

Part 8

QUESTION 645

3 addresses are shown in binary form below:

- A. 01100100.00001010.11101011.00100111
- B. 10101100.00010010.10011110.00001111
- C. 11000000.10100111.10110010.01000101

Regarding these three binary addresses in the above exhibit; which statements below are correct? (Select three)

- A. Address C is a public Class C address.
- B. Address C is a private Class C address.
- C. Address B is a public Class B address.
- D. Address A is a public Class A address.
- E. Address B is a private Class B address.
- F. Address A is a private Class A address.

Answer: A, D, E

Explanation:

- A. Address C converts to 192.167.178.69 in decimal, which is a public class C address.
 - D. Address A converts to 100.10.235.39, which is a public class A IP address.
 - E. Address B converts to 172.18.158.15, which is a private (RFC 1918) IP address.
-

QUESTION 646

What is the subnetwork address for a host with the IP address 201.100.5.68/28?

- A. 201.100.5.0
- B. 201.100.5.32
- C. 201.100.5.64
- D. 201.100.5.65
- E. 201.100.5.31
- F. 201.100.5.1

Answer: C

Explanation:

This is a C ip with a subnet mask of 255.255.255.240 the host 201.100.5.68/28 belong to the second subnet which is

201.100.5.64 this is determined by doing the following subnets? $2^{32-28} =$

14 hosts? $2^{32-28} =$

14 valid subnet

range? $256 - 240 =$

16 $16 + 16 = 32$, $16 + 32 = 48$, $16 + 48 = 64$, $64 + 16 = 80$ and so as you can see the ip 201.100.5.68 belongs to the second subnet which is .64

QUESTION 647

Which command will configure a default route on a router?

- A.router(config)# ip route 0.0.0.0 10.1.1.0 10.1.1.1
- B.router(config)# ip defaultroute
10.1.1.0
- C.router(config)# ip defaultgateway
10.1.1.0
- D.router(config)# ip route 0.0.0.0 0.0.0.0 10.1.1.1

Answer: D

Explanation:

Ip route 0.0.0.0 0.0.0.0 <ipaddress
of the interface> command is used to configure a default route.
So, Choice D is correct.

QUESTION 648

In which situation would the use of a static route be appropriate?

- A.To configure a route to the first Layer 3 device on the network segment.
- B.To configure a route from an ISP router into a corporate network.
- C.To configure a route when the administrative distance of the current routing protocol is too low.
- D.To reach a network is more than 15 hops away.
- E.To provide access to the Internet for enterprise hosts.

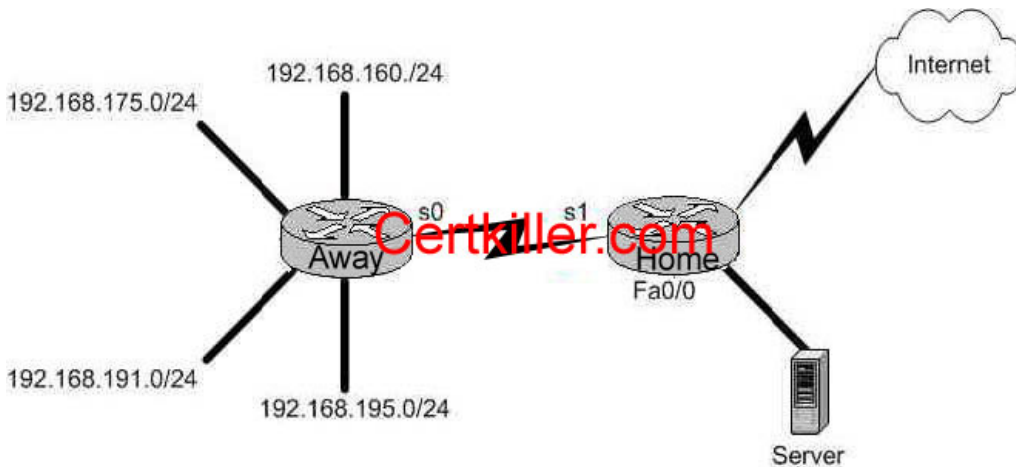
Answer: B

Explanation:

Static routes are special routes that the network administrator manually enters into the router configuration. Stub networks are the ideal candidate for static routes.
There is no need to run a routing protocol over the WAN links between an ISP Router and a corporate network.

QUESTION 649

The Certkiller Network is displayed in the flowing diagram:



You need to place an access list on the Fa0 interface of the Home router; that will deny access to all hosts that lie within the range 192.168.160.0-192.168.191.0.

Hosts in the 192.168.195.0 network should be granted full access. Which one of the following answer choices fulfills your needs?

- A.accesslist
1 deny 192.168.163.0 0.0.0.255
- B.accesslist
1 deny 192.168.128.0 0.0.127.255
- C.accesslist
1 deny 192.168.0.0 0.0.255.255
- D.accesslist
1 deny 192.168.0.0 0.0.31.255

Answer: D

Explanation:

This question is really more of an inverse subnet masking questions than a security question. Your goal is to block access to the host range 192.168.160.0-192.168.191.0 while allowing everything else (including hosts from 192.168.195.0) full access. Answer choice D is correct because the address and mask are numbered correctly.

QUESTION 650

Which of the following describe private IP addresses? (Choose two)

- A.Addresses chosen by a company to communicate with the Internet.
- B.Addresses that cannot be routed through the public Internet.
- C.Addresses that can be routed through the public Internet.
- D.A scheme to conserve public addresses.
- E.Addresses licensed to enterprise or ISPs by an Internet registry organization.

Answer: B, D

Explanation:

Private IP address space has been allocated via RFC 1918. This means the addresses are available for any use

by anyone and therefore the same private IP addresses can be reused. However they are defined as not routable on the public Internet. They are used extensively in private networks due to the shortage of publicly registerable IP addresses and therefore network address translation is required to connect those networks to the Internet.

QUESTION 651

Study the following exhibit:



Taking the information from the above exhibit, which command line below would correctly configure serial port0 on the Certkiller 2 router with the LAST usable host addresses on the 192.216.32.32 subnet?

- A. Certkiller 2(configif)#
ip address 192.216.32.63 255.255.255.248
- B. Certkiller 2(configif)#
ip address 192.216.32.38 255.255.255.240
- C. Certkiller 2(configif)#
ip address 192.216.32.39 255.255.255.248
- D. Certkiller 2(configif)#
ip address 192.216.32.63 255.255.255.248 no shut
- E. Certkiller 2(configif)#
ip address 192.216.32.39 255.255.255.248 no shut
- F. Certkiller 2(configif)#
ip address 192.216.32.38 255.255.255.248

Answer: F

Explanation:

F is the correct answer, as the last usable IP address on this subnet is 192.216.32.38. The subnet mask for a /29 is 255.255.255.248

Mask/29 11111111.11111111.11111111.11111000 255.255.255.248

Subnet 11000000.11011000.00100000.00100000 192.216.32.32

Broadcast 11000000.11011000.00100000.00100111 192.216.32.39

Address range = 192.216.32.33

192.216.32.38

QUESTION 652

DRAG DROP

As a Certkiller .com network administrator you are required to construct the command sequence to configure an IP address on an Ethernet interface. (Not all options will be used.)

enter privileged EXEC mode	place here
enter global configuration mode	place here
enter interface configuration mode	place here
configure the interface IP address	place here
enable the interface	place here

Select from these

Certkiller3# configure Certkiller	Certkiller3(config)#interface fa0/0
Certkiller3(config-if)#ip address 192.168.3.3/24	Certkiller3(config-if)#no shutdown
Certkiller3(config-if)#ip address 10.8.26.0 255.255.248.0	Certkiller3(config-if)#enable interface
Certkiller3(config)#ip address 172.16.10.1 255.255.255.0	Certkiller3#enable
Certkiller3#interface fa0/0	Certkiller3>enable

Answer:

As a Certkiller.com network administrator you are required to construct the command sequence to configure an IP address on an Ethernet interface. (Not all options will be used)

enter privileged EXEC mode	Certkiller3>enable
enter global configuration mode	Certkiller3# configure terminal
enter interface configuration mode	Certkiller3(config)#interface fa0/0
configure the interface IP address	Certkiller3(config-if)#ip address 10.8.26.0 255.255.248.0
enable the interface	Certkiller3(config-if)# no shutdown

Select from these

Certkiller3(config-if)#ip address 192.168.3.3/24	Certkiller3(config-if)#no shutdown
Certkiller3(config)#ip address 172.16.10.1 255.255.255.0	Certkiller3#enable
Certkiller3#interface fa0/0	

QUESTION 653

When a new trunk link is configured on an IOS based switch, which VLANs are allowed over the link?

- A.All defined VLANs are allowed on the trunk by default.
- B.Each VLAN, or VLAN range, that is specified with theswitchport modecommand.
- C.Each VLAN, or VLAN range, that is specified with thevtp domaincommand.
- D.Each VLAN, or VLAN range, that is specified with thevlan databasecommand.

Answer: A

Explanation:

By default a trunk link carries all the VLANs that exist on the switch. This is because all VLANs are active on a trunk
can elect to selectively remove and add VLANs from a trunk link.

QUESTION 654

Why would a network administrator configure port security on a switch?

- A.To prevent unauthorized Telnet access to a switch port.
- B.To limit the number of Layer 2 broadcasts on a particular switch port.
- C.To prevent unauthorized hosts from accessing the LAN.
- D.To protect the IP and MAC address of the switch and associated ports.
- E.To block unauthorized access to the switch management interfaces over common TCP ports.

Answer: C

QUESTION 655

Assuming

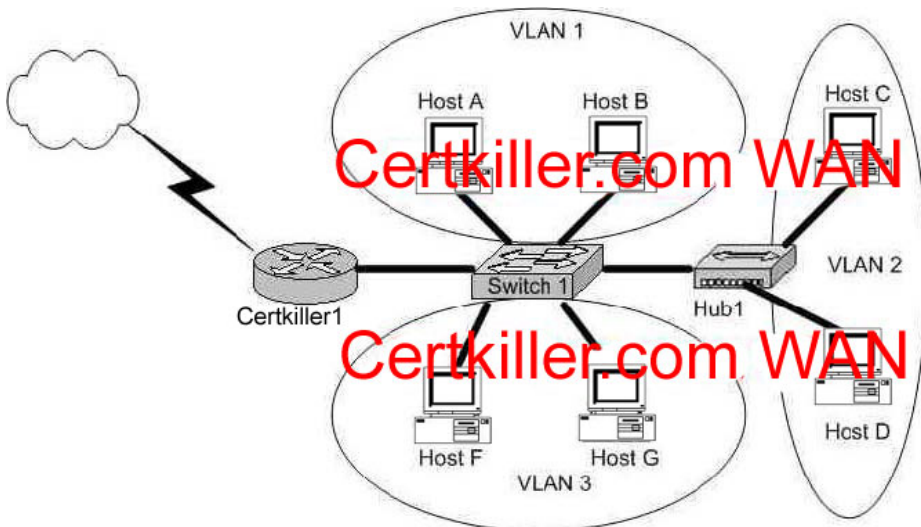
only one VLAN in the exhibit, which switch is acting as the root bridge?

- A. Certkiller 1
- B. Certkiller 2
- C. Certkiller 3
- D.A root bridge is not required in this network.

Answer: C

QUESTION 656

The Certkiller Network consists of a router, switch, and hub as shown below:



In accordance with the above diagram; which of the statements below correctly describe the switch port configuration and the router port configurations? (Select three answer choices)

- A. The Certkiller 1 WAN port is configured as a trunking port.
- B. The Certkiller 1 port connected to Switch1 is configured using subinterfaces.
- C. The Certkiller 1 port connected to Switch1 is configured as 10 Mbps.
- D. The Switch1 port connected to Certkiller 1 is configured as a trunking port.
- E. The Switch1 port connected to Host B is configured as an access port.
- F. The switch1 port connected to Hub1 is configured as full duplex.

Answer: B, D, E

Explanation:

B is correct because the diagram and the function match the description of a subinterface. Subinterfaces are needed because for inter-vlan communication, routing needs to take place. D is correct because all 3 VLAN's are trunked to reach the router. E is correct because access ports are correct in this case.

Incorrect Answers:

- A. This is incorrect because trunks only work between switches, and not between a router and a WAN.
- C, F. Although these may be true, we are not given enough information in this diagram to confirm it.

QUESTION 657

As a Certkiller .com instructor you are required to place the following items to the correct order they are used when Cisco IOS based hardware is booted.

Item	Items, place here in order
TFTP	1st
ROM	2nd
NVRAM	3rd
FLASH	4th

Answer:

As a Certkiller .com instructor you are required to the following items to the correct order they are used when Cisco IOS based hardware is booted.

Item	Items, place here in order
	NVRAM
	FLASH
	TFTP
	ROM

QUESTION 658

DRAG DROP

Your Certkiller .com boss asks you tot match the descriptions to the corresponding router modes.

Router mode	Place description here
User EXEC mode	Place here
privileged EXEC mode	Place here
Global configuration mode	Place here
specific configuration mode	Place here
Setup mode	Place here

Descriptions, select from these

- Interactive configuration dialog
- Provides access to all other router commands
- Commands that affect interfaces/processes only
- Commands that affect the entire system
- Limited to basic monitoring commands

Answer:

Your Certkiller.com boss asks you to match the descriptions to the corresponding router modes.

Router mode	Place description here
User EXEC mode	Limited to basic monitoring commands
privileged EXEC mode	Provides access to all other router commands
Global configuration mode	Commands that affect the entire system
specific configuration mode	Commands that affect interfaces/processes only
Setup mode	Interactive configuration dialog

QUESTION 659

Your goal is to illustrate the five necessary steps of configuring dialondemand routing (DDR) on an ISDN

BRI. Place the parameters on the right to the proper slot on the left. (Note: not all the parameters will be used)

Place here	Select from these
Place 1st parameter here	unicast <next-hop-address>
Place 2nd parameter here	dial string dialer
Place 3rd parameter here	map group
Place 4th parameter here	dialer-list <protocol>
Place 5th parameter here	

Answer:

dialer
map
<protocol>
<next-hop-address>
dial string

QUESTION 660

DRAG DROP

As a Certkiller .com network technician you are required to drag the network problems to the correct OSI layers.

Physical Layer Problems

Place here

Place here

Place here

Data Link Layer Problems

Place here

Place here

Place here

Place here

Select from these

router serial line down

router serial line up; no CDP neighbors

router serial line protocol down

dialup authentication failure

switch port link light is on

router serial line encapsulation failure

excessive Ethernet collisions

Answer:

As a Certkiller.com network technician you are required to drag the network problems to the correct OSI layers.

Physical Layer Problems

router serial line down

switch port link light is on

excessive Ethernet collisions

Data Link Layer Problems

router serial line protocol down

router serial line up; no CDP neighbors

dialup authentication failure

router serial line encapsulation failure

QUESTION 661

DRAG DROP

As a network technician at Certkiller .com you are required to match the characteristics to the correct category of Ethernet collisions on the right. Not all characteristics are used.

Characteristics, select from these

damaged frame retransmitted

considered abnormal network operation

caused by excessive media latency

occasionally occur in normal network operation

cannot occur on a shared media segment

occurs after the first 64 bytes of a frame are transmitted

frequently occurs in full-duplex operation

jam signal sent to intentionally corrupt frame

Late collision

place here

place here

Local collision

place here

place here

place here

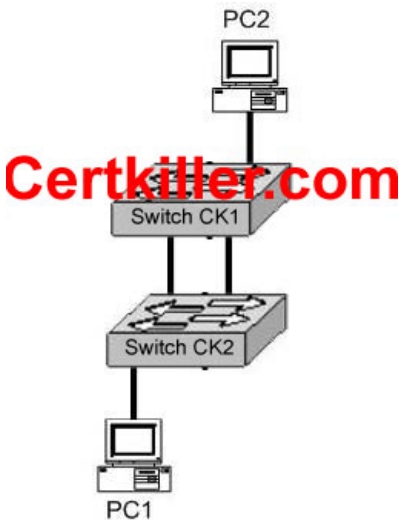
Answer:

Late collision
caused by excessive media latency
considered abnormal network operation
occurs after the first 64 bytes of a frame are transmitted

Local collision
damaged frame retransmitted
occasionally occur in normal network operation
jam signal sent to intentionally corrupt frame

QUESTION 662

Exhibit:



Refer

to the exhibit. When PC1 sends an ARP request for the MAC address of PC2, network performance slows dramatically, and the switches detect an unusually high number of broadcast frames. What is the most likely cause of this?

- A. The portfast feature is not enabled on all switch ports.
- B. The PCs are in two different VLANs.
- C. Spanning Tree Protocol is not running on the switches.
- D. PC2 is down and is not able to respond to the request.
- E. The VTP version running on the two switches do not match.

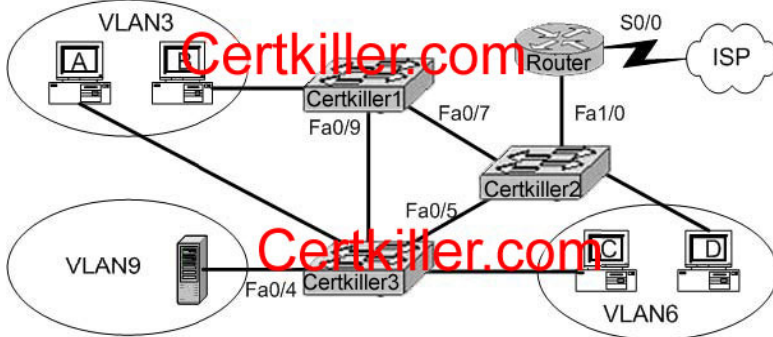
Answer: C

Explanation:

As the switches CK1 and CK2 are connected with each other via two links, spanning tree must be enabled on both

switches to avoid switching loops and broadcast storms. An ARP request is a broadcast message. If Spanning tree is not running, broadcast loops will form reducing the performance of the network.

QUESTION 663



A technician is investigating a problem with the exhibited network. These symptoms have been observed:

- 1.All of the user hosts can access the Internet.
- 2.None of the user hosts can access the server in VLAN9
- 3.All of the hosts can ping each other.

What could cause the symptoms?

- A.Interface S0/0 on the router is down.
- B.Interface Fa1/1 on the router is down.
- C.Interface Fa0/5 on Certkiller 3 is down.
- D.Interface Fa0/4 on Certkiller 3 is down.
- E. Certkiller 2 is turned off.
- F.Trunking is not enabled on the link between Certkiller 1 and Certkiller 3.

Answer: D

QUESTION 664

DRAG DROP

A Certkiller .com network technician is testing an ISDN circuit that uses PPP between two IP hosts. Match the success indicator with the layer of OSI functionality on the right that the success indicator verifies.

Select from these

The link is up.	Layer3	Place here
A ping of the remote host is successful.	Layer2	Place here
A telnet connection to the remote host is successful.	Layer1	Place here
A dial session to the remote host is successful.		Place here

Answer:

A Certkiller.com network technician is testing an ISDN circuit that uses PPP between two IP hosts. Match the success indicator with the layer of OSI functionality on the right that the success indicator verifies.

Select from these

Layer3	Place here
Layer2	A ping of the remote host is successful.
Layer1	A dial session to the remote host is successful.
	A telnet connection to the remote host is successful.
	The line is up.

QUESTION 665

DRAG DROP

Your boss at Certkiller .com asks you to match the terms with the appropriate OSI layer. Not all options are used.

Network Layer	Transport Layer
Place here	Place here
Place here	Place here
Place here	Place here

Terms, select from these

bits	IP addresses	windowing
packets	msg_emi	routing
UDP	MAC addresses	switching

Answer:

Your boss at Certkiller.com asks you to match the terms with the appropriate OSI layer. Not all options are used

Network Layer	Transport Layer
Packets	Windowing
IP addresses	segments
routing	UDP

Terms, select from these

bits
MAC addresses
switching

QUESTION 666

If the bandwidth of an OSPF interface is 64, what would be the calculated cost of the link?

- A. 1
- B. 10

- C. 1562
- D. 64000
- E. 128000
- F. None of the above

Answer: C

Explanation:

The question states that OSPF interface has been configured with the bandwidth 64 command. Cisco IOS always interprets the values for the bandwidth command as being in kbps, so the bandwidth is configured as 64 kbps. The

metric for any OSPF defaults to $100,000,000/\text{bandwidth}$. So, in this example:
 $100,000,000 / 64000 = 1562.5$

496 Reference:

Sybex CCNA Study Guide edition 4, page 284.

QUESTION 667

The following exhibit shows the router topology for the Certkiller network.



On the assumption that every router is running RIP; which of the statements below correctly describe the way the routers exchange their routing tables? (Select all valid answer choices)

- A. Certkiller 4 exchanges directly with Certkiller 3.
- B. Certkiller 4 exchanges directly with Certkiller 2.
- C. Certkiller 4 exchanges directly with Certkiller 1.
- D. Certkiller 1 exchanges directly with Certkiller 3.
- E. Certkiller 1 exchanges directly with Certkiller 2.
- F. Certkiller 1 exchanges directly with Certkiller 4.

Answer: A, D

Explanation:

RIP exchanges routing tables with their adjacent neighbors. Therefore, Certkiller 3 will exchange routes with Certkiller 1,

RIP, unlike OSPF, only exchange information with

their directly connected neighbors. With link state protocols such as OSPF and ISIS,

information is flooded to all

routers within the network system.

QUESTION 668

How does route poisoning work with holddown timers to prevent routing loops?

- A.Information learned from one source is not distributed back to that source.
- B.Routing updates from the poisoned source are ignored until a holddown timer expires.
- C.Failed routers are advertised with infinite metrics.
- D.New routing updates are ignored until the network has converged.
- E.A route is marked as unavailable when its timetolive is exceeded.

Answer: C

QUESTION 669

Which of the following protocols utilize TCP? (Choose all that apply)

- A.NTP
- B.NNTP
- C.SMTP
- D.SNMP
- E.HTTPS
- F.TFTP

Answer: B, C, E

Explanation:

- B.NNTP uses TCP port 119
- C.SMTP uses TCP port 25
- E.HTTPSuses TCP port 443

Incorrect Answers:

- A.NTP uses UDP port 123
 - D.SNMP uses UDP port 161
 - F.TFTP uses UDP port 69
-

QUESTION 670

What does the term computer language refer to?

- A.Binary
- B.Decimal
- C.Hexadecimal
- D.Octal

Answer: A

Explanation:

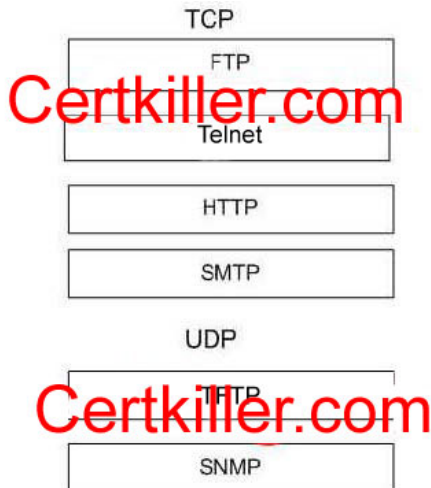
Computers speak in binary code; meaning that every piece of aspects within a computer is a series of 1s and 0s.

QUESTION 671

Your Certkiller .com boss asks you tot match the networks services with the corresponding Layer 4 protocols.

Network service	TCP
FTP	Place here
SNMP	Place here
SMTP	Place here
TFTP	Place here
Telnet	UDP
HTTP	Place here
	Place here

Answer:



Explanation:

FTP uses TCP Port Numbers 20 and 21. Port 20 is used for Data. Port 21 is used for Control.
 Telnet used TCP Port Number 23.
 HTTP uses TCP Port Number 80.
 SMTP uses TCP Port Number 25.
 SNMP uses UDP Port Number 161.
 TFTP uses UDP Port Number 69.

QUESTION 672

Which of the following protocols use both TCP and UDP ports?

- A.FTP
- B.SMTP
- C.Telnet
- D.DNS

Answer: D

Explanation:

FTP :TCPPort20 or 21
SMTP :TCPPort110
Telnet :TCPPort23
DNS : both TCP andUDPPort25

QUESTION 673

How many simultaneous Telnet sessions does a Cisco router support by default?

- A.1
- B.2
- C.3
- D.4
- E.5
- F.6

Answer: E

Explanation:

Several concurrent Telnet connections to a router are allowed. The `line vty 0 4` command signifies that this configuration applies to vtys (virtual teletypes—terminals) 0 through 4. Only these five vtys are allowed by the IOS unless it is an IOS for a dial access server, such as a Cisco AS5300. All five vtys typically have the same password, which is handy because users connecting to the router via a Telnet cannot choose which vty they get.

QUESTION 674

Error detection schemes check errors in the data packets by reading which field frame IDs?

- A.MTU
- A.PDU
- B.FCS
- C.Flag
- D.MAC
- E.BRI

Answer: C

Explanation:

Frame Check Sequence (FCS) field

Ethernet uses aCyclicRedundancyCheck(CRC) algorithm to detect transmission errors.

TheFrameCheckSequence field

is filled (using a CRC) by the sending host. If the receiving host detects a wrong CRC, it will throw away that packet.

Incorrect Answers:

A.MTU is the Maximum Transmission Unit, which is set to 1500 bytes by default for ethernet packets.

B, D.This is not part of the data packet.

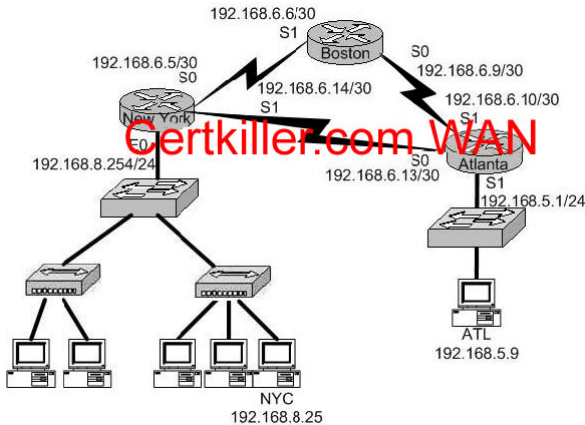
E.This is the Media Access Control, which is used most often to describe the layer 2 physical address of a device.

F.BRI is related to an ISDN connection, describing a ciircuit with 2 bearer channels and a single data channel.It

has
absolutely nothing to do with error correction in a data packet.

QUESTION 675

Exhibit:



The internetwork shown in the graphic is using the EIGRP routing protocol. What will be the destination address of a packet destined for host NYC as it leaves the ATLANTA router?

- A. 192.168.6.5
- B. 192.168.6.6
- C. 192.168.6.9
- D. 192.168.6.14
- E. 192.168.8.25
- F. 192.168.8.25

Answer: E

Explanation:

In case of Routing Source and Destination IP Addresses never change so, a packet destined to NYC will always have 192.168.8.25 as a destination IP Address.

QUESTION 676

Regarding Frame Relay Multipoint subinterfaces; which statement is true?

- A. An IP address is required on the physical interface
- B. All routers are required to be fully meshed
- C. All routers must be in the same subnet to forward routing updates and broadcasts
- D. Multipoint is the default configuration for Frame Relay subinterfaces

Answer: C

Explanation:

Unlike Frame Relay point-to-point connections, multipoint Frame Relay router interfaces must all be in the same subnet.

Incorrect Answers:

- A. The IP address is required on the logical subinterface, not the physical interface.

B.It is never an absolute requirement for a frame relay network to be fully meshed.The vast majority of frame relay networks are configured in a hub and spoke fashion, to avoid all of the charges associated with the numerous PVC's needed to be fully meshed.
D.Point to point is the default frame relay subinterface type.

QUESTION 677

The Certkiller Frame Relay network is displayed below:



In regard to router TestKing1; what is the function of the Frame Relay DLCI?

- A. Defines the signaling standard between Certkiller 1 and Certkiller 2.
- B. Classifies the encapsulation used between Certkiller 1 and Certkiller 2.
- C. Identifies the circuit between Certkiller 2 and the frame switch.
- D. Classifies the circuit between Certkiller 1 and Certkiller 2.
- E. Defines the signaling standard between Certkiller 1 and the frame switch.

Answer: C

Explanation:

Certkiller 1 sends frames with DLCI, and they reach the local switch. The local switch sees the DLCI field and forwards the frame through the Frame Relay network until it reaches the switch connected to Certkiller 2. The Certkiller 2's local switch forwards the frame out of the access link to Certkiller 2. DLCI information is considered to be locally significant, meaning that the DLCI is used between the end router and the carrier's local frame relay switch.

Reference: CCNA Self Study

CCNA ICND exam certification Guide (Cisco Press, ISBN 158720083X)

Page 386

Incorrect Answers: A, E.

DLCI is used only as a circuit identifier (DLCI=Data Link Circuit Identifier), and not used for signaling.

B. The encapsulation options are not defined with DLCIs.

D. The DLCI information is considered to be locally significant, meaning that the DLCI is used between the end router and the carrier's local frame relay switch. The DLCI is not used end to end (router to router).

QUESTION 678

WAN data link encapsulation types include which of the following? Choose two

- A.T1
- B.Frame Relay
- C.DSL
- D.PPP
- E.ISDN

Answer: B, D

Explanation: Frame relay and PPP is used with WAN encapsulation.

Frame Relay most closely compares to the OSI data link layer (Layer 2). If you remember that the word "frame" describes the data link layer protocol data unit (PDU), it will be easy to remember that Frame Relay relates to OSI

Layer 2. Like other data link protocols, Frame Relay can be used to deliver packets (Layer 3 PDUs) between routers.