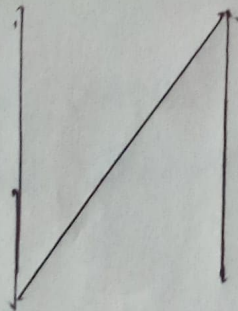
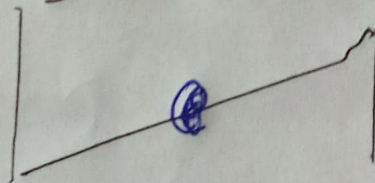


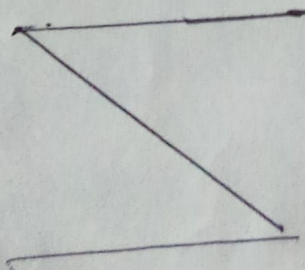
CCA

Assignment-2

Data communication overview.



A. Marikandan



Assignment -2

1) What are the different types of networks?

- * Local Area Network (LAN)
- * WLAN
- * Wide Area Network (WAN)

2) Explain the Shield Twisted pair (STP) and Unshield Twisted pair (UTP)

* Shield Twisted pair (STP)

The purpose of a STP was to transmit to a message to sender to receiver. This was productive of all messages in the

* UTP (Unshield Twisted pair).

The purpose of a UTP was to transmit to a message to sender. This was unproductive of all messages into sender and receiver.

3) What is the difference between base band and broadband transmission?

The base band is a type of signal which has a frequency range near to zero. The base band signals are used for transmitting the signals are used for transmitting the

The signals in the telecommunication world without using the modulation that means no alteration in the frequency of a signal. The bandwidth of the base band signal is near to zero. The other name of base band is the low-pass transmission.

Base band transmission:

- * Short distance signal travelling

- * Example: Ethernet is using Base band and LAN

- * Short distance signal travelling

Broad band transmission:

- * Analog signalling

- * Example: used to transmit cable or to premises

- * Signal travelling distance is long

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

Hub:-

- * A passive hub is just a connector. it connects the wires coming from different branches

- * An active hub is actually a multiport repeater

- * Those hubs which operate below the physical layer are passive hub.

Router:-

- * The routing tables are normally dynamic and are updated using routing protocols.

A computer can communicate with other computers in a network. They are joined in a network layer.

And each is a unique layer. And each makes a unique contribution to the overall network (data, address, addressing).

Switch

12-14 are low layer 2 (12) Switch 13 is a

layer 3 (13) Switch

And 12 Switch is a bridge

And 12 Switch performs the physical and

data link layer

And 13 Switch is a bridge that makes a

forwarding decision

14-16 are high layer 3 (14) Switch and router 15 is a more sophisticated 13 Switch and router 16 is a sophisticated

router. A router is a device that connects two or more dissimilar networks.

And each is normally a computer and

operates in all 7 layers of the Internet.

5) Draw TCP/IP model in detail?

X 3-801 a router is used in the Internet

* ARPANET was the starting point of the internet

* It is based on TCP/IP protocol suite

* There is a hierarchical system to provide the access in the internet.

* IP address, MAC address, and port address

6) What is a web browser (browser) give some example

Web browser allow exchange of information between the client and server applications on the WWW. Eg. Utility computing.

7) What is the search engine? Give example?

A search engine is a web-based tool that enables users to locate information on the world wide web (WWW). popular examples of search engines are Google, Yahoo!, and MSN.

8) What is the internet of WWW? What are the uses of internet in our daily life?

* WWW is also known as W3

* There are more than 19 billion websites online today internet

* The world wide web (WWW) was conceived in 1989 at the CERN lab in Geneva, Switzerland, as a way for scientists to share knowledge.

- * World wide web (WWW)
- * WWW works on client-server approach
- * Sharing, e-commerce, e-learning, knowledge
- Social connectivity, file transfer

Q) How do we view my internet browser's history?

- * Go to your Google Account
- * On the left navigation panel, click Data and privacy
- * Under History setting click my Activity
- * To view your activity: Browse your activity, organized by day and time, at the top, use the search bar and filters to find specific activity

10) What is the internet provider? Give some example of ISP in India?

* It appeals to users on limited budgets.

* The technology does not require any infrastructure, other than a telephone connection

* Dial-up internet connectivity is the most common type of access provided by ISP or

Internet service providers.

The user's router or computer enables access via a local server, that exhibits slightly of a standard 56 kilobits per second modem.

Example

AT and T, Verizon. Comcast or Spectrum.

1) Define static IP and Dynamic IP?
Discuss the difference between IPv4 and IPv6?

Static IP:-

* An Internet protocol (IP) address is a unique number assigned to each computer on a network. A computer on the internet can have a static IP address, which means it stays the same over time or a dynamic IP address, which means the address can change over time.

Dynamic IP:-

* A dynamic IP address is an IP address that an ISP lets you use temporarily. If a dynamic address is not in use, it can be automatically assigned to a different device. Dynamic IP addresses are assigned using either DHCP or PPPoE.

Difference

IPv4 and IPv6

• IPv4 is 32-bit IP address whereas IPv6 is a 128-bit IP address

• IPv4 is a numeric addressing method whereas IPv6 is an alphanumeric addressing method

• IPv4 has 12 header fields whereas IPv6 has 3 header fields

• IPv4 supports broadcast whereas IPv6 doesn't support broadcast

Q) Discuss the difference between MAC and address, IP address and port address?

The difference between IP address and port number is that IP is a numerical label that helps to identify a specific device in the network while the port number is a numerical value assigned to a process in the device. MAC addresses handle the physical connection from computer to wire while IP addresses handle the logical routable connection from both computer to computer and network to network.

13) In a network that contains two servers and twenty workstations where is the best place to install an Anti-virus program?

* As, in a network that contains two servers and twenty workstations where is the best place to install an anti virus program in their system the anti virus was improved the system production in their system.

14) When you move the NIC cards from one PC to another PC, does the MAC Address gets transferred as well?
* As well move the NIC cards from one PC to another PC.

MAC Address handle the physical connection from computer will IP address handle the logical routable connection of the other computer.

15) In a network that contains two servers and twenty

15) When troubleshooting computer network problems, what common hardware-related problem can occur?

* Noisy computer

* Ram faults and Error

* Liquid Spilled on pc

* Computer freezing - The major reason for the hardware problem in a PC is overheating.

* System error Blue screen. The user often finds a blue screen when they start the computer.