

Week 3 assignment answers

إجابات الاختيار من متعدد

1. C
 2. C
 3. D
 4. C
 5. B
 6. C
 7. B
 8. C
 9. D
 10. C
 11. C
 12. C
 13. C
 14. C
 15. C
 16. D
 17. B
 18. A
 19. C
 20. C
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إجابات الأسئلة المقالية

Q1.

The Network Layer provides logical addressing, routing, packet forwarding, encapsulation, and de-encapsulation using IP.

Q2.

IPv4 uses 32-bit addresses and requires NAT due to address depletion, while IPv6 uses 128-bit addresses, has a simplified header, and eliminates the need for NAT.

Q3.

The host compares its IP address and subnet mask with the destination IP. If the destination is outside the local network, traffic is sent to the Default Gateway.

Q4.

The Default Gateway forwards traffic outside the local network. Without it, a host cannot communicate with remote networks.

Q5.

Static routing is manually configured and suitable for small networks, while dynamic routing automatically adapts to topology changes and is suitable for larger networks.