**Which of the following are the address ranges of the private IP addresses? (Choose three.)**

10.0.0.0 to 10.255.255.255

200.100.50.0 to 200.100.25.255

150.150.0.0 to 150.150.255.255

172.16.0.0 to 172.31.255.255

192.168.0.0 to 192.168.255.255

127.16.0.0 to 127.31.255.255

**Which two functions of the OSI model occur at layer two? (Choose two.)**

physical addressing

encoding

routing

cabling

media access control

**Refer to the exhibit. What function does router RT\_A need to provide to allow Internet access for hosts in this network?**

address translation

DHCP services

ftpd

web server

**What is true regarding network layer addressing? (Choose three.)**

uses a flat structure

prevent broadcasts

heirarchical

uniquely identifies each host

48 bits in length

contains a network portion

**Refer to the exhibit. Host A attempts to establish a TCP/IP session with host C. During this attempt, a frame was captured with the source MAC address 0050.7320.D632 and the destination MAC address 0030.8517.44C4. The packet inside the captured frame has an IP source address 192.168.7.5, and the destination IP address is 192.168.219.24. At which point in the network was this packet captured?**

leaving host A

leaving ATL

leaving Dallas

leaving NYC

**Refer to the exhibit. Assume all devices are using default configurations. How many subnets are required to address the topology that is shown?**

1

3

4

5

7

**A technician is asked to secure the privileged EXEC mode of a switch by requiring a password. Which type of password would require this login and be considered the most secure?**

console

enable

enable secret

VTY

**Refer to the exhibit. A technician is working on a network problem that requires verification of the router LAN interface. What address should be pinged from this host to confirm that the router interface is operational?**

127.0.0.1

192.168.64.196

192.168.254.1

192.168.254.9

192.168.254.254

**Which OSI layer does IP rely on to determine whether packets have been lost and to request retransmission?**

application

presentation

session

transport

**When connectionless protocols are implemented at the lower layers of the OSI model, what is usually used to acknowledge that the data was received and to request the retransmission of missing data?**

IP

UDP

Ethernet

a connectionless acknowledgement

an upper-layer, connection-oriented protocol or service

**Refer to the exhibit. Host C is able to ping 127.0.0.1 successfully, but is unable to communicate with hosts A and B in the organization. What is the likely cause of the problem?**

Hosts A and B are not on the same subnet as host C.

The IP addresses on the router serial interfaces are wrong.

The subnet mask on host C is improperly configured.

The FastEthernet interface fa0/0 of router 1 is wrongly configured.

**Refer to the exhibit. Which list refers only to end devices?**

D,E,F,G

A,H,B,C

A,D,E,F

A,D,E,G

**Refer to the exhibit. Host A sends a frame with the destination MAC address as FFFF.FFFF.FFFF. What action will the switch take for this frame?**

It will drop the frame.

It will send the frame back to host A.

It will send the frame to all hosts except host A.

It will forward the frame to the default gateway.

**14. Which subnet mask will allow 2040 hosts per subnet on the IP network 10.0.0.0?**

255.255.0.0

255.255.254.0

255.255.252.0

255.255.248.0

255.255.240.0

255.255.255.128

**15. Refer to the exhibit. RouterB is configured properly. The Ethernet interface Fa0/0 of RouterA is configured with the use of the commands that are shown. However, a ping from the Fa0/0 interface of RouterA to the Fa0/0 interface of RouterB is unsuccessful. What action should be taken on RouterA to solve this problem?**

Use the description command on the FastEthernet interface Fa0/0.

Configure the clock rate of the FastEthernet interface Fa0/0.

Use the no shutdown command on the FastEthernet interface Fa0/0.

Reboot the router.

**16. To send data through a network, what two flags are used to establish a session? (Choose two.)**

ACK

CRC

SYN

Ack #

Port #

Seq #

**Which statement is true about the TTL value of an IPv4 packet?**

It determines the priority of a packet.

It specifies the remaining “life” of the packet.

It indicates that the packet has been fragmented.

It denotes the data payload type that the packet is carrying.

**17. Refer to the exhibit. Communication for hosts X and Y is restricted to the local network. What is the reason for this?**

Host X is assigned a network address.

Host Y is assigned a multicast address.

Host X and host Y belong to different networks.

The gateway addresses are broadcast addresses.

**What type of network is maintained if a server takes no dedicated role in the network?**

mainframe

client/server

peer-to-peer

centralized

**20. A routing issue has occurred in your internetwork. Which of the following type of devices should be examined to isolate this error?**

access point

host

hub

router

switch

**Which physical component is used to access and perform the initial configuration on a new unconfigured router?**

Correct answer is image 2 , CONSOLE !

**22. A user sees the command prompt: Router(config-if)# . What task can be performed at this mode?**

Reload the device.

Perform basic tests.

Configure individual interfaces.

Configure individual terminal lines.

**What is the correct order for PDU encapsulation?**

Correct answer is first image !

**24. What information can be gathered by using the command netstat?**

the default gateway

the routing protocol

active TCP connections

the locally configured subnet mask

**25. How can ARP be used to help document the network?**

It can list each hop on the way to a destination host.

It can show the average latency of hosts on the network.

It can provide a list of physical addresses on the network.

It can indicate which hosts are not responding to network traffic.

**-What is the protocol data unit that is associated with the data link layer of the OSI reference model?**

data

frame

packet

segment

**27. Which application layer protocol allows administrators to log into a server from remote locations and control a server as though logged in locally?**

DNS

FTP

DHCP

SMTP

Telnet

**28. Which statement identifies the DNS protocol?**

It transmits information using TCP port 25.

It transfers and conveys information using HTML pages.

It matches a resource name with the required network address.

It requests and assigns an IP address, default gateway, and server addresses to hosts.

**29. Which password would allow a user to establish a Telnet session with a Cisco device?**

VTY password

enable password

console password

enable secret password

**Which identifier is contained in the header of the Layer 2 Ethernet frame?**

timing and synchronization of bits

source and destination port numbers

logical source and destination addresses

physical source and destination addresses

**What happens when a node on an Ethernet network is creating a frame and it does not have the destination MAC address?**

The node drops the frame.

The node sends out a Layer 3 broadcast message.

The node sends a message directly to the router for the address.

The node sends out an ARP request with the destination IP address.

**32. An administrator makes changes to the default configuration of a router and saves them to NVRAM. After testing, it is discovered that the configurations did not have the desired effect and must be removed. What steps must be taken to remove the changes and return the router to the default configuration?**

Reboot the router.

Use no version of the commands that are issued.

Issue the erase startup-config command, and then reboot the router.

Issue the erase running-config command, and then reboot the router.

**A network administrator is tasked with connecting two workgroups that are configured to use different subnets. Which device should be selected to allow connectivity between users on the two networks?**

hub

switch

router

wireless access point

**Which two programs can be used to accomplish terminal emulation for configuring a router from the CLI through the console port? (Choose two.)**

HyperTerminal

Internet Explorer

Minicom

Secure Shell

Telnet

**Which statement** **accurately describes file sharing in a peer-to-peer network?**

A dedicated server is required.

Access control is decentralized.

Files are typically stored on the most powerful peer in the network.

Peers can either make requests, or respond to requests, but not both.

**What are two primary responsibilities of the Ethernet MAC sublayer? (Choose two.)**

frame delimiting

data encapsulation

logical addressing

error detection

accessing the media

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

line

router

global

interface

privileged EXEC

**38. Refer to the exhibit. Which device should be included in the network topology to provide Layer 2 connectivity for all LAN devices, provide multiple collision domains, and also provide a connection to the rest of the network?**

server

hub

switch

PC

**Refer to the exhibit. A technician has been asked to test connectivity from PC1 to a remote network. Which action will indicate if there is remote connectivity?**

Correct answer is first image !

**What purpose does a hostname serve on a router?**

uniquely identifies a router on the internet

used by routing protocols to identify peer routers

provides device identification to users logging on remotely

determines the hosts that are allowed to connect to the device

**Which prompt is associated with the privileged exec mode?**

R1>

R1#

R1(config)#

R1(config-router)#

**A technician wishes to connect two computers to move data from one to the other before reloading the operating system. The NICs on both PCs do not support autosensing feature. Which procedure will satisfy the requirement?**

Interconnect the two PCs with a rollover cable.

Interconnect the two PCs with two rollover cables and a hub.

Interconnect the two PCs with a crossover cable.

Interconnest the two PCs with two crossover cables and a hub.

**Refer to the exhibit. Interface Fa0/0 on router A is generating excessive broadcast traffic. Which LAN segments will affected by the excessive broadcasts?**

Only the 192.168.1.200/30 network will be affected.

Only the link between 192.168.1.201 and port Fa0/5 on SW1 will be affected.

Both the 192.168.1.200/30 and 192.168.1.204/30 networks will be affected.

Only the links between 192.168.1.201 and port Fa0/7 on SW2 will be affected.

**Two routers are connected via their serial ports in a lab environment. The routers are configured with valid IP addresses, but they cannot ping each other. The show interface serial0/0 command shows that the serial0/0 interface is up but the line protocol is down. What could be the cause of this problem?**

The no shutdown command has not been applied to the interfaces.

The clock rate command has not been entered on the DCE interface.

The interface timers are not cleared.

The FastEthernet interface is emulating a serial interface by assigning it a timing signal.

**Refer to the exhibit. Which layered network model is shown in the diagram?**

Cisco

IETF

OSI

TCP/IP

**Refer to the exhibit. Host A is unable to reach host B on the remote network. A technician attempted to ping the local gateway and the ping was successful. To verify the host configuration, the technician issued the ipconfig command. What is the likely cause of the problem?**

The local NIC is incorrectly configured.

The subnet mask on host A is incorrectly configured.

The IP address on host A is incorrectly configured.

The default gateway on host A is incorrectly configured.

**Which option shows how a router will route packets to a remote network?**

Correct answer is image 4 !

**An organization has been assigned network ID 10.10.128.0 and subnet mask 255.255.224.0. Which IP address range can be used for this organization?**

10.10.128.0 to 10.10.160.255

10.10.128.0 to 10.10.159.255

10.10.128.0 to 10.10.192.255

10.10.128.0 to 10.10.0.159

10.10.128.0 to 10.10.159.0

**A network administrator is configuring several switches for a network. The switches have similar configurations and only minor differences. The administrator wants to save all commands that are issued on the first switch to a text file for editing. Which transfer option should be selected in HyperTerminal?**

Correct answer is image 3, CAPTURE TEXT !