

Understanding Computer Networks: Today and Tomorrow

Computer Science · Answer Key · 20 Questions

1. What is the primary purpose of a computer network?

- A) To connect individual devices without sharing resources
- B) To allow users to share hardware, software, and data, and communicate electronically**
- C) To isolate computers from external communication
- D) To increase the processing speed of a single computer

2. Which of the following is NOT listed as a networking application in the text?

- A) The Internet
- B) Telephone service
- C) Personal banking software**
- D) Television and radio broadcasting

3. What does GPS stand for and what is its primary function?

- A) Global Positioning System; determining geographic location**
- B) General Processing System; managing computer tasks
- C) Geographic Protocol Suite; securing network data
- D) Global Performance Standard; measuring network speed

4. What type of network connects devices without physical cables, typically using radio waves?

- A) Wired network
- B) Bus network
- C) Wireless network**
- D) Mesh network

5. In a star network topology, how are devices connected?

- A) All devices are attached to a central cable.
- B) There are multiple connections between all devices.
- C) Each device is connected directly to several other devices via a host device.**
- D) Devices are connected in a linear sequence.

6. What is the role of a 'client' in a client-server network architecture?

- A) The computer dedicated to processing client requests.
- B) A device that requests and utilizes network resources.**
- C) A device that manages the entire network.
- D) A computer that provides shared software to other computers.

7. Which type of network connects devices located in a small geographic area?

- A) Personal Area Network (PAN)
- B) Wide Area Network (WAN)
- C) Metropolitan Area Network (MAN)
- D) Local Area Network (LAN)**

8. What is an Intranet?

- A) A network accessible to authorized outsiders.
- B) A private network set up by an organization for employee use.**
- C) A secure path over the Internet for remote access.
- D) A network connecting personal devices close together.

9. A network in which there are multiple connections between devices, allowing messages to take different paths, is known as a:

- A) Star network
- B) Bus network
- C) Mesh network**
- D) Client-server network

10. What is the largest network in the world mentioned in the text?

- A) A Wide Area Network (WAN)
- B) The Internet**
- C) A Metropolitan Area Network (MAN)
- D) A private intranet

11. Which type of network architecture has all computers at the same level, without dedicated servers?

- A) Client-server
- B) Peer-to-peer (P2P)**
- C) Star
- D) Bus

12. What are 'nodes' in the context of network topology?

- A) The cables connecting devices
- B) The devices in the network**
- C) The data being transmitted
- D) The network protocols

13. What is the purpose of a Virtual Private Network (VPN)?

- A) To create a physical connection between remote locations.
- B) To provide a secure path over the Internet for accessing a private network.**
- C) To broadcast television signals wirelessly.
- D) To monitor the location of assets using RFID.

14. Which of the following is a type of wired networking medium?

- A) Radio waves
- B) Wi-Fi
- C) Fiber optic cables**
- D) Bluetooth

15. What is 'placeshifting' content as mentioned in the context of multimedia networking?

- A) Storing multimedia content on a central server.
- B) Distributing multimedia content throughout a home network.
- C) Accessing home multimedia content from outside the home.**
- D) Converting multimedia files to different formats.

16. What does 'Telemedicine' involve?

- A) Remote control of industrial robots.
- B) Providing medical information and services using networking technology.**
- C) Simulating surgical procedures for training.
- D) Monitoring the status of vehicles in real-time.

17. A network that serves a metropolitan area such as a city or county is called a:

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

18. What is the primary characteristic of a bus network?

- A) Each device connects to a central hub.
- B) All devices are attached to a central cable.**
- C) Devices have multiple direct connections to each other.
- D) It covers a very large geographic area.

19. Which of the following are types of mobile phones mentioned?

- A) Landline phones and cordless phones
- B) Cellular phones and satellite phones**
- C) VoIP phones and feature phones
- D) Fax machines and pagers

20. What does an 'Extranet' allow?

- A) Unauthorized access to an organization's internal network.
- B) Employees to access external websites.
- C) Authorized outsiders to access at least part of an organization's intranet.**
- D) Secure communication between two specific computers.