1. Identify whether the given statement is true or false.
   "In a bus topology, when a computer transmits its data, the signals travel in both directions on the bus until they reach both ends."
   A. False
   B. True
   **Answer:** B

2. Identify whether the given statement is true or false.
   "A switch passes data based on the MAC address."
   A. True
   B. False
   **Answer:** A

3. The ____ layer provides access to the network for applications and certain user functions. It displays incoming information and prepares outgoing information for network access.
   A. Transport
   B. Network
   C. Physical
   D. Session
   E. Data-link
   F. Application
   **Answer:** F

4. Which of the following utilities will produce the output as shown in the image below?
   A. PING
   B. NETSTAT
   C. TRACERT
   D. NBTSTAT
   **Answer:** A

5. Which of the following is a function of a WINS server on a network?
   A. Assigning virtual memory to the server.
   B. Assigning IP addresses.
   C. Converting host names to domain names.
   D. Converting NetBIOS names to IP addresses.
   E. Assigning computer names.
   **Answer:** D

6. Which of the following services is required in a routed network to communicate with the DHCP server on another segment?
   A. DHCP
   B. RIS
   C. DNS
D. DHCP relay agent  
E. WINS  
**Answer:** D

7. Which of the following utilities will produce the output as shown in the image below?  
A. NBTSTAT  
B. IPCONFIG  
C. PING  
D. NETSTAT  
**Answer:** B

8. In the FDDI network, each network node is connected to a central cabling nexus called a  
   A. Concentrator  
   B. Gateway  
   C. Repeater  
   D. Transceiver  
   E. NIC  
   F. Bridge  
**Answer:** A

9. Which of the following devices is required for remotely accessing the network through  
   PSTN lines?  
A. Hub  
B. Bridge  
C. Switch  
D. Modem  
E. Gateway  
F. Router  
**Answer:** D

11. Which of the following standards uses twisted pair cabling?  
A. 10Base5  
B. 10BaseT  
C. 100BaseSX  
D. 100BaseFX  
**Answer:** B

12. Which of the following statements is true regarding VLAN?  
A. It increases the number of interfaces available to the network.  
B. It is applied in case of RIP routing.  
C. It configures permissions across the network.  
D. It enables the user to map port number.  
**Answer:** A
13. Identify whether the given statement is true or false.
"In a segmented network, the router prevents broadcasts from being transferred from one segment to another."
A. True
B. False
**Answer:** A

14. Which of the following functions is not performed by a router?
A. Internetwork communication
B. Broadcast forwarding
C. Packet filtering
D. Packet switching
**Answer:** B

15. Which of the following cables offers more resistance to crosstalk than the other cables?
A. Unshielded twisted pair
B. Fiber-optic
C. Coaxial
D. Shielded twisted pair
**Answer:** B