

# CCA-102: Data Communications

## Assignment

1. What are the different types of networks?

Ans:- A computer network is a set of various computers which are connected for sharing and transferring purpose. Computer network is a digital communication system which helps our computer to connect different nodes. There are mainly three types of network: WAN (Wide Area Network), LAN(Local Area Network)and MAN.

2. Explain the shielded twisted pair (STP) and unshielded twisted pair(UTP)?

Ans:- Shielded twisted pair 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 wires twisted together. Those wires are then wrapped in tubing without any other protection.

3. What are the difference between baseband and broadband transmission?

Ans:- baseband technology transmit a single data signal/stream/channel at a time while broadband technology transmits multiple data signal/stream/channels simultaneously at the same time...same as a highway, in the broadband transmission, multiple data signal can be transmitted at the same time.

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

Ans:- Hubs are “dumb” devices that pass on anything received on one connection to all other connections.

Switches are semi intelligent devices that learn which devices are on which connection.

Routers are essentially small computers that perform a variety of intelligent tasks.

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

Ans:- Yes, that’s because MAC address are hard wired into the NIC circuitry, not the pc.This also means that a pc can have a different MAC address when another one replaced the NIC card.

6. When troubleshooting computer network problem, what common hardware related problems 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.

7. in a network that contain two servers and twenty work stations , were is the best place to install an anti-virus programme?

Ans:- The best solution is to install anti-virus o all 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 address, which are assigned by the network when they connect and change over time.

9. Discuss TCP/IP model in detail?

Ans:- TCP/IP reference model is a four layered suite of communication protocols. 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 layer-it is the lowest layer that is concerned with physical transmission of data.

10. What is the web browser? Give some example of browsers?

Ans:- A web browser or simply browser is an application used to access and view websites. Common web browsers include Microsoft edge, Internet explorer, Google chrome, Mozilla Firefox, Apple safari.

11. What is a search engine? Give an example?

Ans:- A search engine is a web based tool that enables users to locate information on world wide web. Examples are Google, Yahoo! and MNS search.

12. What is the internet and WWW? What are the uses of internet in our daily life?

Ans:- Today the internet has become unavoidable in our daily life. Appropriate use of the internet makes our daily life easy, fast and simple. The internet helps us with fact and figures, information and knowledge for personal, social and economic development.

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

Ans:- ISP stands for internet service provider. ISPs use fiber optics, satellite, copper wire and other forms to provide internet access to its customer. Examples are Airtel, BSNL etc.

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

Ans:- Both MAC address and IP address are used to uniquely identify a machine on the internet. MAC address ensures that physical address of computer is unique. IP address is a logical address of the computer and is used to uniquely locate computer connected via a network.

15. How do we view my internet browser's history?

Ans:-

- I. Open the Google chrome
- II. In the upper right corner of the screen tap the icon
- III. In the dropdown menu that appears, select history
- IV. The following page contains your device's history.