

Multiple Choice Quiz: Introduction to Computer Networks

1. What is a computer network?

- A) A single computer
- B) A collection of interconnected devices
- C) A software program
- D) A type of CPU

2. What is the purpose of a computer network?

- A) To reduce device battery life
- B) To share resources and data
- C) To limit connectivity
- D) To increase hardware costs

3. Which protocol is used for reliable data transfer?

- A) USB
- B) TCP/IP
- C) HDMI
- D) Bluetooth

4. In the client-server model, what does the client do?

- A) Provides services
- B) Requests services
- C) Manages hardware
- D) Stores all data

5. What is a characteristic of a Local Area Network (LAN)?

- A) Global coverage
- B) High-speed connections
- C) Public ownership
- D) Low bandwidth

6. Which technology is commonly used for wired LANs?

- A) Wi-Fi
- B) Ethernet
- C) Bluetooth
- D) Infrared

7. Which physical component is used for high-speed, long-distance transmission?

- A) Twisted pair cable
- B) Coaxial cable
- C) Fiber optic cable
- D) Radio waves

8. What does a Network Interface Card (NIC) do?

- A) Displays network data
- B) Connects a device to a network
- C) Stores data permanently
- D) Manages power supply

9. Which network device directs data between networks?

- A) Hub
- B) Switch
- C) Router
- D) Modem

10. What is the function of a modem?

- A) Connects devices in a LAN
- B) Converts digital signals to analog
- C) Broadcasts data to all devices
- D) Extends Wi-Fi coverage

11. Which transmission medium is used in Wi-Fi networks?

- A) Fiber optic
- B) Radio waves
- C) Twisted pair
- D) Coaxial cable

12. What is an IP address used for?

- A) Identifying a device on a network
- B) Storing data
- C) Managing bandwidth
- D) Cooling network devices

13. Which IP address type has 32 bits?

- A) IPv6
- B) IPv4
- C) MAC address
- D) Subnet mask

14. How is a dynamic IP address assigned?

- A) Manually by the user
- B) By a DHCP server
- C) By the operating system
- D) By the modem

15. Which protocol is used for file sharing in networks?

- A) TCP/IP
- B) SMB
- C) HTTP
- D) FTP

16. What is an example of device sharing in a network?

- A) Using a single printer for multiple computers
- B) Storing data on a local drive
- C) Installing software on one device
- D) Connecting to a single monitor

17. Which network topology uses a central switch or hub?

- A) Bus
- B) Ring
- C) Star
- D) Mesh

18. What is a disadvantage of the bus topology?

- A) High cost
- B) Single point of failure
- C) Complex setup
- D) Limited scalability

19. Which topology is highly reliable but expensive?

- A) Star
- B) Bus
- C) Ring
- D) Mesh

20. What is a benefit of a star topology?

- A) Single point of failure
- B) Easy to manage and scale
- C) High cable costs
- D) Slow data transfer

21. Which device improves efficiency by sending data only to the intended recipient?

- A) Hub
- B) Switch
- C) Modem
- D) Access point

22. What does bandwidth measure in a network?

- A) Data storage capacity
- B) Data transfer rate
- C) Number of devices
- D) Signal strength