IT15- Network Technologies

1. What is the main function of a network device?

A. Data storage

B. Data transmission

C. Data processing

D. Data encryption

Answer: B. Data transmission

2. Which network access technique involves carrier sensing and collision detection?

A. CSMA/CA

B. CSMA/CD

C. Token Passing

D. Polling

Answer: B. CSMA/CD

3. What is the primary advantage of using Voice over Internet Protocol (VoIP)?

A. Lower cost compared to traditional phone systems

B. Higher call quality

C. Greater reliability

D. More security features

Answer: A. Lower cost compared to traditional phone systems

4. What is the main purpose of layering in networking?

A. To simplify network design

B. To improve network security

C. To enable interoperability between different systems

D. To reduce network latency

Answer: C. To enable interoperability between different systems

5. Which model defines seven layers of network functionality?

A. OSI Model

B. TCP/IP model

C. Ethernet model

D. UDP model

Answer: A. OSI Model

6. Which layer of the OSI model is responsible for error detection and correction?

A. Physical Layer

B. Data Link Layer

C. Network Layer

D. Transport Layer

Answer: B. Data Link Layer

7. Which protocol is commonly used for error detection in HDLC networks?

A. CRC

B. ARQ

C. TCP

D. UDP

Answer: A. CRC

8. What is the main function of IP addressing?

A. To identify the physical location of a device on the network

B. To identify the logical location of a device on the network

C. To encrypt data transmitted over the network

D. To compress data before transmission

Answer: B. To identify the logical location of a device on the network

9. Which IPv4 address class is reserved for loopback testing?

A. Class A

B. Class B

C. Class C

D. Class D

Answer: A. Class A

10. Which routing protocol is commonly used for interior routing within an Autonomous System (AS)?

A. BGP

B. RIP

C. OSPF

D. ARP

Answer: C. OSPF

11. What is the primary function of a Dynamic Host Configuration Protocol (DHCP) server?

A. To assign IP addresses to client devices dynamically

B. To translate domain names into IP addresses

C. To route data between different networks

D. To provide secure access to network resources

Answer: A. To assign IP addresses to client devices dynamically

12. What is the main purpose of a firewall?

A. To detect and prevent unauthorized access to the network

B. To encrypt data transmitted over the network

C. To optimize network performance

D. To route data between different networks

Answer: A. To detect and prevent unauthorized access to the network

13. What is the Berkeley Socket API commonly used for?

A. Network monitoring

B. Network management

C. Network programming

D. Network encryption

Answer: C. Network programming

14. Which system call is commonly used to create a socket in socket programming?

A. bind()

B. listen()

C. accept()

D. socket()

Answer: D. socket()

15. What is the purpose of specifying an endpoint address in socket programming?

A. To establish a connection between two sockets

B. To identify the network interface used by a socket

C. To specify the port number used by a socket

D. To encrypt data transmitted over a socket

Answer: C. To specify the port number used by a socket