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Course code - CCA 102
Course Name - Data communications

CCA – 102 : Data Communication
Assignment – 2

Q No1:- What are different types of networks?

Ans:- 1. PAN (Personal Area Network)
2. LAN (Local Area Network)
3. MAN (Metropolitan Area Network)
4. WAN (Wide Area Network)

Q No2:- Explain the Shielded Twisted pair (STP) and unshielded twisted pair (UTP)?

Ans:- Shielded twisted pair cable has the individual pairs of wires wrapped in foil, which are then wrapped again for double protection.
Unshielded twisted pair cable has each pair of wire twisted together. Those wires are then wrapped in tubing without any other protection.

Q No3:- What is difference between baseband and broadband transmission?

Ans The Signal used for Transmission
- The baseband transmits the digital signal using the physical medium like wires.
- The broadband transmits the analog signals using optical fibers and twisted cables as a medium of transmission.

Transmission Direction

- The baseband signaling is termed as bidirectional and is capable of sending digital signals in both directions.
- The broadband signaling is termed as unidirectional and is capable of sending signals in only one direction.

Encoding Scheme Used

- The baseband signaling used Manchester encoding scheme while transmitting digital signals.
- The broadband signaling used Manchester encoding scheme while transmitting analog signals.

Topology Used

- The baseband transmission uses the bus topology as the application.
- The broadband transmission uses the tree and bus topology.

Q No 4: What is difference between hub, modem, router and a switch?

Ans A hub transmits data from one direction to another in form of binary units.

- Modem are used to connect internet while hubs are used in local area Network.
- A modem is used as an interface b/w a digital and analog network.
- A router transmits data from one network to another in form of packets.

- A switch transmits data from one direction to another in forms of frames.

Q No 5:- When you move the NIC cards from one PC to another does the MAC address get transfered as well?

Ans Yes That's because MAC address are hardwires into the ~~ad~~ NIC circuitry not the PC.
This also means that a PC can have a different MAC address when another one replaced the NIC card.

Q No 6:- When trouble shooting computer network problems what common hardware - related problem can occur?

Ans:- A large percentage of a network is made up of hardware. Problems in these areas can range from malfunctioning hard drives, broken NICs and even hardware startups.

Q No 7:- In a network that contains two servers and 20 work stations where is the best place to install an anti-virus programs?

Ans:- Best solution is to install anti-viruse on all computers in the network.

Q.No 8:- Define Static IP and Dynamic IP? Discuss the difference between IPV4 and IPV6?

Ans:- When a device is assigned a static IP address, the address does not change. Most devices use dynamic IP addresses, which are assigned by the network when they connect and change over time.

The main difference b/w IPV4 and IPV6 is the address size of IP addresses.

The IPV4 is a 32-bit address IPV6 is 128-bit hexadecimal address space, and it contains a simple header as compared to IPV4

Q.No 9:- Discuss TCP/IP model in detail.

Ans:- It stands for Transmission Control Protocol/Internet Protocol. The TCP/IP model is concise version of the OSI model. It contains four layers, unlike 7 layers in OSI.

Q.No 10:- What is a web browser? Give some examples?

Ans:- Web browser, or simply browser is an application used to access and view websites common web browsers are- Microsoft edge, Google Chrome, Apple, Safari, Internet explorer.

Q.No 11:- What is search engine? Give examples?

Ans:- A search engine is a web-based tool that enables user to locate information on the world wide web. e.g of search engines are Google, Yahoo and MSN search.

Q.No 12:- What is the Internet & WWW? What are the uses of internet in our daily life?

Ans:- The world wide web. are the pages you see when you are at a device and you're online. But internet is the network of connected computers that the web works on, as well as what emails and files travel across.

Think of internet as the roads that connect towns and cities together. The internet is very much useful in our daily life routine tasks.

Q.No 13:- what is an internet service provider? Give some examples of ISP in India.

Ans:- An Internet service provider is an organization that provides services for accessing, using or participating in the internet.

Internet service providers can be organized in various forms such as commercial community-owned, non-profit or otherwise privately owned.

The examples of some internet service providers are Hathway, BSNL, Tata teleservices, Verizon, Reliance Jio, Act Aibernet and many more working in India as well as worldwide.

Q.No14:- Discuss the difference b/w MAC and IP address and Port address?

Ans:- MAC address stands for Media Access control address. IP address stands for internet Protocol address. MAC address ensure that physical address of computer is unique. IP address is a logical address of the computer & is used to uniquely locate computer connected via a network.

Q.No15:- How do we view my Internet Browser's history

Ans:- In the lower left corner of the browser window tap and hold the back arrow. The page that open contains your browser history.