



- ◆ PC to PC Communication with IEEE 802.3
- ◆ Peer to Peer Network
- ◆ Client – Server Network
- ◆ Design of Star topology using 100Base-Tx
- ◆ Design of Bus Topology using 10Base-2
- ◆ Design of Ring topology using DB9
- ◆ Network design using RJ-45, BNC & DB9 connectors
- ◆ Socket programming & processing
- ◆ Data Encryption & Decryption
- ◆ Various LAN protocols
- ◆ Data rate upto 100Mbps
- ◆ Variable packet size
- ◆ Error generation (Manual and Auto)
- ◆ Real time graphical representation of entire transmission & reception
- ◆ Switch faults in both hardware & software

Technical Specifications

Hardware:

PC to PC using RJ-45 Connector
 Star Topology using RJ-45 Connector
 Bus Topology using BNC Connector
 Ring topology using DB9 Connector
 Data Transmission speed: 10/100Mbps
 04 Nodes

Software:

Star, Bus & Ring Selection
 Protocols: CSMA/CD, CSMA/CA, Stop N Wait, Go Back to N, Selective repeat, Sliding Window, Token Bus, Token Ring
 Packet Size: 128, 256, 512, 1024, 2048, 4096, 8192, 16384
 Inter Packet Delay: 1000 – 5000ms
 Error Generation: Acknowledge lost, bad packet, auto error generation

Data encryption & decryption

Complete analysis of Network & Protocols

Graphical Representation:

Graphic representation of data on s/w screen with packet detail

Network Details:

Indication of computer name, IP Address, Port Number, Status of network, MAC Address and OS on computer.

Network & Protocol Analysis:

Indication on packet serial number, file name, file size, file number, receiver name, Workgroup, receiver IP address, total packets, packet length, time out, protocol, topology, receiver, MAC address, port number, file send start time, file sent completion time, transmission data rate (Mbps), error.

Power Supply: 220V±10%, 50 Hz.

Scope of Learning:

- Ø Study & Implementation of Cable designs in networking
- Ø Implementation of PC to PC with IEEE 802.3
- Ø Implementation of Star topology using 100Base Tx
- Ø Implementation of Bus topology using 10Base2
- Ø Implementation of Ring topology using DB9
- Ø Implementation of Peer to Peer network
- Ø Implementation of Client – Server Network
- Ø Study of protocol
 - ◆ CSMA/CD ◆ CSMA/CA
- Ø Study of flow control
 - ◆ Stop - N – Wait ◆ Sliding Window
 - ◆ Go Back to N ◆ selective repeat
- Ø Token ring
- Ø Token Bus
- Ø Socket Programming & Wireless LAN
- Ø Measurement of throughput & effect of bit error on various protocols

Manufactured By:

NVIS Technologies

141 - B, Electronic Complex, Pardesipura, Indore – 452010 India, Tel: +91-731-4211500, 6546638, Telefax: +91-731-4202959

E-mail: info@nvistech.com, Website: www.nvistech.com