Cisco Demo

Cisco Certified Network Associate 2.0(CCNA 2.0)

640-607

QUESTION NO: 1
You can configure PPP on which of the following types of physical interfaces? (Choose two)

A. Ethernet
B. Token Ring
C. Synchronous Serial
D. Asynchronous Serial

Answers: C, D.
Explanation: Point-to-Point Protocol (PPP) provides router-to-router and host-network connections over synchronous and asynchronous circuits. PPP was designed to work with several network layer protocols, including IP and IPX. It also has built in security features such PAP (Password Authentication Protocol) and CHAP (Challenged Handshake Authentication Protocol).

Incorrect Answers:
A: Ethernet is a LAN (Local Area Network) architecture. It uses either a star or a bus topology to exchange data.
B: Token Ring is a type of network in which the computers are arranged in a circular fashion. These computers pass a token between each other. This token is used to communicate data.

Steve McQuerry. Interconnecting Cisco Network Devices. (Cisco Press: 2000) page 373.

QUESTION NO: 2
Frame Tagging is used to interconnect multiple switches and to maintain VLAN information as traffic goes between switches. Which of the following statements about the Frame Tagging are true? (Choose two)

A. A Filtering table is developed for each switch.
B. Frame Tagging defines a unique user defined ID to each frame.
C. A unique identifier is placed in the header of each frame as it is forwarding between switches.
D. Frame Tagging is technique that examines particular information about each frame based on user-defined offsets.

Answer: B, C.

Explanation: Frame tagging or frame identification uniquely assigns a user-defined ID to each frame. This is sometimes referred to as VLAN ID. Cisco created frame tagging to be used when an Ethernet frame traverses a trunked link.

Steve McQuerry. Interconnecting Cisco Network Devices. (Cisco Press: 2000) pages 186-187.

QUESTION NO: 3

Your company is having trouble connecting a Cisco router to a Nortel router using Frame Relay. What is the default encapsulation type for Frame Relay on a Cisco router?

A. HDLC
B. PPP
C. IETF
D. Cisco
E. ANSI

Answer: D.

Explanation: Cisco is the default encapsulation type for Frame Relay on a Cisco router**.**
Note: For a router to operate in a Frame Relay network the serial interface must be configured for Frame Relay Encapsulations. There are two types of Frame Relay encapsulation types: Cisco and IETF. When you are connecting to a non Cisco router the frame relay encapsulation type is IETF.

Incorrect Answers
A. HDLC stands for High level Data Link Control. This is the encapsulation type on synchronous serial links.
B. Point to Point Protocol (PPP). This provides for host to network and router to router connections over synchronous and asynchronous circuits.
C. IETF should be used in this scenario. However, the default Frame Relay encapsulation type on Cisco routers is Cisco.
E. Cisco routers support three types of LMIs: Cisco, ANSI and Q933a. This question is looking for the default encapsulation type.

Steve McQuerry. Interconnecting Cisco Network Devices. (Cisco Press: 2000) pages 418-420, 416, and 373-374.

QUESTION NO: 4

The IP address 131.107.0.0 is a class B address. What is the range of binary values for the first octet in this address class?

A. 10000000-11111111
B. 00000000-10111111
C. 10000000-10111111
D. 10000000-11011111
E. 11000000-11101111

Answer: C

Explanation: Class B addresses have a range of 128 – 191. One of these numbers would appear in the first octet of a Class B address. 128 and 191 are converted to binary below:

	128	64	32	16	8	4	2	1
128	1	0	0	0	0	0	0	0
191	1	0	1	1	1	1	1	1

Therefore the first octet converted to binary is 10000000 – 10111111.

Incorrect Answers
A: The 10000000-11111111 range, 128-255, does not define an address class.
B: The 00000000-10111111 range, 0-191, does not define an address class.
D: The 10000000-11011111 range, 128-223, does not define an address class.
E: The 11000000-11101111 range, 192-239, does not define an address class.

Steve McQuerry. Interconnecting Cisco Network Devices. (Cisco Press: 2000) pages 220 – 223.

QUESTION NO: 5
TCP is a connection-oriented protocol. An advantage of operating in a connection-oriented environment is that a connection is established between both ends before the transfer of information can begin. What is a disadvantage of using a connection-oriented protocol such as TCP?

A. Packet acknowledgement may add overhead.
B. Packets are not tagged with sequence numbers.
C. Loss or duplication of data packets is more likely to occur.
D. The application layer must assume responsibility for correct sequencing of the data packets.

Answer: A.

Explanation: One of the benefits of a connection-orientated protocol is that there is a guarantee of delivery of data. This guarantee is provided as the two communicating exchange PDUs during transmission and if an acknowledgement is not received then the data is retransmitted. As can be imagined this exchange of PDUs can cause an increase in overhead.

Incorrect Answers:
B: Sequence numbers are added to insure correct order
C: Packet loss, duplication, and ordering are handled by connection-oriented protocols.
D: The transport layer (such as TCP) handles sequencing.

Steve McQuerry. Interconnecting Cisco Network Devices. (Cisco Press: 2000) pages 29-30.

QUESTION NO: 6
Switches have three primary modes to handle frame switching. Which one of these modes looks at the destination address and then immediately forwards the frame to the destination?

A. CSMA/CD
B. FULL DUPLEX
C. CUT THROUGH
D. HALF DUPLEX
E. FRAGMENTATION
F. STORE AND FORWARD

Answer: C.
Explanation:
In cut-through mode, the switch checks the destination address (DA) as soon as the header is received and immediately begins forwarding the frame. Depending on the network transport protocol being used (connection or connectionless orientate), there is a significant decrease in latency from input port to output port. The delay in cut-through switching remains constant regardless of the size of the frame, because this switching mode starts to forward the frame as soon as the switch reads the DA.

Incorrect Answers:
A: CSMA/CD is not a method of transporting frames. Rather it is a set of rules that are used to determine how network devices will respond to two different devices attempting to communicate on a data channel at the same time.
B: Full duplex refers to how two switches communicate with each other. In this case, there is a transmission of data in two directions at the same time.
D: Half duplex refers to how two switches communicate with each other. With half duplex the communication can only be in one direction and if not a collision will occur.
E: This is not a method of frame communication.
F: In store and forward the entire frame must first be received before it can be forwarded on.

Steve McQuerry. Interconnecting Cisco Network Devices. (Cisco Press: 2000) pages 162-5.

QUESTION NO: 7
Which of the following are Application layer protocols that use TCP/IP? (Choose three.)

A. ARP
B. HTTP
C. SMTP
D. FTP
E. ICMP

Answer: B, C, D
Explanation: There are a number of TCP/IP application layer protocols. The common TCP/IP application layer protocols include: FTP, Telnet, SMTP, and HTTP.

Incorrect Answers:

A. ARP operates at the Internetwork layer of the TCP/IP protocol stack.
E. ICMP operates at the Internetwork layer of the TCP/IP protocol stack.

Steve McQuerry. Interconnecting Cisco Network Devices. (Cisco Press: 2000) pages 206 – 215.

QUESTION NO: 8
Two types of frame tagging are ISL and 802.lQuestion No: What is the purpose of Frame Tagging?

A. They provide best path determination.
B. They allow the exchange of filtering tables.
C. They specify different implementation of the Spanning-Tree Protocol.
D. They provide **inter-switch** VLAN communication.

Answer: D

Explanation: The purpose of frame tagging (ISL tagging) is to interconnect multiple switches and to keep VLAN information as it goes through various switches.

Incorrect Answers:

A, B, and C. This are not the purposed for frame tagging.

Steve McQuerry. Interconnecting Cisco Network Devices. (Cisco Press: 2000) pages 186 – 187.

QUESTION NO: 9

You company has decided to use RIP version 1 as the routing on a Cisco router. What is the command to enable rip as the routing protocol on the company's router?

Answer: Router rip

Explanation: The key characteristics of RIP include: it is a distance vector protocol, hop count is the metric used for path selection, it maximum allowable hop count is 15, it broadcasts it entire routing table every 30 seconds by default and it can be load balanced as many as six equal cost paths (4 paths are the default). To configure RIP not only does the router rip command need to be inputted but also it must be followed by the network command. The network command must be issued for each directly connected network.

Steve McQuerry. Interconnecting Cisco Network Devices. (Cisco Press: 2000) pages 278-279.

QUESTION NO: 10

Your company has decided to use IP RIP version 1 as the routing protocol. Which of the following are the commands you can use to configure IP RIP version 1 on your router?

A. Router RIP
   network 172.16.1.0
   network 10.1.0.1
B. Router RIP
   network 172.16.0.0
   network 10.0.0.0
C. Router RIP
   network 172.16.1.0 172.16.1.1
   network 10.1.0.0 10.1.1.1
D. Router RIP
   network 172.16.1.0 265.255.255.0
   Network 10.1.0.0 255.255.0.0

Answer: B.
Explanation: To enable RIP version 1 not only does the router rip command need to be used but also it must be followed by the network command. The network command must be issued for each directly connected network. The network command must be followed by a valid network address.

Incorrect Answers:
A: Is this series of commands the network 10.1.0.1 is not a valid command.
C: If 4 networks are directly connected they must have their own network command.
D: There is no need to include a subnet mask with a network command.

Steve McQuerry. Interconnecting Cisco Network Devices. (Cisco Press: 2000) pages 278-9.

QUESTION NO: 11
Spanning-Tree was originally developed by DEC. What is the reason Spanning-Tree is used in a switched LAN?

A. To provide a mechanism for network monitoring in switched environments.
B. To prevent routing loops in networks with redundant paths.
C. To prevent routing switching loops in networks with redundant switched paths.
D. To manage, the addition, deletion, and naming of VLANs across multiple switches.
E. To segment a network into multiple collision domains.

Answer: B.
Explanation: The purpose of the Spanning Tree Protocol (STP) is to provide for redundant paths within a switched environment while ensuring that there is a loop free network. This is done as the redundant ports are blocked.

Incorrect Answers:
A. STP does not provide mechanism to monitor a switched network.
C. Loops are not referred to as "routing switching loops".
D. STP is not used for VLAN management.
E. Switches create multiple collisions domains and not STP.

Steve McQuerry. Interconnecting Cisco Network Devices. (Cisco Press: 2000) pages 155-156.