

Tên

Lớp học

Ngày

1. **A company is contemplating whether to use a client/server or a peer-to-peer network. What are three characteristics of a peer-to-peer network? (Choose three.)**
  - a) easy to create
  - b) lacks centralized administration
  - c) better device performance when acting as both client and server
  - d) better security
  - e) less cost to implement
  
2. **Which device performs the function of determining the path that messages should take through internetworks?**
  - a) a DSL modem
  - b) a router
  - c) a web server
  - d) a firewall
  
3. **What two criteria are used to help select a network medium from various network media? (Choose two.)**
  - a) the types of data that need to be prioritized
  - b) the cost of the end devices utilized in the network
  - c) the number of intermediary devices installed in the network
  - d) the distance the selected medium can successfully carry a signal
  - e) the environment where the selected medium is to be installed

**4. Which two statements describe intermediary devices? (Choose two.)**

- a) Intermediary devices initiate the encapsulation process
- b) Intermediary devices direct the path of the data.
- c) Intermediary devices connect individual hosts to the network.
- d) Intermediary devices generate data content.
- e) Intermediary devices alter data content.

**5. What are two functions of end devices on a network? (Choose two.)**

- a) They provide the channel over which the network message travels
- b) They filter the flow of data to enhance security.
- c) They originate the data that flows through the network.
- d) They are the interface between humans and the communication network.
- e) They direct data over alternate paths in the event of link failures.

**6. Which area of the network would a college IT staff most likely have to redesign as a direct result of many students bringing their own tablets and smartphones to school to access school resources?**

- a) intranet
- b) extranet
- c) wireless LAN
- d) wireless WAN
- e) wired LAN

**7. What type of network must a home user access in order to do online shopping?**

- a) an extranet
- b) an intranet
- c) the Internet
- d) a local area network

**8. An employee at a branch office is creating a quote for a customer. In order to do this, the employee needs to access confidential pricing information from internal servers at the Head Office. What type of network would the employee access?**

- a) the Internet
- b) a local area network
- c) an intranet
- d) an extranet

9. **Which two connection options provide an always-on, high-bandwidth Internet connection to computers in a home office? (Choose two.)**

- a) cellular
- b) satellite
- c) cable
- d) DSL
- e) dial-up telephone

10. **Which two Internet connection options do not require that physical cables be run to the building? (Choose two.)**

- a) satellite
- b) dialup
- c) dedicated leased line
- d) cellular
- e) DSL

11. **Which term describes the state of a network when the demand on the network resources exceeds the available capacity?**

- a) optimization
- b) convergence
- c) synchronization
- d) congestion

12. **What type of network traffic requires QoS?**

- a) email
- b) wiki
- c) video conferencing
- d) on-line purchasing

13. **Which expression accurately defines the term bandwidth?**

- a) a set of techniques to manage the utilization of network resources
- b) a state where the demand on the network resources exceeds the available capacity
- c) a measure of the data carrying capacity of the media
- d) a method of limiting the impact of a hardware or software failure on the network

14. **A network administrator is implementing a policy that requires strong, complex passwords. Which data protection goal does this policy support?**

- a) data redundancy
- b) data integrity
- c) data confidentiality
- d) data quality

15. **Which statement describes a characteristic of cloud computing?**

- a) A business can connect directly to the Internet without the use of an ISP.
- b) Investment in new infrastructure is required in order to access the cloud
- c) Devices can connect to the Internet through existing electrical wiring.
- d) Applications can be accessed over the Internet by individual users or businesses using any device, anywhere in the world.

16. **What is the Internet?**

- a) It is a network based on Ethernet technology.
- b) It provides network access for mobile devices.
- c) It provides connections through interconnected global networks.
- d) It is a private network for an organization with LAN and WAN connections

17. **Which statement describes the use of powerline networking technology?**

- a) Wireless access points use powerline adapters to distribute data through the home LAN
- b) New “smart” electrical cabling is used to extend an existing home LAN.
- c) A home LAN is installed without the use of physical cabling.
- d) A device connects to an existing home LAN using an adapter and an existing electrical outlet.

18. **What security violation would cause the most amount of damage to the life of a home user?**

- a) spyware that leads to spam emails
- b) denial of service to your email server
- c) replication of worms and viruses in your computer
- d) capturing of personal data that leads to identity theft

19. **A user is implementing security on a small office network. Which two actions would provide the minimum security requirements for this network? (Choose two.)**

- a) implementing an intrusion detection system
- b) implementing a firewall
- c) installing antivirus software
- d) installing a wireless network
- e) adding a dedicated intrusion prevention device

20. **A \_\_\_\_\_ network is capable of delivering voice, video, text, and graphics over the same communication channels.**
- a) LAN  
b) WAN  
c) synchronized  
d) converged
21. **The acronym \_\_\_\_\_ refers to the policy that allows employees to use their personal devices in the business office to access the network and other resources.**
- a) BYOD  
b) BYOC  
c) IRC  
d) ADW
22. interactive websites where people create and share user-generated content with friends and family
- a) social media  
b) blog  
c) podcast  
d) wiki
23. Web pages that groups of people can edit and view together
- a) blog  
b) podcast  
c) social media  
d) wiki
24. an audio-based medium that allows people to deliver their recordings to a wide audience
- a) wiki  
b) instant messaging  
c) blog  
d) podcast
25. real-time communication of between two or more people
- a) podcast  
b) instant messaging  
c) wiki  
d) social media
26. web pages that give anyone a means to communicate their thoughts to a global audience without technical knowledge of web design
- a) instant messaging  
b) blog  
c) social media  
d) wiki

27. Not suited for heavily wooded areas

- |                          |          |
|--------------------------|----------|
| a) satellite             | b) cable |
| c) dedicated leased line | d) DSL   |

28. uses coaxial cable as a medium

- |              |           |
|--------------|-----------|
| a) satellite | b) cable  |
| c) DSL       | d) dialup |

29. typically has very low bandwidth

- |           |                          |
|-----------|--------------------------|
| a) dialup | b) dedicated leased line |
| c) DSL    | d) cable                 |

30. high bandwidth connection that runs over telephone line

- |                          |          |
|--------------------------|----------|
| a) dialup                | b) DSL   |
| c) dedicated leased line | d) cable |

31. typically uses a T1/E1 or T3/E3 circuit

- |          |                          |
|----------|--------------------------|
| a) DSL   | b) satellite             |
| c) cable | d) dedicated leased line |

32. only the intended recipients can access and read the data

- |                             |                          |
|-----------------------------|--------------------------|
| a) ensuring confidentiality | b) maintaining integrity |
| c) ensuring availability    |                          |

33. the assurance that the information has not been altered during transmission

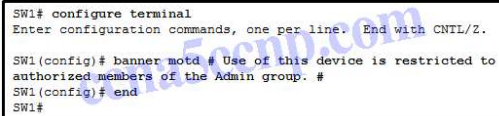
- |                             |                          |
|-----------------------------|--------------------------|
| a) ensuring availability    | b) maintaining integrity |
| c) ensuring confidentiality |                          |

34. the assurance of timely and reliable access to data
- a) ensuring confidentiality
  - b) maintaining integrity
  - c) ensuring availability
35. Which networking trend involves the use of personal tools and devices for accessing resources on a business or campus network?
- a) powerline networking
  - b) BYOD
  - c) video conferencing
  - d) cloud computing
36. **What is a characteristic of a converged network?**
- a) A converged network requires a separate network infrastructure for each type of communication technology
  - b) it delivers data, voice, and video over the same network infrastructure
  - c) it limits the impact of a failure by minimizing the number of devices affected
  - d) it provides only one path between the source and destination of a message
37. **What is the function of the kernel of an operating software?**
- a) It is an application that allows the initial configuration of a Cisco device.
  - b) The kernel links the hardware drivers with the underlying electronics of a computer.
  - c) The kernel provisions hardware resources to meet software requirements
  - d) It provides a user interface that allows users to request a specific task
38. A network administrator needs to keep the user ID, password, and session contents private when establishing remote CLI connectivity with a switch to manage it. Which access method should be chosen?
- a) SSH
  - b) AUX
  - c) Telnet
  - d) Console

39. **Which procedure is used to access a Cisco 2960 switch when performing an initial configuration in a secure environment?**
- a) Use Secure Shell to remotely access the switch through the network.
  - b) Use the AUX port to locally access the switch from a serial or USB interface of the PC
  - c) Use Telnet to remotely access the switch through the network.
  - d) Use the console port to locally access the switch from a serial or USB interface of the PC.
40. Which command or key combination allows a user to return to the previous level in the command hierarchy?
- a) Ctrl-Z
  - b) end
  - c) Ctrl-C
  - d) exit
41. A router has a valid operating system and a configuration file stored in NVRAM. The configuration file contains an enable secret password but no console password. When the router boots up, which mode will display?
- a) global configuration mode
  - b) privileged EXEC mode
  - c) setup mode
  - d) user EXEC mode
42. **Which two functions are provided to users by the context-sensitive help feature of the Cisco IOS CLI? (Choose two.)**
- a) allowing the user to complete the remainder of an abbreviated command with the TAB key
  - b) selecting the best command to accomplish a task
  - c) providing an error message when a wrong command is submitted
  - d) determining which option, keyword, or argument is available for the entered command
  - e) displaying a list of all available commands within the current mode
43. Which information does the show startup-config command display?
- a) the bootstrap program in the ROM
  - b) the IOS image copied into RAM
  - c) the contents of the current running configuration file in the RAM
  - d) the contents of the saved configuration file in the NVRAM



44. Why is it important to configure a hostname on a device?
- a) a Cisco router or switch only begins to operate when its hostname is set
  - b) to allow local access to the device through the console port
  - c) a hostname must be configured before any other parameters
  - d) to identify the device during remote access (SSH or telnet)
45. Which two host names follow the guidelines for naming conventions on Cisco IOS devices? (Choose two.)
- a) HO Floor 17
  - b) SwBranch799
  - c) Branch2!
  - d) RM-3-Switch-2A4
  - e) Floor(15)
46. **How does the service password-encryption command enhance password security on Cisco routers and switches?**
- a) It encrypts passwords that are stored in router or switch configuration files.
  - b) It requires that a user type encrypted passwords to gain console access to a router or switch.
  - c) It encrypts passwords as they are sent across the network.
  - d) It requires encrypted passwords to be used when connecting remotely to a router or switch with Telnet

47. 

**Refer to the exhibit. A network administrator is configuring the MOTD on switch SW1. What is the purpose of this command?**

- a) to configure switch SW1 so that only the users in the Admin group can telnet into SW1
- b) to force users of the Admin group to enter a password for authentication
- c) to configure switch SW1 so that the message will display when a user enters the enable command
- d) to display a message when a user accesses the switch

48. **While trying to solve a network issue, a technician made multiple changes to the current router configuration file. The changes did not solve the problem and were not saved. What action can the technician take to discard the changes and work with the file in NVRAM?**
- a) Issue the reload command without saving the running configuration.
  - b) Issue the copy startup-config running-config command
  - c) Close and reopen the terminal emulation software.
  - d) Delete the vlan.dat file and reboot the device.
49. Which statement is true about the running configuration file in a Cisco IOS device?
- a) It is stored in NVRAM.
  - b) It should be deleted using the erase running-config command.
  - c) It affects the operation of the device immediately when modified.
  - d) It is automatically saved when the router reboots.
50. **What are two characteristics of RAM on a Cisco device? (Choose two.)**
- a) RAM is able to store multiple versions of IOS and configuration files
  - b) The contents of RAM are lost during a power cycle.
  - c) RAM is a component in Cisco switches but not in Cisco routers.
  - d) The configuration that is actively running on the device is stored in RAM.
  - e) RAM provides nonvolatile storage.
51. Which interface allows remote management of a Layer 2 switch?
- a) the AUX interface
  - b) the first Ethernet port interface
  - c) the console port interface
  - d) the switch virtual interface
52. Which interface is the default SVI on a Cisco switch?
- a) GigabitEthernet 0/1
  - b) VLAN 99
  - c) VLAN 1
  - d) FastEthernet 0/1

53. Why would a Layer 2 switch need an IP address?

- a) to enable the switch to function as a default gateway
- b) to enable the switch to receive frames from attached PCs
- c) to enable the switch to send broadcast frames to attached PCs
- d) to enable the switch to be managed remotely

54. What command can be used on a Windows PC to see the IP configuration of that computer?

- a) ipconfig
- b) ping
- c) show interfaces
- d) show ip interface brief

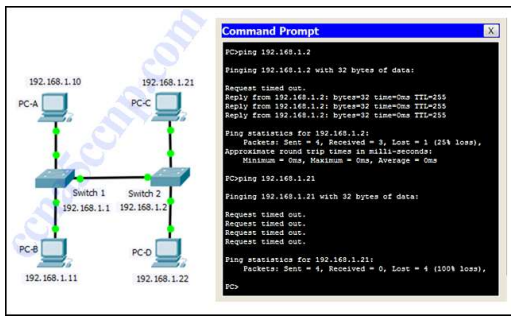
55. **A technician is adding a new PC to a LAN. After unpacking the components and making all the connections, the technician starts the PC. After the OS loads, the technician opens a browser, and verifies that the PC can reach the Internet. Why was the PC able to connect to the network with no additional configuration?**

- a) The PC came preconfigured with IP addressing information from the factory.
- b) The PC does not require any additional information to function on the network.
- c) The PC was preconfigured to use DHCP.
- d) The PC used DNS to automatically receive IP addressing information from a server.
- e) The PC virtual interface is compatible with any network.

56. **What is a user trying to determine when issuing a ping 10.1.1.1 command on a PC?**

- a) what type of device is at the destination
- b) if there is connectivity with the destination device
- c) the path that traffic will take to reach the destination
- d) if the TCP/IP stack is functioning on the PC without putting traffic on the wire

57.



Refer to the exhibit. A network technician is testing connectivity in a new network. Based on the test results shown in the exhibit, which device does the technician have connectivity with and which device does the technician not have connectivity with? (Choose two.)

- a) connectivity: switch 2
- b) connectivity: PC-D
- c) no connectivity: switch 1
- d) no connectivity: PC-C
- e) no connectivity: switch 2

58.

Switch# show ip interface brief					
Interface	IP-Address	OK?	Method	Status	Protocol
FastEthernet0/1	unassigned	YES	manual	up	up
FastEthernet0/2	unassigned	YES	manual	down	down
FastEthernet0/3	unassigned	YES	manual	down	down
FastEthernet0/5	unassigned	YES	manual	down	down
FastEthernet0/6	unassigned	YES	manual	down	down
(output omitted)					
FastEthernet0/23	unassigned	YES	manual	down	down
FastEthernet0/24	unassigned	YES	manual	down	down
Vlan1	192.168.11.3	YES	manual	up	up

Refer to the exhibit. What three facts can be determined from the viewable output of the show ip interface brief command? (Choose three.)

- a) One device is attached to a physical interface.
- b) Two physical interfaces have been configured.
- c) Two devices are attached to the switch.
- d) The default SVI has been configured
- e) The switch can be remotely managed.

59. **An administrator is configuring a switch console port with a password. In what order will the administrator travel through the IOS modes of operation in order to reach the mode in which the configuration commands will be entered? (Not all options are used.)**

-first mode -interface configuration mode

-second mode -privileged EXEC mode

-third mode -line configuration mode

-final mode -global configuration mode

-user EXEC mode

a) first mode - user EXEC mode

second mode - privileged EXEC mode

third mode - line configuration mode

final mode - interface configuration mode

b) first mode - user EXEC mode

second mode - global configuration mode

third mode - interface configuration mode

final mode - line configuration mode

c) first mode - global configuration mode

second mode - line configuration mode

third mode - user EXEC mode

final mode - privileged EXEC mode

d) first mode - user EXEC mode

second mode - privileged EXEC mode

third mode - global configuration mode

final mode - line configuration mode

60. displays the next screen

a) space bar

b) tab

c) up arrow

d) ?

61. Scrolls backwards through previously entered commands

a) up arrow

b) tab

c) ctrl-shift-6

d) ctrl-c

62. provides context-sensitive help

a) space bar

b) ctrl-c

c) tab

d) ?

63. completes abbreviated commands and parameters

a) space bar

b) tab

c) ?

d) up arrow

64. aborts commands such as trace and ping
- a) ctrl-shift-6
  - b) space bar
  - c) ctrl-c
  - d) up arrow
65. cancels any command currently being entered and returns directly to privileged EXEC mode
- a) ctrl-shift-6
  - b) up arrow
  - c) tab
  - d) ctrl-c
66. What method can be used by two computers to ensure that packets are not dropped because too much data is being sent too quickly?
- a) access method
  - b) response timeout
  - c) encapsulation
  - d) flow control
67. What type of communication will send a message to all devices on a local area network?
- a) multicast
  - b) broadcast
  - c) unicast
  - d) allcast
68. What process is used to place one message inside another message for transfer from the source to the destination?
- a) access control
  - b) flow control
  - c) encapsulation
  - d) decoding
69. **A web client is sending a request for a webpage to a web server. From the perspective of the client, what is the correct order of the protocol stack that is used to prepare the request for transmission?**
- a) Ethernet, IP, TCP, HTTP
  - b) Ethernet, TCP, IP, HTTP
  - c) HTTP, IP, TCP, Ethernet
  - d) HTTP, TCP, IP, Ethernet

70. **Which statement is correct about network protocols?**

- a) They define how messages are exchanged between the source and the destination.
- b) They all function in the network access layer of TCP/IP.
- c) Network protocols define the type of hardware that is used and how it is mounted in racks.
- d) They are only required for exchange of messages between devices on remote networks

71. **Which statement is true about the TCP/IP and OSI models?**

- a) The TCP/IP network access layer has similar functions to the OSI network layer.
- b) The OSI Layer 7 and the TCP/IP application layer provide identical functions.
- c) The TCP/IP transport layer and OSI Layer 4 provide similar services and functions.
- d) The first three OSI layers describe general services that are also provided by the TCP/IP internet layer

72. **What is an advantage of using standards to develop and implement protocols?**

- a) A particular protocol can only be implemented by one manufacturer.
- b) Products from different manufacturers can interoperate successfully.
- c) Standards provide flexibility for manufacturers to create devices that comply with unique requirements
- d) Different manufacturers are free to apply different requirements when implementing a protocol.

73. **What three application layer protocols are part of the TCP/IP protocol suite? (Choose three.)**

- a) FTP
- b) NAT
- c) DNS
- d) DHCP
- e) ARP

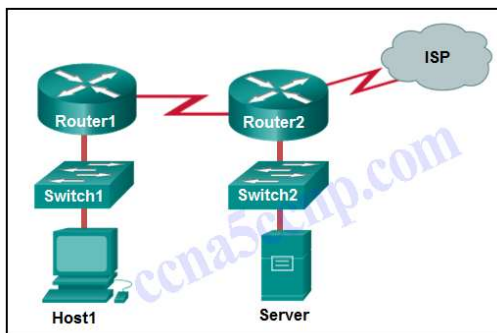
74. **What are proprietary protocols?**

- a) a collection of protocols known as the TCP/IP protocol suite
- b) protocols that can be freely used by any organization or vendor
- c) protocols developed by private organizations to operate on any vendor hardware
- d) protocols developed by organizations who have control over their definition and operation

75. What is an advantage of network devices using open standard protocols?

- a) A client host and a server running different operating systems can successfully exchange data.
- b) Network communications is confined to data transfers between devices from the same vendor.
- c) Competition and innovation are limited to specific types of products.
- d) Internet access can be controlled by a single ISP in each market.

76.



Refer to the exhibit. If Host1 were to transfer a file to the server, what layers of the TCP/IP model would be used?

- a) only Internet and network access layers
- b) application, transport, Internet, and network access layers
- c) only application, Internet, and network access layers
- d) application, session, transport, network, data link, and physical layers
- e) only application and Internet layers

77. Which three layers of the OSI model are comparable in function to the application layer of the TCP/IP model? (Choose three.)

- a) application
- b) transport
- c) data link
- d) session
- e) presentation

78. At which layer of the OSI model would a logical address be encapsulated?

- a) data link layer
- b) network layer
- c) transport layer
- d) physical layer



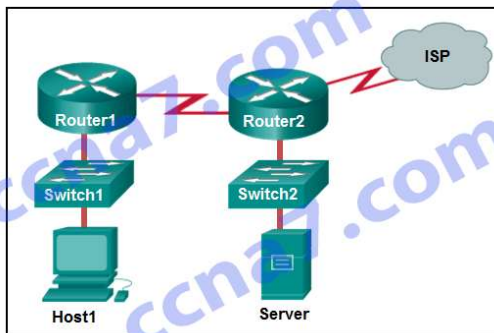
79. Which PDU format is used when bits are received from the network medium by the NIC of a host?

- a) frame
- b) segment
- c) packet
- d) file

80. Which PDU is processed when a host computer is de-encapsulating a message at the transport layer of the TCP/IP model?

- a) segment
- b) frame
- c) bits
- d) packet

81.



**Refer to the exhibit. HostA is attempting to contact ServerB. Which two statements correctly describe the addressing that HostA will generate in the process? (Choose two.)**

- a) A frame with the destination MAC address of SwitchA.
- b) A packet with the destination IP address of ServerB.
- c) A frame with the destination MAC address of RouterA
- d) A packet with the destination IP address of RouterA.
- e) A packet with the destination IP address of RouterB.

82. Which address does a NIC use when deciding whether to accept a frame?

- a) destination MAC address
- b) source MAC address
- c) destination IP address
- d) source IP address
- e) source Ethernet address

83. **What will happen if the default gateway address is incorrectly configured on a host?**

- a) The host will have to use ARP to determine the correct address of the default gateway.
- b) The switch will not forward packets initiated by the host.
- c) The host cannot communicate with hosts in other networks.
- d) A ping from the host to 127.0.0.1 would not be successful
- e) The host cannot communicate with other hosts in the local network.

84. **Which characteristic describes the default gateway of a host computer?**

- a) the logical address of the router interface on the same network as the host computer
- b) the logical address assigned to the switch interface connected to the router
- c) the physical address of the router interface on the same network as the host computer
- d) the physical address of the switch interface connected to the host computer

85. the process of converting information from one format into another acceptable for transmission

- a) message encapsulation
- b) message encoding
- c) message sizing

86. the process of placing one message format inside another message format

- a) message encapsulation
- b) message encoding
- c) message sizing

87. the process of breaking up a long message into individual pieces before being sent over the network

- a) message encoding
- b) message sizing
- c) message encapsulation

88. governing the way a web server and a web client interact

- a) network access protocol
- b) internet protocol
- c) transport protocol
- d) application protocol

89. taking the segments from transport protocol, encapsulating them into packets, and assigning them with appropriate addresses
- a) application protocol
  - b) network access protocol
  - c) internet protocol
  - d) transport protocol
90. preparing packets to be transmitted over the network media
- a) application protocol
  - b) internet protocol
  - c) network access protocol
  - d) transport protocol
91. managing the individual conversations between web servers and web clients
- a) transport protocol
  - b) internet protocol
  - c) network access protocol
  - d) application protocol
92. this organization promotes the open development, evolution, and use of the Internet throughout the world
- a) ISOC
  - b) ISO
  - c) ICANN
  - d) EIA
93. this organization is the largest developer of international standards in the world for a wide variety of products and services. It is know for its Open Systems Interconnection (OSI) reference model
- a) ISO
  - b) ISOC
  - c) IANA
  - d) ICANN
94. This organization is responsible for overseeing and managing IP address allocation, domain name management, and protocol identifiers
- a) ISOC
  - b) IANA
  - c) EIA
  - d) ICANN

95. This organization is an international standards and trade organization for electronics organizations. It is best known for its standards related to electrical wiring, connectors, and the 19-inch racks used to mount networking equipment.

a) ICANN

b) ISOC

c) IANA

d) EIA

