≡ **Instructions**

1. Which device is responsible for determining the best path for data packets to travel across multiple networks? **1 point**

○ Network switch

◉ Router

○ Modem

○ Bridge

2. Which device operates at Layer 3 of the OSI model and uses IP addresses to route network traffic between different networks? **1 point**

○ Network switch

◉ Router

○ Modem

○ Firewall

3. Which layer of the OSI model is responsible for addressing and routing packets? **1 point**

◉ Network layer

○ Data link layer

○ Transport layer

○ Physical layer

4. Which model defines seven layers of networking protocols? **1 point**

◉ OSI model

○ DoD model

○ TCP/IP model

○ Ethernet model

5. Which network topology connects all devices in a linear sequence where each device is connected to exactly two other devices, except for the first and last devices? **1 point**

○ Bus topology

○ Star topology

◉ Ring topology

○ Mesh topology

6. Which device provides a connection between a local area network (LAN) and the internet service provider (ISP)? **1 point**

○ Network switch

○ Router

◉ Modem

○ Firewall

7. Which network topology requires the least amount of cabling and is easy to set up, but if the central device fails, the entire network becomes inaccessible? **1 point**

○ Bus topology

◉ Star topology

○ Ring topology

○ Ring topology

○ Mesh topology

8. Which network topology consists of a single shared communication line to which all devices are connected?   **1 point**

◉ Bus topology

○ Star topology

○ Ring topology

○ Mesh topology

9. Which device provides wireless network connectivity within a local area network (LAN)?   **1 point**

○ Network switch

○ Router

○ Modem

◉ Wireless access point

10. Which layer of the OSI model provides encryption and decryption of data for secure communication?   **1 point**

◉ Presentation layer

○ Session layer

○ Application layer

○ Physical layer

11. Which device can be used to create logical network segments and improve network performance by reducing network congestion?   **1 point**

◉ Network switch

○ Router

○ Modem

○ Repeater

12. The DoD model is commonly known as the: **1 point**

◉ Four-layer model

○ Five-layer model

○ Six-layer model

○ Seven-layer model

13. Which layer of the OSI model is responsible for establishing, managing, and terminating connections between devices?   **1 point**

○ Transport layer

◉ Session layer

○ Data link layer

○ Presentation layer

14. Which device is primarily used to connect multiple devices within a local area network (LAN)?   **1 point**

◉ Network switch

○ Router

○ Modem

○ Hub

15. Which device can perform Network Address Translation (NAT) to allow multiple devices on a private network to share a single public IP address?   **1 point**

- ○ Network switch
- ◉ Router
- ○ Modem
- ○ Bridge

- ○ Network switch

- ◉ Router

- ○ Modem

- ○ Bridge