

PARAGON CONVENT SCHOOL

SECTOR 24 B CHANDIGARH

CLASS 8

CHAPTER 1 - NETWORKING CONCEPTS

RECAP: -

1. A Computer network can be defined as a group of computers and other peripheral devices that are linked together for the purpose of sharing data and hardware resources.
2. Networking in computers brings efficiency, economy and effectiveness in an organization.
3. To establish a wired network in a group of computer, additional components required such as network card, networking cable, modem, hubs and switches.
4. A modem enables to connect your computer to the available internet connection over the existing telephone lines.
5. PAN, LAN, MAN and WAN are the different types of networks.
6. Network security means protecting data and resources from any unauthorized access.

Q 1. Fill in the blanks:-

1. PAN is a computer network created for an individual person.
2. A computer network enables two or more computers to share data and resources.
3. In a network, modification or upgradation of the software or data is done at single point only.

4. Each computer in a network is called a node.
5. Network cards are used to send and receive data being transmitted over the ethernet cables .

Q 2. State true or false.

1. The computers in a network cannot work independently. False
2. Networking provides the facility to instantly deliver soft copies from one computer to the other throughout the world. True
3. Network cards is used to physically attach a computer to a network. True
4. WAN stands for, Wide area network. True
5. In WAN, computer terminals are not physically connected through wires. True
6. In star topology, all the nodes in the network are connected in a circular manner. False

Q C. Multiple Choice questions:-

1. Which is the most commonly use Network card?

- a. Wi- Fi                      b. Bluetooth                      c. Ethernet network card

2. A \_\_\_\_\_ enables you to connect your computer to the available internet connection over the existing telephone lines.

- a. Protocol                      b. Network cable                      c. Modem

3. \_\_\_\_\_ security means protecting data and resources from any unauthorised access.

- a. Network                      b. Information                      c. Resource Sharing

4. \_\_\_\_\_ type of network connects two or more computers located at different places.

- a. **WAN**                                      b. LAN                                      c. PAN

5. The data transmission speed of LAN is \_\_\_\_\_ as compared to WAN.

- a. Faster                                      b. **Slower**                                      c. Equivalent

Q E. Answer the following questions:-

Q 1. What is networking? Give some common relevant examples.

Ans. A Computer network can be defined as a group of computers and other peripheral devices that are linked together for the purpose of sharing data and hardware resources.

For Example: - If one of the computers in a network has a printer attached to it , then all the computers in that network can access the printer and use it to print the document.

Q 2. Differentiate between LAN and WAN.

Ans.

<b>LAN</b>	<b>WAN</b>
<b>1.</b> LAN is restricted to limited geographical area.	<b>1.</b> WAN covers greater distance and operates nationwide.
<b>2.</b> In LAN, computer terminals are physically connected with wires.	<b>2.</b> In WAN, computer terminals are not physically connected with wires.
<b>3.</b> The data speed is slow.	<b>3.</b> The data speed is fast
<b>4.</b> A few data transmission errors can occur.	<b>4.</b> Larger data transmission errors can occur.

Q 3. What do you mean by Network Security?

Ans. Network Security means protecting data and resources from any unauthorized access. It is the most important aspect in computer networking. Since many users are accessing the same data, so you must ensure its proper security. Only the authorized persons can access or modify data.

Q 4. What are the main networking components?

Ans. The main networking components are – Network card, Networking cable, Modem, Hubs and switches.

Q 5. Write any two advantages of networking.

Ans. Two advantages of networking are:-

1. Quickest Document delivery:

Networking provides a facility to instantly deliver soft copies from one computer to the other computer throughout the world.

2. Preserving Information:-

It is difficult to maintain regular backups on a number of stand-alone computers. When you keep backups on a central location, you have one place to look for the lost information.

Q E. Define the following terms.

1. WAN – This kind of network connects two or more computers located at distant places. They are linked by communication facilities like telecommunication or satellite signals. The most common example of WAN type network is Telecom System.

2. MODEM – A Modem enables you to connect your computer to the available internet connection over the existing telephone lines. It converts the digital signals of a computer into analog signals to enable their transmission via phone lines. At the destination, the receiving modem further converts the analog signal into digital signals so that the data can be understood at the receiving end.

3. Router – Access points or Routers are used instead of hubs/switches. These have a wireless antenna, which increases the communication range of the radio signals. Access points can also be used to join a wired network, thus making the network a combination of wired as well as wireless network.

4. Node - The computers in a network can communicate with each other as well as work independently. Each computer in a network is called a node.

5. Network card – A network card is used to physically attach a computer to a network, so that it can participate in network communication. Ethernet Network card is the most commonly used network card.