Date.

Expt. No. Page No.

ECA-102: Data Communications

1 What are the different types of networks?

1 11 Types of Networks in use Today.
2. Personal Area Network (PAN)
3. Local Area Network (LAN)
4 Wireless local Area Network (WLAN)
5. Campus Area Network (CAN)
6. Metropolition Area Network (MAN)
7. Wide Area Network (WAN)

2. Explain the Shield twisted pair (STP) and Un Shielded twisted pair (UTP)?

Shielded twisted pair cable (STP) had the individual pair of wires wrapped in foil, which are then wrapped again for double protection. Un Shield twisted pair code (UTP) has each pair of wired twisted together. Those wires are without any other protection.

3. What is difference between baseband and broaband transmission? Difference between broadband and base band coaxial cables is that base band Coaxial cable supports quick transmission of a singal signal at a time and mainly used coaxial cable transi multiple signals at the same time and is used for longer distances.

Teacher's Signature :

Date.

Page No.

4. What is difference between a hub, modem, router and a switch?

When computers network devices or other network are required to be connected, hubs, switches and routes are the bridges to link them together. All the three types of devices can perform the same function, and technicians sometimes may use the terms interchangeably. However, this will make people confuse whether they are the same thing or different from each other.

5. When you move the NIC Cards From one PC to another PC, does the MAC address gets transferred as well?

When you move The NIC cards from one pc to another PC, does the MAC address gets trans as well? Yes thats because MAC addresses are hard-wired into the NIC circuitry not the pc. This also mean that a pc can have a different MAC address when another one replaced the NIC card.

6. When troubleshooting Computer network Problems what Common hardware - related Problems Can Occur?

When troubleshooting Computer Problems what Common hardware - related Problems Can Occur? a large Percentage of a network is

Teacher's Signature :

Date.

Page No.

made up of hardwork. Problems in ~~This~~ These areas can range from malfunctioning hard drives broken NICS, and even hardware startups.

7. in a network that contains two Servers and twenty workstations. where is the best place to install an anti-Virus Program?
n a network that contains two Servers and twenty workstations. where is the best place to install an anti-virus program. The best solution is to install anti-virus on all the Computers is the Network.

8. Define Static IP and Dynamic IP? Discuss the difference between IPV4 and IPV6.
what is the differnce between Dynamic and Staic IP address when a device is assigned d Static IP address, the address does not change most device use dynamic IP address which are assigned by the Network when they

Teacher's Signature :

Date.

Page No.

Connet and Chang Time over. Time.

IPV4 is an version widely used to identify device on a network useing an addressing system. it was The First version of IP depoyed for Production in The ARPANet in 1983. it uses a 32-bit address scheme to store 2^32 address with more Than 4 billion address. it is Considered The Primary Internet Protocol and Carries 94% of internet toraffic.

IPV6 is The most recent version of The version of Internet Protocal. This new IP address version is being deployed to fulfill the need more Intenet address it. was aimed to oresolve issues that are associated with IPV4. with 128-bit address space. it allows 340 undecillion unique address IPV6 is also Called IPng (Internet Protocol next generation)

Q. Discuss Tcp / IP model in detail.

Tcp / IP Reperence model is a four - layered Suite of Communation Protocolls. it was developed by The DoD (Department of Defence

Teacher's Signature :

Date.

Page No.

In The 1960s. it is named after The two.
main Protocol that are used in The model namely Tcp and IP, Tcp Stands for transmission Control Protocol and IP Stands for internet Protocol The four layers in The Tcp/IP Protocol Suite are -

- Host - to Network Layers - it is the lowest layers that is Concerned with The Physial transmisson of data TCP/IP does not specifically define any Protocol here but Supports by ~~The Protocol~~ all The Standard Protocol.

- Internet Layer - it defines the Protocol for logical trasmission of data over The network. The main Protocol in This layer is Internet Protocol (IP) and it is supported by The Protocol Icmp, Igmp RARP and ARP.

- Transport Layer - it is responsible for error & free end - to - end delivery of data.

Teacher's Signature :