

Answer to the text questions

Chapter-1 : Introduction to Computers : Networking

A] Multiple Choice Questions

1. Inter-connection of various devices is called Networking.
(a) chatting (b) **networking** (c) Internet
2. Peripheral devices connected to the network are resources.
(a) servers (b) workstations (c) **resources**
3. In which topology all the nodes are connected in the shape of a closed loop?
(a) star (b) bus (c) **ring**

B] Fill in the blanks

1. A network can be of any size.
2. Your computer is a workstation on the network.
3. A NIC has a port where the network cable plugs in.
4. A MAN is a collection of Local Area Network within a city.
5. A Star topology has minimal line cost.

C] Write the full forms of the following

1. LAN - **Local Area Network**
2. WAN - **Wide Area Network**
3. MAN - **Metropolitan Area Network**
4. PAN - **Personal Area Network**
5. NIC - **Network Interface Card**
6. TCP/IP - **Transmission Control Protocol/Internet Protocol**
7. HTTP - **Hypertext Transfer Protocol**

D] Quiz

1. Name the computer which serves or distributes the files to the network users.
Ans1. Server

2. Name the topology in which all the nodes are connected to a central system.
Ans2. Star topology

E] Very Short Answer Questions

1. What is a node?
Ans1. A node is a computer or any other device on a network that communicates with other devices.
2. What is topology?
Ans2. The term network topology refers to the way in which the nodes of a network are linked together.
3. What is workstation?
Ans3. A workstation is a computer connected to a network.

F] Short Answer Questions

1. Describe the following : (i) network (ii) computer network.
Ans1. Networking refers to inter-connection of various devices to share their resources.

Examples – Cable network, Television network, Telephone network

A computer network is a collection of computers and peripheral devices.

2. Differentiate between LAN and WAN.

Ans2.

LAN	WAN
not more than 100 computers	connects LAN and MAN networks together
computer located close to one another	computers located across the world

3. Write a short note on the hardware parts required to establish a network.

Ans3. Cables – Cables are the wires that connect computers and resources on a network.

Connectors – A connector is a device that joins two computers on networks together.

NIC – A Network Interface Card (NIC) is a device that joins a cable to a computer. Most Network Interface Cards are installed inside a computer

G] Long Answer Questions

1. Write three benefits of using a network.

Ans1. (i) Computer connected to a network can share resources including printers and hard drives.

(ii) Network makes installing programs simple because only one copy of a program needs to be installed on a central computer.

(iii) Network increases productivity because computers connected to network share information and data.

2. Write the advantages and disadvantages of the following:

(a) Ring topology

Advantages of the Ring Topology

(i) The ring topology works well where there is no central-site computer system.

(ii) It is more reliable than a star topology.

Disadvantages of the Ring Topology

(i) The ring network requires more complicated control software.

(ii) Failure of one node results in the failure of the entire network.

(b) Star topology

Advantages of the Star Topology

(i) Star topology has minimal line cost.

(ii) If any of the local computer fails, the remaining portion of the network remains unaffected.

Disadvantages of the Star Topology

(i) The system crucially depends on the central switch. If it fails, the entire network goes down.

(C) Bus topology

Advantages of the Bus Topology

(i) It is quite easy to set up.

(ii) Failure of one node does not affect the rest of the network.

Disadvantages of the Bus Topology

(i) It offers limited flexibility for change.

(i) A signal on the bus must be strong enough to reach the receiver.