

CCA-102 Data communications

Assignment-

1. What are the different types of networks?

(Ans) Seven types of networks :-

Personal area network. A personal area network (PAN) is the smallest and simplest type of network.

- \* Local area network.
- \* Metropolitan area network.
- \* campus network.
- \* Wid area network.
- \* Content delivery network.
- \* Virtual Private network.

2. Explain the Shielded twisted pair (STP) and Unshielded twisted pair (UTP).

(Ans) - STP and UTP cables.

Shielded twisted pair cable (STP) has the individual pairs of wires wrapped in foil, which are then wrapped again for double protection. Unshielded twisted pair cable (UTP) has each pair of wires twisted together. Those wires twisted together then wrapped in tubing without any other protection.

3. What is difference between baseband and broadband transmission?

Ans - The major difference between baseband transmission and broadband transmission is that in baseband transmission the whole bandwidth of the cable is utilized by a single signal.

Conversely in the broadband transmission, multiple frequencies simultaneously using a single channel.

4. What is the difference between a hub, mo

-em, router and a switch?

Ans:— A switch transmits data from one device to another in form of frames while a router transmits data from one network to another in form of packets. A hub transmits data from one device to another in form of binary bits.

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

Ans:— Yes, that's because MAC addresses are hard-wired into the NIC circuitry, not the PC. This also means that a PC can have a different MAC address when the NIC card was replaced by another one.

6. When trouble shooting computer network problems. What common hardware-related problems can occur?

*(Ans.)* - Most common hardware related problems are PBX, LAN card, WLAN card and Wi-Fi if it is wireless, cables, switches, routers and wireless controllers. Most problems are hardware related, a faulty power cable or power supply unit. Sometimes RAM needs to be upgraded or VGA cable is not properly connected.

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

*(Ans.)* - The best solution is to install anti-virus on all the computers in the network.

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.

9. Discuss TCP/IP model in detail?

Ans:- TCP/IP stands for transmission control protocol / internet protocol and is a suite of communication protocols used to interconnect network devices on the internet. TCP/IP is also used as a communications protocol in a private network (an intranet or extranet).

10. What is a web Browser (Browser)? Give some example of browsers?

Ans:- A web browser is a type of software that allows you to find and view websites on the internet. Even if you didn't know it, you're using a web browser right now to read this page! There are many different web browsers, but

Some of the most common ones include Google chrome, safari, and Mozilla Firefox.

11. What is a search engine? Give example.

Ans:— A search engine is a web-based tool that enables users to locate information on the world wide web. Popular examples of search engines are Google, Yahoo!, and MSN Search.

12. What is the internet - is www? What are the uses of internet in our daily life?

Ans:— The world wide web - also known as the web, www or w3 - refers to all the public websites or pages that user can access on their local computers and other devices through the internet.

13. What is Internet service provider? Give some example of ISP in India?

An Internet-service provider (ISP) is a company that provides access to the internet. ISP can provide this access through multiple means, including dialup, DSL, cable wireless and fiber-optic connections. A variety of companies serve as ISPs, including cable providers, mobile carriers, and telephone companies.

Rank	ISP
1	Jio
2	Airtel
3	Vi
4	BSNL

14. Discuss the difference between MAC address, IP address and port address?

Ans. - The Physical address - which is also called a media access control, or MAC address - identifies a device to other device on the same local network. The ~~network~~ address - or IP address - identifies the device globally.

A network packet needs both addresses to its destination.

15 How do we view my internet- browser's History?

Ans:- Go to your Google account- you would have to go to the browser's they use depending on the browser, click the history tab. This will show you a list of all, browse your activity, organized by day and time.