

## CCNA 1 Practice Final v5.0 Exam Answers 2015 (100%)

1. A host is accessing a Web server on a remote network. Which three functions are performed by intermediary network devices during this conversation? (Choose three.)

- regenerating data signals
- acting as a client or a server
- providing a channel over which messages travel
- applying security settings to control the flow of data
- notifying other devices when errors occur
- serving as the source or destination of the messages

2. For which three reasons was a packet-switched connectionless data communications technology used when developing the Internet? (Choose three.)

- It can rapidly adapt to the loss of data transmission facilities.
- It efficiently utilizes the network infrastructure to transfer data.
- Data packets can travel multiple paths through the network simultaneously.
- It allows for billing of network use by the amount of time a connection is established.
- It requires that a data circuit between the source and destination be established before data can be transferred.

3. A medium-sized business is researching available options for connecting to the Internet. The company is looking for a high speed option with dedicated, symmetric access. Which connection type should the company choose?

- DSL
- dialup
- satellite
- leased line
- cable modem

4. What is an ISP?

- It is a standards body that develops cabling and wiring standards for networking.
- It is a protocol that establishes how computers within a local network communicate.
- It is an organization that enables individuals and businesses to connect to the Internet.
- It is a networking device that combines the functionality of several different networking devices in one.

5. An administrator needs to upgrade the IOS in a router to a version that supports new features. Which factor should the administrator consider before performing the upgrade?

- The old IOS must be removed first.
- NVRAM must be erased before the new IOS can be installed.
- **The new IOS might require more RAM to function properly.**
- The old IOS should be backed up to NVRAM so that it is not lost during a power failure.

6. Refer to the exhibit. A network engineer is attempting to connect to a new router to perform the initial configuration. The engineer connects a rollover cable from the serial port of a PC to the Aux port on the router, then configures HyperTerminal as shown. The engineer cannot get a login prompt in HyperTerminal. What would fix the problem?



CCNA 1 Practice Final Answer 001 (v5.02, 2015)

- Connect to the Ethernet port on the PC.
- Change connection settings to even parity.
- **Move the cable to the router console port.**
- Use a crossover cable instead of a rollover cable.

7. Which connection provides a secure CLI session with encryption to a Cisco router?

- a console connection
- an AUX connection
- a Telnet connection
- **an SSH connection**

**8. Refer to the exhibit. An administrator is trying to view the current configuration on this switch but receives the error message that is displayed. What does this error indicate?**

```
Router# sh r
% Ambiguous command: 'sh r'
```

*CCNA 1 Practice Final Answer 002 (v5.02, 2015)*

- The command does not exist.
- One or more required keywords or arguments were omitted.
- **Not enough characters were entered for the interpreter to recognize the command.**
- The administrator does not have the required level of access to use this command.

**9. Refer to the exhibit. From global configuration mode, an administrator is attempting to create a message-of-the-day banner by using the command banner motd V Authorized access only! Violators will be prosecuted! V When users log in using Telnet, the banner does not appear correctly. What is the problem?**

```
Authorized access only!
Router>
```

*CCNA 1 Practice Final Answer 003 (v5.02, 2015)*

- The banner message is too long.
- **The delimiting character appears in the banner message.**
- The symbol “!” signals the end of a banner message.
- Message-of-the-day banners will only appear when a user logs in through the console port.

**10. A network administrator enters the service password-encryption command into the configuration mode of a router. What does this command accomplish?**

- This command encrypts passwords as they are transmitted across serial WAN links.
- **This command prevents someone from viewing the running configuration passwords.**
- This command enables a strong encryption algorithm for the enable secret password command.

- This command automatically encrypts passwords in configuration files that are currently stored in NVRAM.
- This command provides an exclusive encrypted password for external service personnel who are required to do router

**11. Refer to the exhibit. A network administrator is configuring access control to switch SW1. If the administrator uses a console connection to connect to the switch, which password is needed to access user EXEC mode?**

```
Enter configuration commands, one per line. End with CNTL/Z.
SW1(config)# enable password letmein
SW1(config)# enable secret secretin
SW1(config)# line console 0
SW1(config-line)# password lineconin
SW1(config-line)# login
SW1(config-line)# exit
SW1(config)# line vty 0 15
SW1(config-line)# password linevtyin
SW1(config-line)# login
SW1(config-line)# end
SW1#
```

*CCNA 1 Practice Final Answer 004 (v5.02, 2015)*

- letmein
- secretin
- **lineconin**
- linevtyin

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

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

**13. A network administrator is designing a new network infrastructure that includes both wired and wireless connectivity. Under which situation would a wireless connection be recommended?**

- The end-user device only has an Ethernet NIC.
- The end-user device requires a dedicated connection because of performance requirements.
- **The end-user device needs mobility when connecting to the network.**

- The end-user device area has a high concentration of RFI.

**14. A network administrator is troubleshooting connectivity issues on a server. Using a tester, the administrator notices that the signals generated by the server NIC are distorted and not usable. In which layer of the OSI model is the error categorized?**

- presentation layer
- network layer
- **physical layer**
- data link layer

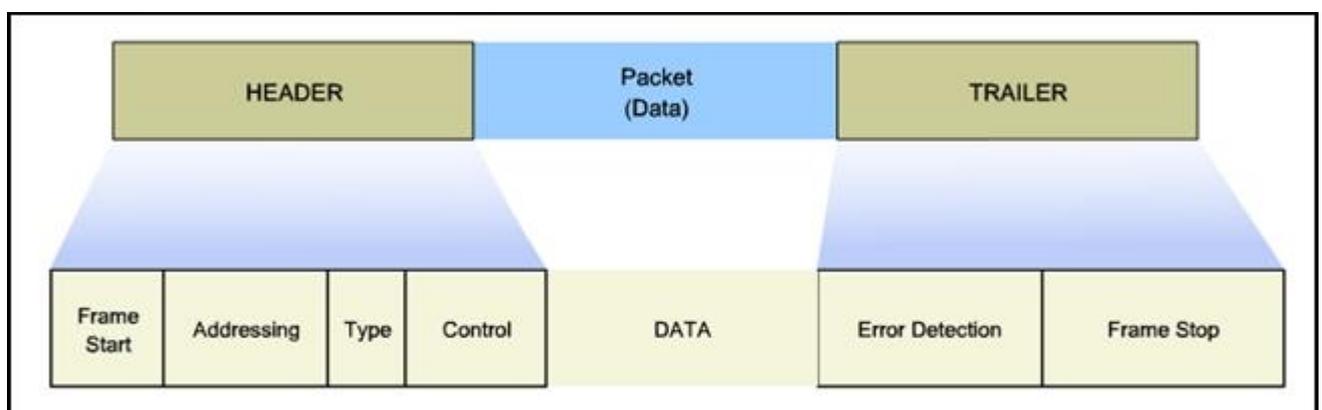
**15. Why are the paired wires twisted in a CAT5 cable?**

- to facilitate cable termination in the connector
- to extend the signaling length
- to improve the mechanical strength
- **to provide eletromagnetic noise cancellation**

**16. What makes fiber preferable to copper cabling for interconnecting buildings? (Choose three.)**

- **greater distances per cable run**
- lower installation cost
- **limited susceptibility to EMI/RFI**
- durable connections
- **greater bandwidth potential**
- easily terminated

**17. Refer to the exhibit. Which layer of the OSI model would format data in this way?**



*CCNA 1 Practice Final Answer 005 (v5.02, 2015)*

- physical
- network

- data link
- transport
- application

**18. On a point-to-point network, which communication type is used when two devices can both transmit and receive but not at the same time?**

- controlled access
- deterministic
- full-duplex
- half-duplex

**19. What three statements describe features or functions of media access control? (Choose three.)**

- Controlled media access involves collision handling.
- It is responsible for detecting transmission errors in transmitted data.
- It uses contention-based access also known as deterministic access.
- 802.11 utilizes CSMA/CD.
- Data link layer protocols define the rules for access to different media.
- Ethernet utilizes CSMA/CD.

**20. A frame is transmitted from one networking device to another. Why does the receiving device check the FCS field in the frame?**

- to determine the physical address of the sending device
- to verify the network layer protocol information
- to compare the interface media type between the sending and receiving ends
- to check the frame for possible transmission errors
- to verify that the frame destination matches the MAC address of the receiving device

**21. The ARP table in a switch maps which two types of address together?**

- Layer 3 address to a Layer 2 address
- Layer 3 address to a Layer 4 address
- Layer 4 address to a Layer 2 address
- Layer 2 address to a Layer 4 address

**22. What are two actions performed by a Cisco switch? (Choose two.)**

- building a routing table that is based on the first IP address in the frame header
- using the source MAC addresses of frames to build and maintain a MAC address table
- forwarding frames with unknown destination IP addresses to the default gateway
- utilizing the MAC address table to forward frames via the destination MAC address

- examining the destination MAC address to add new entries to the MAC address table

**23. Which two functions are primary functions of a router? (Choose two.)**

- **packet switching**
- microsegmentation
- domain name resolution
- **path selection**
- flow control

**24. A router boots and enters setup mode. What is the reason for this?**

- The IOS image is corrupt.
- Cisco IOS is missing from flash memory.
- **The configuration file is missing from NVRAM.**
- The POST process has detected hardware failure.

**25. Using default settings, what is the next step in the router boot sequence after the IOS loads from flash?**

- Perform the POST routine.
- Search for a backup IOS in ROM.
- Load the bootstrap program from ROM.
- Load the running-config file from RAM.
- **Locate and load the startup-config file from NVRAM.**

**26. What are two ways that TCP uses the sequence numbers in a segment? (Choose two.)**

- **to identify missing segments at the destination**
- **to reassemble the segments at the remote location**
- to specify the order in which the segments travel from source to destination
- to limit the number of segments that can be sent out of an interface at one time
- to determine if the packet changed during transit

**27. A high school in New York (school A) is using videoconferencing technology to establish student interactions with another high school (school B) in Russia. The videoconferencing is conducted between two end devices through the Internet. The network administrator of school A configures the end device with the IP address 192.168.25.10. The administrator sends a request for the IP address for the end device in school B and the response is 192.168.25.10. The administrator knows immediately that this IP will not work. Why?**

- This is a loopback address.
- This is a link-local address.
- **This is a private IP address.**
- There is an IP address conflict.

**28. Which service will translate private internal IP addresses into Internet routable public IP addresses?**

- ARP
- DHCP
- DNS
- **NAT**
- 

**29. Which IPv6 address notation is valid?**

- 2001:0DB8::ABCD::1234
- ABCD:160D::4GAB:FFAB
- **2001:DB8:0:1111::200**
- 2001::ABCD::

**30. Which range of link-local addresses can be assigned to an IPv6-enabled interface??**

- FEC0::/10?
- FDEE::/7?
- **FEBF::/10**
- FF00::/8?

**31. What are the three parts of an IPv6 global unicast address? (Choose three.)**

- broadcast address
- **global routing prefix**
- subnet mask
- **subnet ID**
- **interface ID**

**32. What is the purpose of ICMP messages?**

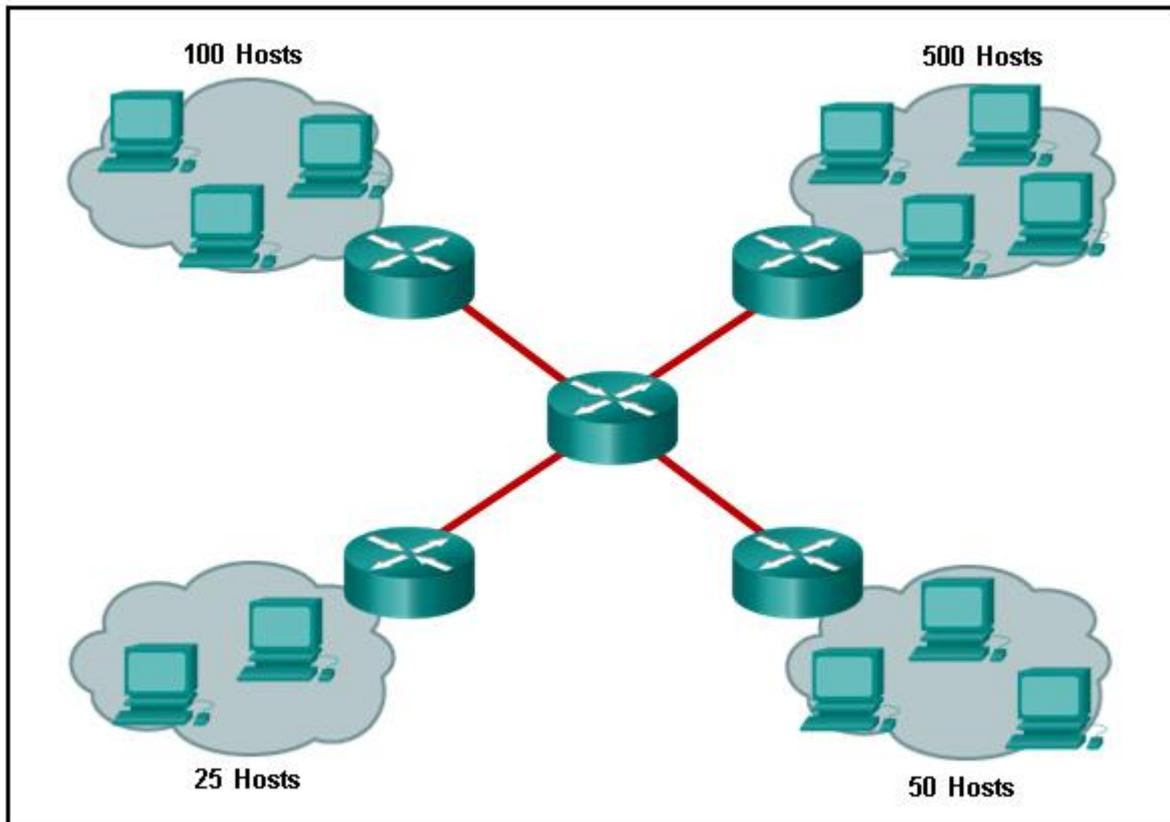
- to inform routers about network topology changes
- to ensure the delivery of an IP packet
- **to provide feedback of IP packet transmissions**
- to monitor the process of a domain name to IP address resolution

**33. Which statement describes a characteristic of the traceroute utility?**

- It sends four Echo Request messages.

- It utilizes the ICMP Source Quench messages.
- It is primarily used to test connectivity between two hosts.
- **It identifies the routers in the path from a source host to a destination host.**

**34. Refer to the exhibit. Using VLSM, what is the largest and smallest subnet mask required on this network in order to minimize address waste?**



*CCNA 1 Practice Final Answer 006 (v5.02, 2015)*

- 255.255.254.0 and 255.255.255.224
- **255.255.254.0 and 255.255.255.252**
- 255.255.255.128 and 255.255.255.224
- 255.255.255.0 and 255.255.255.252

**35. A network administrator has been issued a network address of 192.31.7.64/26. How many subnets of equal size could be created from the assigned /26 network by using a /28 prefix?**

- 3
- **4**
- 6
- 8
- 14
- 16

36. A small satellite office has been given the overall network number of 192.168.99.0/24 and the network technician can subdivide the network addresses as needed. The office needs network access for both wired and wireless devices. However, because of the security consideration, these two networks should be separate. The wired network will have 20 devices. The wireless network has a potential connection of 45 devices. Which addressing scheme would be most efficient for these two networks?

- 192.168.99.0/26  
192.168.99.64/27
- 192.168.99.0/27  
192.168.99.32/26
- 192.168.99.0/27  
192.168.99.32/28
- 192.168.99.0/28  
192.168.99.16/28
- 192.168.99.0/28  
192.168.99.64/26

37. The administrator of a branch office receives an IPv6 prefix of 2001:db8:3000::/52 from the corporate network manager. How many subnets can the administrator create?

- 1024
- 2048
- 4096
- 8192
- 65536

38. A user is attempting to do an `http://www.cisco.com/` without success. Which two configuration values must be set on the host to allow this access? (Choose two.)

- DNS server
- WINS server
- HTTP server
- default gateway
- Netbios

39. Which devices should be secured to mitigate against MAC address spoofing attacks?

- Layer 7 devices
- Layer 4 devices
- Layer 2 devices
- Layer 3 devices

**40. Which router configuration mode would an administrator use to configure the router for SSH or Telnet login access?**

- **line**
- router
- global
- interface
- privileged EXEC

**41. Refer to the exhibit. An administrator is testing connectivity to a remote device with the IP address 10.1.1.1. What does the output of this command indicate?**

```
Switch# ping 10.1.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.1.1.1, timeout is 2 seconds:
UUUUU
Success rate is 0 percent (0/5)
```

*CCNA 1 Practice Final Answer 007 (v5.02, 2015)*

- Connectivity to the remote device was successful.
- **A router along the path did not have a route to the destination.**
- A ping packet is being blocked by a security device along the path.
- The connection timed out while waiting for a reply from the remote device.

**42. Which is a function of the show ip route command when used as a tool for troubleshooting network connectivity?**

- indicates the point of failure in the connection
- **shows the IP address of the next hop router for each route**
- lists the IP addresses of all hops the traffic will pass through to reach the destination network
- shows the incoming and outgoing interfaces the traffic will go through in order to reach the destination network

**43. A user calls the help desk to report that a Windows XP workstation is unable to connect to the network after startup and that a popup window says "This connection has limited or no connectivity." The technician asks the user to issue the ipconfig /all command. The user reports the IP address is 169.254.69.196 with subnet mask of 255.255.0.0 and nothing is displayed for the DNS server IP address. What is the cause of the problem?**

- The workstation NIC has malfunctioned.
- The subnet mask was configured incorrectly.
- The DNS server IP address needs to be configured.
- **The workstation is unable to obtain an IP address from a DHCP server.**

44. A particular email site does not appear to be responding on a Windows 7 computer. What command could the technician use to show any cached DNS entries for this web page?

- ipconfig /all
- arp -a
- **ipconfig /displaydns**
- nslookup

45. To revert to a previous configuration, an administrator issues the command copy tftp startup-config on a router and enters the host address and file name when prompted. After the command is completed, why does the current configuration remain unchanged?

- The command should have been copy startup-config tftp.
- **The configuration should have been copied to the running configuration instead.**
- The configuration changes were copied into RAM and require a reboot to take effect.
- A TFTP server can only be used to restore the Cisco IOS, not the router configuration.

46. Refer to the graphic. What is the effect of setting the security mode to WEP on the Linksys integrated router?



CCNA 1 Practice Final Answer 008 (v5.02, 2015)

- It identifies the wireless LAN.
- It allows the access point to inform clients of its presence.
- It translates IP addresses into easy-to-remember domain names.
- **It encrypts data between the wireless client and the access point.**
- It translates an internal address or group of addresses into an outside, public address.

47. Which type of wireless security is easily compromised?

- EAP
- PSK
- **WEP**
- WPA

48. Refer to the exhibit. Which two settings could be changed to improve security on the wireless network? (Choose two.)

The screenshot shows the 'Basic Wireless Settings' configuration page. The settings are as follows:

Setting	Value
Network Mode:	Mixed
Network Name (SSID):	linksys
Radio Band:	Auto
Wide Channel:	Auto
Standard Channel:	Auto
SSID Broadcast:	Enabled

CCNA 1 Practice Final Answer 009 (v5.02, 2015)

- network mode
- **SSID**
- radio band
- wide channel
- standard channel
- **SSID broadcast**

49. Fill in the blank. Do not abbreviate. Use lower case.

Which interface configuration mode command puts a Layer 3 switch interface into Layer 3 mode? **no switchport**

50. Fill in the blank.

A nibble consists of **4** bits.

51. Match each item to the type of topology diagram on which it is typically identified. (Not all options are used.)

physical topology diagram
cables that connect rooms to wiring closets
desktop PC in a classroom
logical topology diagram
IP address of a server
a switch that is located in a classroom

CCNA 1 Practice Final Answer 010 (v5.02, 2015)

**52. Match the situation with the appropriate use of network media.**

<b>Copper Cables</b>
horizontal cabling structure
desktop PCs in an enterprise office
<b>Fiber Optic</b>
backbone cabling in an enterprise
long-haul networks
<b>Wireless</b>
guest access in a coffee shop
waiting rooms in a hospital

CCNA 1 Practice Final Answer 011 (v5.02, 2015)

**53. Match the subnetwork to a host address that would be included within the subnetwork. (Not all options are used.)**

192.168.1.63
192.168.1.64/27
192.168.1.128
192.168.1.32/27
192.168.1.96/27

*CCNA 1 Practice Final Answer 012 (v5.02, 2015)*

**54. Open the PT Activity. Perform the tasks in the activity instructions and then answer the question.**

**What is the secret keyword that is displayed on the web page?**

- router
- switch
- frame
- **packet**
- cisco

**55. Open the PT activity. Perform the tasks in the activity instructions and then fill in the blank.**

**The Server0 message is **winner** .?**