
	03	Bhavya M	1	2	2	3	4	5						
	04	Bhoomika	1	2	2	4	5	6						
	05	Bhumika A M	1	2	3	4	5	6						
	06	Chaithanya P S	1	2	3	4	4	5						
	07	Chandana B R	1	2	2	3	4	5						
	08	Chandana H M	1	2	3	4	5	6						
	09	Divya M N	1	2	2	4	5	6						
	10	G R Vidyashree	1	2	2	3	4	5						
	11	Hamsa R	1	2	3	4	5	6						
	12	Jamuna U	1	2	3	4	5	6						
	13	Kavya B C	1	2	3	4	4	5						
	14	Kavya D	1	2	3	3	4	5						
	15	Kavyashree B N	1	2	3	4	5	6						
	16	Kavyashree D	1	2	3	4	5	6						
	17	Keerthana N K	1	2	3	3	4	5						
	18	Kusuma P S	1	2	3	4	5	6						
	19	Lanchana P C	1	2	2	3	4	5						
	20	Madhura M M	1	2	3	4	5	6						
	21	Mahalakshmi R	1	2	2	3	4	5						
	22	Monika T R	1	2	3	4	5	6						
	23	Nandini K V	1	2	3	4	5	6						
	24	Nithyashree S	1	2	3	3	4	5						

1) No. at the beginning of the month ....
2) Admission during the month ....
3) No. Left during the month ....
4) No. at the end of the month ....

No. present:

Diploma Course - 2020-21

ATTENDANCE REGISTER

By Batch

Name of the Institution ....

Admn.No.	Sl. No.	NAMES	1	2	3	4	5	6	7	8	9	10	11
	01	Pooja M R	1	2	3	4	5						
	02	Pavithra N	1	2	3	4	5						
	03	Prarthana K	1	2	3	4	4						
	04	Rakshitha B T	1	2	3	4	5						
	05	Rakshitha T L	1	2	3	4	5						
	06	Sinchana T G	1	2	3	4	5						
	07	Sindhu P S	1	2	3	4	5						
	08	Soundarya S S	1	2	3	4	5						
	09	Sumana N	1	2	3	4	5						
	10	Suneha A	1	2	3	4	5						
	11	Sushmitha K R	1	2	2	3	4						
	12	Tejaswini C R	1	2	3	4	5						
	13												

1) No. at the beginning of the month _____
2) Admission during the month _____
3) No. Left during the month _____
4) No. at the end of the month _____
5) No. of working days _____

No.present: _____

Initials: _____

Sree Siddaganga College of Arts, Science and Commerce for Women

B.H. Road, Tumkur-572101.
Re-Accredited by NAAC with "A" Grade

Department of Computer Science

UGC Recognised Career Oriented Programme

NETSIM

COURSES OFFERED	DURATION
1. CERTIFICATE COURSE	1 YEAR
2. DIPLOMA COURSE	1 YEAR
3. ADVANCED DIPLOMA COURSE	1 YEAR

Prof. Mahesha S.
HOD, Dept. of Computer Science

Sri Siddaganga College of Arts, Science & Commerce for Women

Accredited by NAAC with "B+" Grade

Tumakuru

Certificate

This is to certify that ....

has successfully completed the UGC sponsored Career Oriented Program "Computer Networking using NETSIM" organized by Department of Computer Science, Sree Siddaganga College of Arts, Science and Commerce, Tumkur in fulfillment of Certificate/ Diploma course conducted during the year ....

Co-ordinator　　　　　　　　　　　　　　　　　　**Principal**

NETSIM COURSE