Formative Assessments (Quizzes)

1. Describe the following networks: LAN, WAN, VLAN, SAN, VPN, PAN, AND P2P.
2. Vocabulary Quizzes
    a. Network Fundamentals
        i. standard
        ii. protocol
    b. Data Transmission
        i. data packet
        ii. data integrity
        iii. flow control
        iv. deadlock
        v. congestion
        vi. error checking
        vii. packet switching
    c. Wireless Networks
        i. hardware components
        ii. software components
        iii. WIFI
        iv. WIMAX
        v. LTE
        vi. LTE-Advanced
        vii. encryption
        viii. authentication
        ix. MAC address filtering

3. Differentiate between standards and protocols
4. Identify the technologies required to provide a VPN.
5. Outline the characteristics of different transmission media
6. Outline the advantages and disadvantages of wireless networks.
7. Identify the hardware and software components of a wireless network.
8. Describe the characteristics of the following wireless networks: WIFI, WIMAX, LTE, and LTE-Advanced.
9. What are 3G and 4G mobile networks? What about 5G Networks?
10. Describe encryption, authentication, and MAC address filtering.

Summative Assessments (Test Question Bank)

Network Fundamentals

1. Outline the importance of standards in the construction of networks
2. Explain why protocols are necessary
3. What is the purpose of the OSI Model?
4. Draw a diagram of the OSI Model showing how data flows through the seven layers
5. Evaluate the use of a VPN.

Data Transmission

6. Explain why the speed of data transmission across a network can vary
7. Explain why compression of data is often necessary when transmitting across a network
8. Evaluate the use of a VPN
9. Explain how data is transmitted by packet switching

Wireless Networking

10. Evaluate the effectiveness of encryption, authentication, and MAC address filtering as they relate to wireless networking
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