

ASSIGNMENT

Q1/ What are the different types of network?

Ans/ 11 types of networks Explained: VPN LAN & more

1. Personal area network (PAN)
2. Local area network (LAN)
3. Wireless local area network (WLAN)
4. Campus area network (CAN)
5. Metropolitan area network (MAN)
6. Wide area network (WAN)
7. Storage-area network (SAN)
8. Systems area network (also known as SAN)
9. Passive optical local area network (POLAN)
10. Enterprise private network (EPN)
11. Virtual private network (VPN)

Q2/ Explain the shielded twisted pair (STP) and unshielded twisted pair (UTP)

Ans/ Shielded twisted pair cable (STP) has the individual pair 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. These wires are then wrapped in tubing without any other protection.

Q3/ What is difference between baseband and broadband transmission?

Ans// The major difference between broadband transmission and baseband transmission is that the baseband transmission uses the complete bandwidth for transmitting the signals and occupy the whole cable. While in broadband transmission, at the same time, multiple signals can be transmitted using multiple frequencies using only.

Ques 1) Difference between a hub, modem, router and a switch?

Ans// A switch transmits data from one (network) 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.

Ques 2) 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.

Ques 3) 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 arise from malfunctioning hard drives, broken NICs, and even hardware startups.

Q2// In a network that contains two servers and twenty workstations, where is the best place to install an anti-virus program?

Ans You need atleast three levels of security.

1. A good firewall. This can stop intrusions, malware, unauthorized access etc. before they reach the workstations.

2. Antivirus software on the servers and at the endpoint workstations. This software should be centrally managed to keep end users updated constantly and to minimize user meddling with the settings. Good antivirus will also protect email clients.

3. Educated and aware users who: do not casually install downloaded programs; don't click on unknown links; don't fall for phishing emails etc.

Q3// Define static IP and dynamic IP? Discuss the difference b/w IPV4 and IPV6.

Ans Static IP address is provided by internet service provider and remains fixed till the system is connected to the network. Dynamic

IP address is provided by DHCP. Generally a company gets a simple static IP address and then generates the dynamic IP address for its computer within the organization network.

The main difference between IPV4 and IPV6 is the address size of IP address. The IPV4 is a 32 bit address whereas IPV6 is a 128 bit hexadecimal address. IPV6 provides a large address space and it contains a simple header as compared to IPV4.

Q9, Discuss TCP/IP model in detail.

Ans/ TCP/IP reference model is a four-layered suite of communication protocols. In internet layer it defines the protocol of logical transmission of data over the network. The main protocol in this layer is internet protocol (IP) and it is supported by the protocols ICMP, IGMP, RARP and ARP.

Q10/ What is a web browser? Give some examples of web browser?

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, and Apple Safari.

Q11// What is a search engine? Give example.

Ans// A search engine is a platform on which we can search the internet content.
E.g. Google, Yahoo.

Q12// What is the internet and WWW? What are the uses of internet in our daily life?

Ans// The internet is very much useful in our daily routine tasks. E.g., it helps us to see our notifications and emails. Apart from this, people can use the internet for money transfers, shopping, order online food etc.

Q13// What is an internet service provider? Give some example of ISP in India.

Ans// An internet service provider (ISP) is the industry term for the company that is able to provide you with access to the internet, typically from a computer. E.g. of ISP are Airtel, Jio, ACT.

Q14// Discuss the difference b/w MAC address, IP address and port address.

Ans// The main difference between MAC and IP address is that MAC address is used to ensure the physical address of the computer. It uniquely identifies the devices on a network. While IP address

are used to uniquely identify the connection of the network with that device takes part in a network.

Q15// How do we view my internet browser's history?

Ans// To view your browsing history in chrome

In any chrome window, use the keyboard short-cut $\text{CTRL} + \text{H}$, or ~~alternative~~ navigate to the URL `chrome://history`, or click the menu button which is located near the top right side of the browser window, and choose history, then history again.