Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

1. What is a network device?

   A. A type of software used for internet browsing

   B. A physical device used to connect and communicate on a network

   C. A virus protection program

   D. A power supply unit

   Answer: B. A physical device used to connect and communicate on a network

   Explanation: Network devices enable data transmission between networked hardware like computers and printers.

2. Which of the following is NOT a network device?

   A. Router

   B. Switch

   C. Monitor

   D. Hub

   Answer: C. Monitor

   Explanation: A monitor is an output device, not a network device. Routers, switches, and hubs are used in networking.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

3. Which device is used to route data from a local network to the internet?

   A. Repeater

   B. Switch

   C. Router

   D. Bridge

   Answer: C. Router

   Explanation: A router connects local networks to other networks like the internet.

4. What device amplifies a weak signal and retransmits it?

   A. Router

   B. Repeater

   C. Switch

   D. Firewall

   Answer: B. Repeater

   Explanation: A repeater is used to boost signals so data can travel longer distances without degradation.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

5. What device operates at the Data Link layer and forwards data based on MAC addresses?

   A. Router

   B. Switch

   C. Modem

   D. Firewall

   Answer: B. Switch

   Explanation: A switch works at Layer 2 (Data Link layer) and uses MAC addresses to forward data to the correct device within a local network.

6. What is the main function of a hub in a network?

   A. Filters traffic by IP

   B. Sends data only to the intended recipient

   C. Broadcasts data to all connected devices

   D. Blocks unauthorized traffic

   Answer: C. Broadcasts data to all connected devices

   Explanation: A hub is a basic device that broadcasts incoming data to all connected ports, regardless of the destination address, often causing unnecessary traffic.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

7. Which device can convert digital signals to analog and vice versa for transmission over telephone lines?

   A. Switch

   B. Modem

   C. Repeater

   D. Router

   Answer: B. Modem

   Explanation: A modem (modulator-demodulator) converts digital signals into analog signals for transmission over phone lines and vice versa.

8. Which device is used to connect two different types of networks (e.g., LAN to WAN)?

   A. Switch

   B. Repeater

   C. Router

   D. Hub

   Answer: C. Router

   Explanation: A router is designed to connect different networks, such as a local area network (LAN) to a wide area network (WAN) like the internet.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

9. What is the primary function of a switch?

   A. Encrypt data before sending

   B. Provide internet access

   C. Forward data to the correct device using MAC address

   D. Block unauthorized access

   Answer: C. Forward data to the correct device using MAC address

   Explanation: Switches forward data only to the intended recipient, using its MAC address, improving efficiency.

10. What does "Modem" stand for?

    A. Module Emulator

    B. Modulator Demodulator

    C. Modular Device

    D. Monitor Emulator

    Answer: B. Modulator Demodulator

    Explanation: A modem modulates and demodulates signals, allowing digital data to be transmitted over analog lines.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

11. What is the primary function of a modem?

A. Store large files

B. Convert analog signals into digital and vice versa

C. Print documents

D. Filter spam emails

Answer: B. Convert analog signals into digital and vice versa

Explanation: A modem converts digital signals from a computer into analog signals for transmission and vice versa.

12. What type of connection does a modem typically provide?

A. Wireless Bluetooth

B. HDMI connection

C. Internet connection over telephone or cable lines

D. USB file transfer

Answer: C. Internet connection over telephone or cable lines

Explanation: Modems are used to connect to the Internet using DSL, cable, or telephone lines.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

13. What kind of signals do telephone lines use?

A. Digital

B. Optical

C. Analog

D. Wireless

Answer: C. Analog

Explanation: Telephone lines transmit analog signals, so digital signals must be converted using a modem.

14. What happens at the receiver's end in a modem communication process?

A. Encoding

B. Demodulation

C. Encryption

D. Compression

Answer: B. Demodulation

Explanation: The receiver's modem demodulates the incoming analog signal back into digital data.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

15. What is modulation in data communication?

A. Turning off the signal

B. Increasing power

C. Converting analog to digital

D. Converting digital signals into analog

Answer: D. Converting digital signals into analog

Explanation: Modulation is the process of converting digital data into an analog signal for transmission over analog mediums like phone lines.

16. What is demodulation in the context of networking?

A. Compressing data before sending

B. Changing signal frequency

C. Converting analog signals back to digital data

D. Encrypting data

Answer: C. Converting analog signals back to digital data

Explanation: Demodulation is the reverse of modulation—turning analog signals back into usable digital data.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

17. What is another common name for an Ethernet card?

A. Modem

B. Switch

C. Network Interface Card (NIC)

D. Router

Answer: C. Network Interface Card (NIC)

Explanation: An Ethernet card is also called a NIC, which allows a computer to connect to a wired network.

18. What is the main function of a Network Interface Card (NIC)?

A. Boost signal strength

B. Route data between networks

C. Act as an interface between the computer and the network

D. Filter incoming data

Answer: C. Act as an interface between the computer and the network

Explanation: The NIC enables data exchange between a computer and the network.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

19. Which type of network does an Ethernet card typically connect to?

A. Wireless LAN

B. WAN

C. Wired LAN

D. Bluetooth network

Answer: C. Wired LAN

Explanation: An Ethernet card is specifically designed for wired local area networks (LANs).

20. What is the typical data transfer speed range of Ethernet cards?

A. 1 Mbps to 10 Mbps

B. 10 Mbps to 100 Mbps

C. 10 Mbps to 1 Gbps (1000 Mbps)

D. 1000 Mbps to 10 Gbps

Answer: C. 10 Mbps to 1 Gbps (1000 Mbps)

Explanation: Common Ethernet cards support 10/100/1000 Mbps speeds, depending on the card and network setup.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

21. What unique identifier does every NIC have?

A. IP address

B. Hostname

C. MAC address

D. Gateway address

Answer: C. MAC address

Explanation: Every NIC is assigned a Media Access Control (MAC) address, which uniquely identifies it on the network.

22. What type of address is a MAC address?

A. Logical address

B. Physical address

C. Dynamic address

D. Broadcast address

Answer: B. Physical address

Explanation: The MAC address is a physical/hardware address embedded in the NIC by the manufacturer.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

23. What does RJ45 stand for?

A. Remote Jack 45

B. Registered Jack 45

C. Radio Junction 45

D. Routed Junction 45

Answer: B. Registered Jack 45

Explanation: RJ45 stands for Registered Jack-45, a standardized network interface for connecting Ethernet cables.

24. How many pins does an RJ45 connector have?

A. 6

B. 4

C. 8

D. 2

Answer: C. 8

Explanation: An RJ45 connector has 8 pins, allowing it to handle 8 wires used in Ethernet cabling.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

25. Which type of cable typically uses the RJ45 connector?

A. Coaxial cable

B. USB cable

C. Ethernet cable (Twisted Pair)

D. HDMI cable

Answer: C. Ethernet cable (Twisted Pair)

Explanation: RJ45 connectors are used with Cat5, Cat5e, Cat6, and Cat6a Ethernet cables for networking purposes.

26. What is the maximum theoretical data transfer speed for RJ45 connectors with Cat6a cable?

A. 100 Mbps

B. 1 Gbps

C. 10 Gbps

D. 100 Gbps

Answer: C. 10 Gbps

Explanation: With Cat6a cable, RJ45 connectors can support speeds up to 10 Gbps over short distances.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

27. What happens if an RJ45 cable is not properly crimped?

A. The cable becomes faster

B. The cable overheats

C. The network connection becomes unreliable or fails

D. The cable turns into a coaxial cable

Answer: C. The network connection becomes unreliable or fails

Explanation: A poorly crimped RJ45 connector can lead to connection issues, including packet loss and slow speeds.

28. What is the primary function of a repeater in networking?

A. Converts analog to digital

B. Filters network traffic

C. Amplifies and retransmits signals

D. Assigns IP addresses

Answer: C. Amplifies and retransmits signals

Explanation: A repeater regenerates and boosts weak signals, extending the reach of the network.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

29. What type of device is a repeater also commonly known as?

A. Bridge

B. Gateway

C. Signal booster

D. Switch

Answer: C. Signal booster

Explanation: Since it boosts the signal, a repeater is often called a signal booster.

30. Where are repeaters typically used?

A. In very short cable networks

B. In long-distance or wide area networks

C. Inside a modem

D. Between switches and hubs

Answer: B. In long-distance or wide area networks

Explanation: Repeaters are ideal for long-distance communication to maintain signal strength.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

31. Which network scenario would require a repeater?

A. A small office with all devices in one room

B. Connecting two cities via fiber optic cable

C. A computer with a built-in wireless card

D. Bluetooth device pairing

Answer: B. Connecting two cities via fiber optic cable

Explanation: In long-distance networks, like between cities, repeaters are used at intervals to maintain signal integrity.

32. What is the primary function of a hub in a network?

A. Routes data to specific devices

B. Filters and forwards data based on MAC addresses

C. Broadcasts data to all connected devices

D. Encrypts network traffic

Answer: C. Broadcasts data to all connected devices

Explanation: A hub sends incoming data to all devices connected to it, regardless of the destination.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

33. What is the primary function of a hub in a network?

A. Routes data to specific devices

B. Filters and forwards data based on MAC addresses

C. Broadcasts data to all connected devices

D. Encrypts network traffic

Answer: C. Broadcasts data to all connected devices

Explanation: A hub sends incoming data to all devices connected to it, regardless of the destination.

34. How is a hub classified in terms of network intelligence?

A. Smart

B. Intelligent

C. Non-intelligent

D. Dynamic

Answer: C. Non-intelligent

Explanation: A hub is a non-intelligent device because it cannot determine the destination of data packets.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

35. What type of data transmission does a hub perform?

A. Unicast

B. Multicast

C. Broadcast

D. Anycast

Answer: C. Broadcast

Explanation: Hubs perform broadcast transmission, sending data to all connected devices.

36. How does a hub handle incoming data?

A. It reads the MAC address and forwards accordingly

B. It encrypts the data

C. It sends the data to all ports

D. It discards the data if destination is unknown

Answer: C. It sends the data to all ports

Explanation: Hubs lack intelligence and simply send data to all ports, not just the one it's meant for.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

37. When comparing speed and efficiency, a hub is:

A. Faster and more efficient than a switch

B. Equal to a router

C. Slower and less efficient than a switch

D. Used only for wireless networking

Answer: C. Slower and less efficient than a switch

Explanation: Hubs are basic and slow compared to switches, which intelligently direct traffic.

38. What is the main function of a network switch?

A. Sends data to all devices in the network

B. Filters viruses in the network

C. Forwards data only to the intended recipient device

D. Converts analog signals to digital

Answer: C. Forwards data only to the intended recipient device

Explanation: A switch is an intelligent device that forwards data only to the device it is meant for, based on MAC addresses.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

39. Which address type does a switch use to forward data?

A. IP address

B. Port address

C. MAC address

D. Hostname

Answer: C. MAC address

Explanation: Switches use the MAC address (physical address) of devices to determine where to send the data.

40. How is a switch different from a send?

A. A switch is wireless, a hub is wired

B. A switch sends data to one device, a hub sends to all

C. A hub is faster than a switch

D. A hub stores IP addresses

Answer: B. A switch sends data to one device, a hub sends to all

Explanation: Unlike a hub, which broadcasts data to all devices, a switch sends data only to the correct device.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

41. What makes a switch an "intelligent" network device?

A. It stores usernames

B. It chooses the best route using IP

C. It filters traffic based on MAC addresses

D. It connects to the internet

Answer: C. It filters traffic based on MAC addresses

Explanation: Switches maintain a MAC address table and direct traffic intelligently.

42. In terms of speed and intelligence, a switch is:

A. Slower and less intelligent than a hub

B. The same as a hub

C. Faster and smarter than a hub

D. Used only for wireless networks

Answer: C. Faster and smarter than a hub

Explanation: Switches are more efficient, reducing traffic and improving network performance.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

43. What is the primary function of a router in networking?

A. Store user data

B. Convert analog signals to digital

C. Connect different networks and route data between them

D. Assign MAC addresses

Answer: C. Connect different networks and route data between them

Explanation: A router connects multiple networks and directs data packets between them using IP addresses.

44. What type of address does a router use to forward data?

A. MAC address

B. Hostname

C. IP address

D. Port number

Answer: C. IP address

Explanation: Routers make forwarding decisions based on IP addresses in the packet headers.

Name of the Bundle	Proficient Bundle V1	Subject	Networking V1
Topic	Network Devices	Last updated on	07 July 2025

45. What device is most commonly used to connect a home or office network to the internet?

A. Switch

B. Hub

C. Router

D. Repeater

Answer: C. Router

Explanation: A router is typically used to connect internal networks (LAN) to the external internet (WAN).

46. Can a router connect two different IP networks?

A. No, only the same network

B. Yes, that's its primary function

C. Only using a hub

D. Only using Wi-Fi

Answer: B. Yes, that's its primary function

Explanation: Routers are designed to connect different IP networks, such as LAN to WAN.