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Course title:- Data communication.

1.

## CCA 102: Data Communication

### Assignment - 2.

Qno-1. What are the 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).

Qno-2. Explain the Shielded twisted pair (STP) and unshielded twisted pair (UTP).

Ans:- Shielded twisted pair cable (STP) has the individual pairs of wires wrapped in foil, which are then wrapped again for double protection. Unshielded twisted

2.

pair cable (UTP) has each pair of wires twisted together. Those wires are then wrapped in tubing without any other protection.

Qno:3. What is the difference b/w base band and broad band transmission?

| Ans. Base band trans.                               | Broad band trans.                         |
|-----------------------------------------------------|-------------------------------------------|
| 1. Digital signalling.                              | → Analog signalling.                      |
| 2. Frequency division multiplexing is not possible. | → Transmission of data is unidirectional. |
| 3. Eg: Ethernet                                     | → Eg, used to                             |

3.

|                                   |                                         |
|-----------------------------------|-----------------------------------------|
| using baseba-<br>-nals for<br>LAN | transmit cable<br>TV to premi-<br>-ses. |
|-----------------------------------|-----------------------------------------|

Qno:4 What is the difference  
b/w a hub, modem, router  
and a switch?

Ans:- A hub :- A hub transmits  
data from one device to  
another in form of binary  
bits.

Modem :- Modem are used to  
connect to the internet while  
hubs are used in local Areas  
Networks. A modem is used  
as an interface b/w a  
digital and analog network.

Router :- A router transmits  
data from one network to

another in forms of packets.

Switch :- A switch transmits data from one device to another in forms of frames.

Qno:-5. When you move the NIC cards from one PC to another PC, does the MAC address get transferred as well?

Ans:- Yes, that's because MAC addresses are hardwired 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.

Qno:-6. When trouble shooting computer problems. What common

5.

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 hardware startups.

Qno: 9 In a network that contains two servers and twenty workstations where is the best place to install an Anti-virus programs ?

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

6.

Ques:- Define Static IP and Dynamic IP? Discuss the difference b/w 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, whereas IPV6 is a 128-bit hexadecimal address space, and it contains a simpler header as compared to IPV4.

Ques:- Discuss TCP/IP model in detail.

Ans:- It stands for transmission control protocol / internet protocol. The TCP/IP model is a concise version of the OSI model. It contains four layers, unlike seven layers in the OSI model.

Ques:- What is a web browser? Give some examples of browsers?

Ans:- A web browser or simply "browser" is an application used to access and view websites. Common web browsers include Microsoft Edge, Google Chrome, Apple Safari, Internet Explorer, Opera mini and

Q.

Mozilla Firefox.

Qno:-11. What is a search engine give examples?

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

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

Ans:- The world wide web, or web for short, are the pages you see when you're at a device.

9.

and you're online. But the internet is the network of connected computers that the web works on, as well as what emails and files travel across. Think of the internet as the roads that connect towns and cities together. The internet is very much useful in our daily routine tasks.

E.g., it helps us to see our notification and emails. A part from this people can use the internet for money transfers, bill pay, online shopping, online order food etc!

Qno: 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 other-wise privately owned.

The examples of some internet service providers are Hathway, BSNL, TATA Teleservices, Verizon, Reliance Jio, Airtel FiberNet and many more working in India as well as worldwide.

Internet service providers or ISP are responsible

for providing services for using the internet.

Qno: 14 Discuss the differences b/w MAC Address, 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 the computer is unique. IP Address is a logical address of the computer and is used to uniquely locate computer connected via a network.

Qno: 15 How do we view my Internet browser's history?

12.

Ans:- In the lower-left corner of the browser window tab and hold the back arrow. The page that opens contains your browser's history.