Chapter 8 - NETWORKS

A. Tick the correct option.

1. FTP stands for ____ .

Ans. File Transfer Protocol

2. NIC stands for ____ .

Ans. Network Interface Card

3. In which topology all the nodes in the network connected to a central device like a hub or switch wire cables?

Ans. Star Topology

4. SLA stands for ____ .

Ans. Service Level Agreement

5. Which of the following is a component of wired networks?

Ans. All of these

B. Fill in the blanks.

1. A LAN uses radio waves to connect two devices over a short distance.

2. Campus area network is a type of network that helps to connect computer located in different buildings in a campus area.

3. A protocol is a set of rules or guidelines that allows computers to communicate with each other.

4. Ethernet users Linux and Unix operating systems.

5. Unshielded twisted pair types of wires are outdated in LANs.

C. State true or false.

1. A computer network does not allow to share hardware or software resources. False

2. Data can be transmitted over a network using wired or wireless media. True

3. In client/server network architecture the powerful Central computer is called a workstation.

4. As applications grow storage capacity of RAM cannot be increased. False

5. OneDrive, Picasa and Google Docs are example of cloud storage. True

E. Answer the following questions.

1. Define the following terms.

I. Hubs - Hubs are attachment points in network cabling of a single Ethernet Network and allow network to be shared by nodes. This means all users get a percentage of the full bandwidth.

II. Server - A server is a piece of computer hardware or software that provides functionality to other programs or devices, called clients.

III. Wide Area Network - This is our geographical a distributor private telecommunication network printer connect multiple local area networks.

IV. Modem - A modem is piece of equipment that connects two or more computers together by means of a telephone line so that information can go from one to the other.

V. Topology - Topology is the arrangement of the elements like links nodes cables extra of a communication network.

2. What is the difference between thick wire and thinwire cables?

Ans. Thickwire - This wire with a diameter of 0.4 inches, this is a single copper wire with you that makes it in flexible and difficult to work with.

Thinwire - This wire with a thickness of 0.2 inches, this is a coaxial cable with data speeds of upto 10 Mbps. It flexible and easy to use.

3. What are the network requirements for Linux operating system?

Ans. 1. Have TCP/IP protocol stack installed. The software includes the clients, like FTP and TELNET which will need the TCP/IP network.

2. To connect to the Ethernet TCP/IP LAN, you will need an Ethernet card.

4. Explain the difference between Bus Topology and Star Topology?

Ans. Bus Topology - Nodes are connected in a series to a bus or a long cable. A break in the cable can bring down the entire segment till the bus is repaired.

Star Topology- All the nodes in the network are connected to a central device like hub or a switch via cables. This topology is the most preferred and popular model.

5. What does the network hardware comprise of?

Ans. The network hardware comprises of - Network Interface Card, Hubs, Repeaters, Bridges, Switches

6. What is the difference between PAN and LAN?

Ans. PAN - A PAN is a computer network for interconnecting devices centered on an individual person's workspace.

LAN - It is a group of computers and peripheral devices that share a common communications line or wireless link to a server within a distinct geographic area.

7. What is a wireless network? What are it's types?

Ans. It is a network where two or more computers communicate using wireless communication protocols.

There are two types of wireless network.

1. Peer-to-peer network

2. Base station as access point

8. What is cloud computing? Explain any two of its advantages.

Ans. Cloud computing allows customers to use shared hardware and software resources on their computer without setting up their own individual networks.

Advantages - 1. Quick and streamlined access to resources.

2. It is cost effective since it eliminates the need for own IT setup.

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