

CCA 102: DATA Communication

Dated: / /

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Assignment - 2

QNo1 what are the different types of network?

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

QNo2 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 pair cable (UTP) has each pair of wires twisted together. those wire are then wrapped in tubing without any other protection.

QNo3 what is difference b/w baseband and broadband transmission?

- | Ans: Baseband trans | Broadband trans |
|--|---|
| ① Digital signalling | Analog signalling |
| ② Frequency division multiplexing is not possible. | Transmission of data is unidirectional. |
| ③ E.g. Ethernet is using basebands for LAN | Eg used to transmit it cable TV to premises |

Q No 4

What is the difference b/w a hub, modem ~~and~~ router and a switch?

Ans

A hub $\Rightarrow$ A hub transmits data from one device to another in form of bits.

Modem $\Rightarrow$ Modem are used to connect to the internet while hubs are used in local area networks. A modem is used as an interface b/w a digital and analog network.

router $\Rightarrow$ A router transmits data from one network to another in form of packets.

Switch $\Rightarrow$ A switch transmits data from one device to another in form of frames.

Q No 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 that NIC card.

Q No 6

When troubleshooting computer network problems 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 hardware startups.

Q No 7 In a network that contains two series 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.

Q No 8 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 address, which assigned by the network when they connect and change over time. The main difference b/w IPV4 and IPV6 is the 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 a concise version of the OSI model. It contains four layers, unlike seven layers in the OSI model.

Q No 10 What is a 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,

Google Chrome, Apple Safari, Internet Explorer, Opera Mini + Mozilla Firefox

Q No 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 are google, yahoo and MSN search.

Q No 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 and you're online. But the internet that the web of 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 money transfers, bill pay, online shopping, online order food etc.

Q No 13 what is an Internet service provider? Give some examples of ISP India?

Ans An Internet service provider is an organization that provides services for accessing using or participating 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, 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.

Q No 14 Discuss the difference 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.

Q No 15 How do we view my Internet browser history?

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