**1. When must a router serial interface be configured with the clock rate command?**

when the interface is functioning as a DTE device

 when the interface timers have been cleared

 when the connected DTE device is shut down

when the interface is functioning as a DCE device

**2. Due to a security violation, the router passwords must be changed. What information can be learned from the following configuration entries? (Choose two.)**

 Router(config)# line vty 0 3

 Router(config-line)# password c13c0

 Router(config-line)# login

The entries specify three Telnet lines for remote access.

The entries specify four Telnet lines for remote access.

 The entries set the console and Telnet password to “c13c0″.

 Telnet access will be denied because the Telnet configuration is incomplete.

Access will be permitted for Telnet using “c13c0″ as the password.

**3. 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

**4. Which password is automatically encrypted when it is created?**

vty

 aux

 console

enable secret

 enable password

**5. Refer to the exhibit. A network technician is trying to determine the correct IP address configuration for Host A. What is a valid configuration for Host A?**

IP address: 192.168.100.19; Subnet Mask: 255.255.255.248; Default Gateway: 192.16.1.2

IP address: 192.168.100.20; Subnet Mask: 255.255.255.240; Default Gateway: 192.168.100.17

 IP address: 192.168.100.21; Subnet Mask: 255.255.255.248; Default Gateway: 192.168.100.18

 IP address: 192.168.100.22; Subnet Mask: 255.255.255.240; Default Gateway: 10.1.1.5

 IP address: 192.168.100.30; Subnet Mask: 255.255.255.240; Default Gateway: 192.168.1.1

 IP address: 192.168.100.31; Subnet Mask: 255.255.255.240; Default Gateway: 192.168.100.18

**6. 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

**7. Which prompt represents the appropriate mode used for the copy running-config startup-config command ?**

Switch-6J>

Switch-6J#

 Switch-6J(config)#

 Switch-6J(config-if)#

 Switch-6J(config-line)#

**8. 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

**9. Refer to the exhibit. The tracert command is initiated from PC1 to PC4. Which device will send a response to the initial tracert packet from PC1?**

Athens

 Ankara

London

 Paris

 PC4

**10. Which information is used by the router to determine the path between the source and destination hosts?**

the host portion of the IP address

the network portion of the IP address

 host default gateway address

 the MAC address

**10. Refer to the exhibit. A PC is communicating with another PC on a remote network. The two networks are connected by three routers. Which action will help to identify the path between the hosts?**

Use the ipconfig command at the host.

 Use the ipconfig/all command at the destination.

Use the tracert command at the host.

 Use the ping command at the destination.

**11. Refer to the exhibit. The diagram represents the process of sending e-mail between clients. Which list correctly identifies the component or protocol used at each numbered stage of the diagram?**

1.MUA 2.MDA 3.MTA 4.SMTP 5.MTA 6.POP 7.MDA 8.MUA

 1.MUA 2.POP 3.MDA 4.SMTP 5.MTA 6.MDA 7.SMTP 8.MUA

 1.MUA 2.POP 3.SMTP 4.MDA 5.MTA 6.SMTP 7.POP 8.MUA

1.MUA 2.SMTP 3.MTA 4.SMTP 5.MTA 6.MDA 7.POP 8.MUA

**12. Refer to the exhibit. The router of the company failed and was replaced. After the replacement, hosts C and D in the Education office are able to ping each other, but they are unable to access the hosts in the Accounts office. What is the likely cause of the problem?**

The IP address at the fa0/0 interface of the router is incorrectly configured.

The subnet mask at the fa0/1 interface of the router is incorrectly entered.

 The IP address at the serial interface of the router is incorrectly configured.

 The hosts in the Accounts office are not on the same subnet as the hosts in the Education office.

 **13. Refer to the exhibit. Host A and B are unable to communicate with each other. What is the reason for this?**

Host A is assigned a network address.

 Host B is assigned a multicast address.

 Host A and host B belong to different networks.

The gateway addresses are network addresses.

**14. Refer to the exhibit. Host B attempts to establish a TCP/IP session with host C. During this attempt, a frame was captured at the FastEthernet interface fa0/1 of the San Francisco router. The packet inside the captured frame has the source IP address 10.10.1.2, and the destination IP address is 10.31.1.20. What is the destination MAC address of the frame at the time of capture?**

0060.7320.D632

0060.7320.D631

 0040.8517.44C3

 0009.B2E4.EE03

 0010.C2B4.342

**15. Refer to the exhibit. While configuring a network, a technician wired each end of a Category 5e cable as shown. Which two statements are true about this setup? (Choose two.)**

The cable is suitable for connecting a switch to a router Ethernet port.

The cable is suitable for connecting dissimilar types of devices.

 The cable is unusable and must be rewired.

 The cable is terminated in a way that the transmit pin is wired to the receive pin.

 The cable simulates a point-to-point WAN link.

**16. 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.

**17. Well-known services and applications use which range of TCP/UDP port numbers?**

0 to 255

0 to 1023

 1024 to 49151

 49152 to 65535

**18. Which three IPv4 addresses represent subnet broadcast addresses? (Choose three.)**

192.168.4.63 /26

 192.168.4.129 /26

192.168.4.191 /26

 192.168.4.51 /27

192.168.4.95 /27

 192.168.4.221 /27

**19. Which three statements are true about network layer addressing? (Choose three.)**

The addresses are 48 bits long.

 Network layer addressing is used by Ethernet switches to make forwarding decisions.

It uses a hierarchical structure.

 It does not support broadcasts.

It uniquely identifies each host.

A portion of the address is used to identify the network.

**20. Which OSI layer addressing is required to route packets between two networks?**

Layer 1

 Layer 2

Layer 3

 Layer 4

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

mainframe

client/server

peer-to-peer

 centralized

 **22. Refer to the exhibit. Host A is requesting a web page from the web server. Which option represents the socket to which the request is made?**

80

 www.cisco.com

 10.0.0.130

10.0.0.130:80

**23. 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

**24. Which statement describes the correct use of addresses to deliver an e-mail message from HostB to the e-mail service that is running on ServerA?**

HostB uses the MAC address of ServerA as the destination.

Router B uses a Layer 3 network address to route the packet.

 Router A uses the Layer 4 address to forward the packet to Router B.

 Via the use of a Layer 3 address, ServerA assigns the message to the e-mail service.

**25. Refer to the exhibit. Host A is configured with the correct IP address for the default gateway of the router R1 FastEthernet0/1 interface. How will a packet that is sent from host A to host B be handled by the devices on the network?**

R1 will drop the packet because R1 does not have a specific route in its routing table to the 10.1.1.0/24 network.

R1 will forward the packet to its default gateway, the next hop router R2. R2 will forward the packet to the directly connected network 10.1.1.0/24.

 R1 will forward the packet to its default gateway, the next hop router R2. R2 will drop the packet because it does not have a default route to network 10.1.1.0/24.

 R1 will forward the packet to its default gateway, the next hop router R2. R2 will drop the packet because it does not have a route that is learned by a routing protocol to network 10.1.1.0/24.

**26. Which option correctly identifies the interface or interfaces used to connect the router to a CSU/DSU for WAN connectivity?**

This correct answer is image 4 ( last image ).

**27. 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.

**28. 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 tree (3).

**29. How many host addresses may be assigned when using the 128.107.0.0 network address with a subnet mask of 255.255.248.0?**

30

 256

2046

 2048

 4094

 4096

**30. 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

**31. During the encapsulation process, what is the PDU of the internet layer?**

bit

 data

 frame

packet

 segment

**32. Which service is used when the nslookup command is issued on a computer?**

FTP

DNS

 DHCP

 Telnet

**33. Refer to the exhibit. A network technician creates equal-sized subnets of network 192.168.2.0/24 using the subnet mask 255.255.255.224. If the technician wishes to calculate the number of host addresses in each subnet by using the formula that is shown in the exhibit, what value will be used for n?**

1

 2

 3

 4

5

**34. What are the default terminal emulation software settings when configuring a Cisco device through a console port?**

Bits per second: 19200

 Data bits: 7

 Parity: None

 Stop bits: 0

 Flow control: None

Bits per second: 9600

 Data bits: 8

 Parity: None

 Stop bits: 1

 Flow control: None

Bits per second: 19200

 Data bits: 7

 Parity: None

 Stop bits: 0

 Flow control: Hardware

Bits per second: 9600

 Data bits: 8

 Parity: None

 Stop bits: 1

 Flow control: Hardware

**35. In a packet-switched data network, what is used to reassemble the packets in the correct order at the destination device?**

source address

sequence number

 priority assignment

 destination address

**36. Refer to the exhibit. A network administrator tries to test the connectivity between routers R1 and R2, but the attempt to ping is unsuccessful. Based on the show ip interface brief command outputs, what could be the possible cause of the problem?**

Interface S0/0/0 on router R1 is shut down.

Interface S0/0/0 on router R1 is configured with an incorrect IP address.

 Interface S0/0/0 on router R2 is administratively down.

 Interface S0/0/0 on router R2 does not have the clock rate settings configured.

**37. Which router configuration mode will require user authentication if an administrator issues the enable secret command?**

user executive mode

privileged executive mode

 global configuration mode

 service specific configuration mode

**38. Which location of router memory is cleared with the erase startup-config command?**

flash

 RAM

 ROM

NVRAM

**39. Which subnet mask should be used for a Class B network that is divided into subnets and will accommodate between 800 hosts and 1000 hosts?**

255.255.255.0

 255.255.254.0

255.255.252.0

 255.255.248.0

 255.255.240.0

**40. 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

**41. Refer to the exhibit. The network containing router B is experiencing problems. A network associate has isolated the issue in this network to router B. What action can be preformed to correct the network issue?**

issue the clock rate command on interface Serial 0/0/0

 issue the description command on interface Serial 0/0/1

 issue the ip address command on interface FastEthernet 0/0

issue the no shutdown command on interface FastEthernet 0/1

**42. Refer to the exhibit. A web browser running on host PC1 sends a request for a web page to the web server with an IP address 192.168.1.254/24. What sequence of steps will follow in order to establish the session before data can be exchanged?**

The session will be initiated using UDP. No additional acknowledgment will be required to establish the session.

 The session will be initiated using TCP. No additional acknowledgment will be required to establish the session.

 The session will be initiated using UDP. The returned web page will serve as an acknowledgment for session establishment.

The session will be initiated using TCP. A three-way handshake must be successfully completed before the session is established.

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

 R1>

R1#

 R1(config)#

 R1(config-router)#

**44. 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.

**45. 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.

**46. What is the effect of using the Router# copy running-config startup-config command on a router?**

The contents of ROM will change.

 The contents of RAM will change.

The contents of NVRAM will change.

 The contents of flash will change.

**47. Which option represents a point-to-point logical topology diagram?**

The correct answer is last image.

**48. In a network design project, a network designer needs to select a device to provide collision free connections to 40 hosts on the LAN. Which device should be selected?**

hub

 router

switch

 firewall

**49. Which communication tool allows real-time collaboration?**

wiki

 e-mail

 weblog

instant messaging