



I. Multiple Choose Questions (Any 15)

15X1=15

1. What is the use of Bridge in the Network?

- A. To connect LANs
- B. To separate LANs
- C. To control network speed
- D. All of the above

2. A device that forwards data packet from one network to another is called a ___

- A. Bridge
- B. Router**
- C. Hub
- D. Gateway

3. First version of Wi-fi (802.11) standard was introduced _____

- A. 1997**
- B. 1996
- C. 1998
- D. 1999

4. An internet is a _____

- A. Collection of WANS
- B. Network of networks**
- C. Collection of LANS
- D. Collection of identical LANS and WANS

5. The device that can operate in place of a hub is a: _____

- A. Switch**
- B. Bridge
- C. Router
- D. Gateway

6. NIC Stands for _____

- A. Network identity card
- B. Network interface code.
- C. National interface card
- D. Network interface card**

7. Which of the following is not the Networking Devices?

- A. Gateways
- B. Linux**
- C. Routers
- D. Switch

8. The location of a resource on the internet is given by its?

- A. Protocol
- B. URL**
- C. E-mail address
- D. ICQ

9. Which one of the following is not a network topology?

- A. Star
- B. Ring
- C. Bus
- D. Peer to Peer**

10. This was the first network.

- A. CSNET
- B. NSFNET
- C. ANSNET
- D. ARPANET**

11. Bluetooth is an example of _____

- A. Wireless Personal Area Network**
- B. Virtual private network
- C. Local area network
- D. Personal area network

12. Rajesh has purchased a new Smart TV and wants to cast a video from his mobile to his new Smart TV. Identify the type of network he is using:

- A. LAN
- B. MAN
- C. WAN
- D. PAN**

13. The topology in which all nodes are individually connected to a central connection point:

- A. Ring
- B. Bus
- C. Star**
- D. Tree

14. ARPANET stands for _____.

- A. Advanced Recheck Projects Agency Internet
- B. Advanced Recheck Projects Agency Network
- C. Advanced Research Projects Agency Network**
- D. Advanced Research Projects Agency Internet

15. How many pins does RJ-45 contain?

- A. Two
- B. Four
- C. Eight**
- D. Ten

16. MAC address is of _____

- A. 24 bits
- B. 36 bits
- C. 42 bits
- D. 48 bits**

17. Which of the following is not a unit for data transfer rate?

- A. MBPS
- B. KBPS
- C. SBPS**
- D. GBPS

II. One Mark Questions

(Any 5)

5X1=05

18. Name two switching circuits.

The two switching circuits are

- Circuit Switching
- Message Switching

19. What are the various types of networks?

There are three types of networks:

- i. Local Area Networks (LANs)
- ii. Metropolitan Area Network (MAN)
- iii. Wide Area Networks (WAN)

20. What is Modem?

A modem is a computer peripheral that connects a workstation to other workstation via telephone lines and facilitates communications.

21. What are hubs? What are its types?

A common connection point for devices in a network. Hubs are commonly used to connect segments of a LAN.

A hub contains multiple ports. Hubs can be either passive or active

22. What is Internet? What is E-mail?

Internet: The Internet is a worldwide network of computer networks around the globe.

E-mail: E-mail or electronic mail is sending and receiving of messages by a computer.

23. What is the difference between LAN and MAN?

LANs are computer networks confined to a localized area such as an office or a factory.

MANs are the networks that link computer facilities within a city.

III. Two Mark Questions (Any 5)

5X2=10

24. Expand the following terms:

HTTP -	The HyperText Transfer Protocol
URL -	Uniform Resource Locator
DNS -	Domain Name System
MAC -	Media Access Control.

25. What is meant by topology? Name some popular topologies.

Topology refers to the way in which the workstations attached to the network are interconnected. The most popular topologies are:

- (a) Bus or Linear Topology
- (b) Ring Topology
- (c) Star Topology
- (d) Tree Topology

26. What is ARPAnet? What is NSFnet?

ARPAnet (Advanced Research Project Agency Network) is a project sponsored by U. S. Department of Defense.

NSFnet was developed by the National Science Foundation which was high capacity network and strictly used for academic and engineering research.

27. Briefly mention two advantages and two disadvantages of Star Topology in network.

Advantage:

- Easy to install and wire.
- No disruptions to the network when connecting or removing devices.

Disadvantage :

- Requires more cable length than a linear topology.
- If the hub, switch, or concentrator fails, nodes attached are disabled.

28. Explain: Router & Gateway.

A router is a networking device whose software and hardware are usually tailored to the tasks of routing and forwarding information.

A network gateway is a computer which has internetworking capability of joining together two networks that use different base protocols.

29. What is HTML? Where it is used?

HTML (Hyper Text Markup Language) which is used to create Hypertext documents (web pages) for websites.

HTML is the static markup language.

- It is used to create Web Pages.
- Tells the browser how to display text, pictures and other support media.

IV. Three Mark Questions

(Any 2)

2X3=06

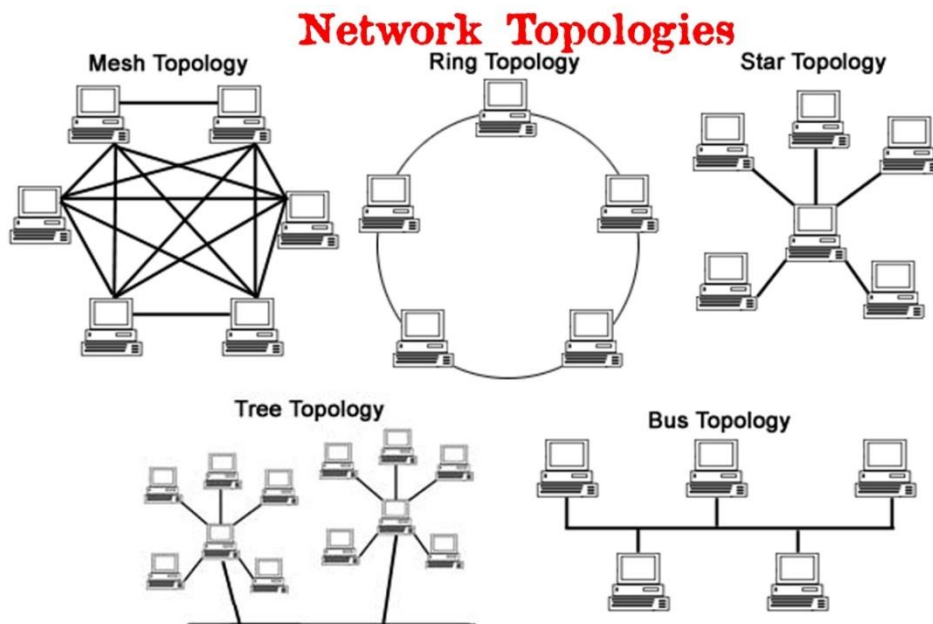
30. Briefly explain how Internet evolved.

- Evolution of networking started way back in 1969 by the development of first network called ARPANET.

The goal of this project was to connect computers at U. S. defense & different universities.

- In 1980's, the NSFnet was started to make high-capacity network strictly for academic and engineering research.
- In 1990s the internetworking of ARPANET, NSFnet and other private networks resulted into Internet.

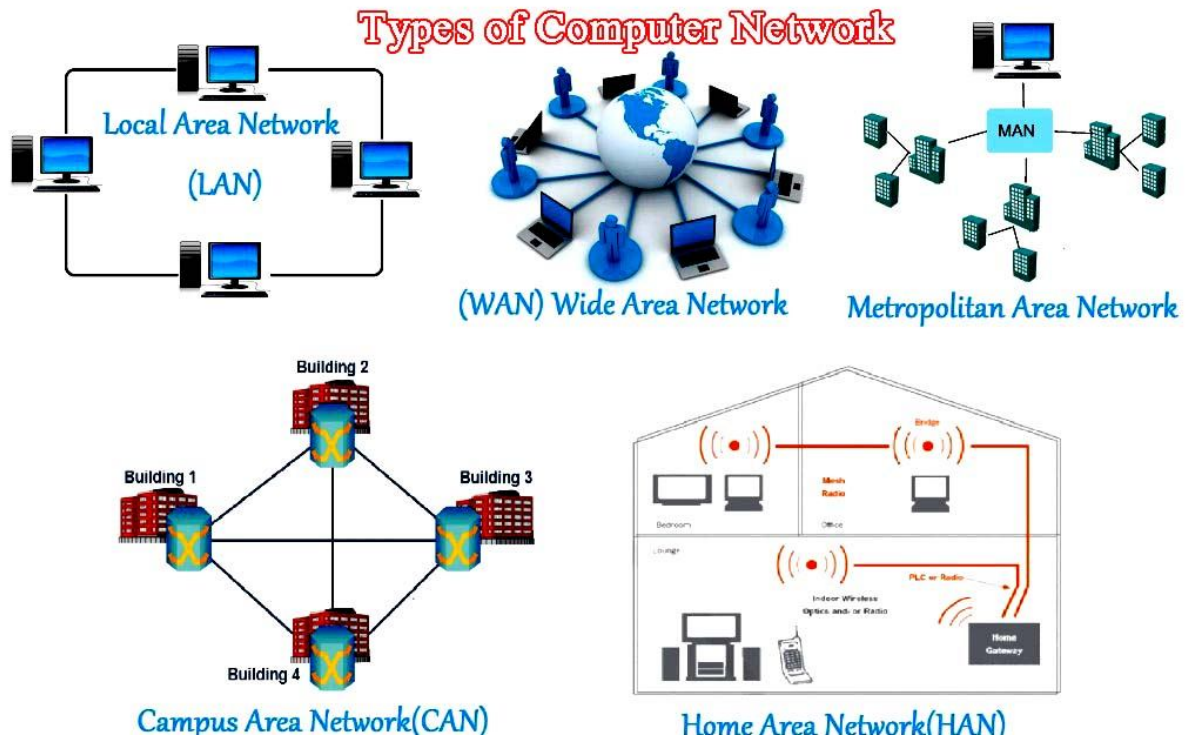
31. Explain various mostly used topologies.



1. **Bus or Linear Topology** – It is characterized by common transmission medium shared by all the connected hosts, managed by dedicated nodes. It offers simultaneous flow of data and control.
2. **Ring Topology** – A ring topology connects one host to the next and the last host to the first. This creates a physical ring of cable.
3. **Star Topology** – It is characterized by central switching mode (communication controller) unique path (point-to-point link) for each host. It is easy to add and remove additional host by upgrading the centralized node.
4. **Tree Topology** – A tree topology may be defined as a group of bus topologies put together and controlled by one node.

32. Discuss and compare various types of networks.

There are three types of networks:



a) LAN (Local Area Network) – A group of computers that shares a common connection and is usually in a small area or even in the same building. For example, it can be an office or a home network.

b) MAN (Metropolitan Area Network) – This is a larger network that connects computer users in a particular geographic area or region. For example, a large university may have a network so large that it may be classified as a MAN.

c) WAN (Wide Area Network) – This is the largest network and can inter-connect networks throughout the world because it is not restricted to a geographical location. The Internet is an example of a worldwide public WAN.

V. Four Mark Questions

4X1=04

33. Write the names of following network devices.



Repeater



Hub



Modem



NIC



Bridge



Gateway



Switch



Router