CISCO 640-864 EXAM BUNDLE

Number: 640-864
Passing Score: 800
Time Limit: 120 min
File Version: 39.9

http://www.gratisexam.com/

CISCO 640-864 EXAM BUNDLE

Exam Name: Cisco Designing for Cisco Internetwork Solutions 2011

Actual-Exams

QUESTION 1
Which consideration is the most important for the network designer when considering IP routing?

A. convergence
B. scalability
C. on-demand routing
D. redistribution

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation: Convergence is most important because with delayed convergence outage recovery will be delayed as well.
Link: http://www.cisco.com/en/US/docs/solutions/Enterprise/Campus/routed-ex.html#wp998414

QUESTION 2
You want to gather as much detail as possible during a network audit, to data time stamping across a large number of interfaces, customized include according to interface, with a minimal impact on the network devices themselves. Which tool would you use to meet these requirements?

A. RMON
B. SNMFV3
C. NetFlow
D. Cisco Discovery Protocol

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

NetFlow provides extremely granular and accurate traffic measurements and a high-level collection of aggregated traffic. The output of netflow information is displayed via the show ip cache flow command on routers. The Table shows a description of the fields for NetFlow output.

Table. Netflow Output escription

Field	Description
Bytes	Number of bytes of memory that are used by the NetFlow cache
Active	Number of active flows
Inactive	Number of flow buffers that are allocated in the Netflow cache
Added	Number of flows that have been created since the start of the summary
Exporting flows	IP address and UDP port number of the workstation to which flows are exported
Flows exported	Total number of flows export and the total number of UDP datagrams
Protocol	IP protocol and well-known port number
Total Flows	Number of flows for this protocol since the last time that statistics were cleared
Flows/sec	Average number of flows this protocol per second
Packets/flow	Average number of packets per flow per second
Bytes/pkt	Average number of bytes for this protocol
Packets/sec	Average number of packets for this protocol per second

QUESTION 3
DataQuirk is a web-based medical transcription company for exotic-animal veterinarians. The company recently added a third ISP for international business. They are organizing the enterprise network into a fully operational Enterprise Edge.

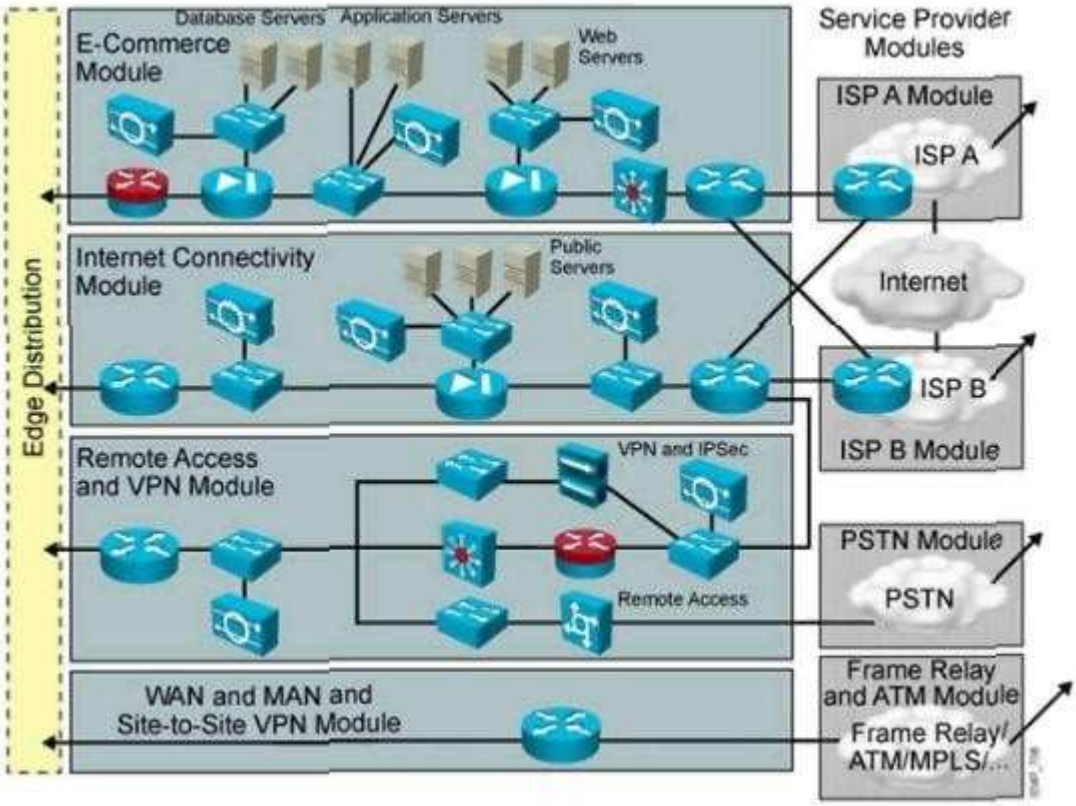
To which two modules will the three ISPs be directly related? (Choose two)

A. PSTN
B. E- Commerce
C. WAN/MAN
D. Edge Distribution
E. Internet Connectivity
F. Remote Access VPN

Correct Answer: BE
Section: (none)
Explanation

Explanation/Reference:
Explanation: The purpose of ISP link is for serving customers & it is also providing internet connectivity to internal & external users, thus it falls into above 2 categories.
Explanation
The Enterprise Edge Module consists of the following modules:
+ E-commerce module: includes the devices and services necessary for an organization to provide e-commerce applications.+ Internet connectivity module: provides enterprise users with Internet access.+ VPN and remote access module: terminates VPN trafc and dial-in connections Cisco 640-864: Practice Exam

from external users.+ WAN/ MAN and site-to-site module: provides connectivity between remote sites and the central site over various WAN technologies. In these modules, only E-Commerce and Internet Connectivity modules will be directly related to the three ISPs.



Link: http://leaman.org/ccna4/Chap_1.pdf

QUESTION 4
Which two of these practices are considered to be best practices when designing the access layer for the enterprise campus? (Choose two)

A. Implement all of the service (QoS, security, STP, and so on) in the access layer, offloading the work from the distribution and core layers.
B. Always use a Spanning Tree Protocol; preferred is Rapid PVST+.
C. Use automatic VLAN pruning to prune unused VLANs from trunked interface to avoid broadcast propagation.
D. Avoid wasted processing by disabling STP where loops are not possible.
E. Use VTP transparent mode to decrease the potential for operational error

Correct Answer: BE
Section: (none)
Explanation

Explanation/Reference:
Explanation:
When designing the building access layer, you must consider the number of users or ports required to size up the LAN switch. Connectivity speed for each host should also be considered.
Cisco 640-864: Practice Exam

Hosts might be connected using various technologies such as Fast Ethernet, Gigabit Ethernet, or port channels. The planned VLANs enter into the design.

Performance in the access layer is also important. Redundancy and QoS features should be considered. The following are recommended best practices for the building access layer:

· Limit VLANs to a single closet when possible to provide the most deterministic and highly available topology.
· Use Rapid Per-VLAN Spanning Tree Plus (RPVST+) if STP is required. It provides the faster convergence than traditional 802.1d default timers.
· Set trunks to ON and ON with no-negotiate.
· Manually prune unused VLANs to avoid broadcast propagation (commonly done on the distribution switch).
· Use VLAN Trunking Protocol (VTP) Transparent mode, because there is little need for a common VLAN database in hierarchical networks.
· Disable trunking on host ports, because it is not necessary. Doing so provides more security and speeds up PortFast.
· Consider implementing routing in the access layer to provide fast convergence and Layer 3 load balancing.
· Use the switchport host commands on server and end-user ports to enable PortFast and disable channeling on these ports.
· Use Cisco STP Toolkit, which provides
· PortFast: Bypass listening-learning phase for access ports · Loop Guard: Prevents alternate or root port from becoming designated in absence of bridge protocol data units (BPDU)
· Root Guard: Prevents external switches from becoming root · BPDU Guard: Disables PortFast-enabled port if a BPDU is received Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 3, Page 85

QUESTION 5
Which one of these statements should the designer keep in mind when considering the advanced routing features?

A. one-way router redistribution avoids the requirement for state or default routes.
B. Redistribution, summarization, and filtering are most often applied between the campus core and enterprise edge.
C. Filtering only occurs on the routing domain boundary using redistribution.
D. Summarize routes at the core toward the distribution layer.
Cisco 640-864: Practice Exam
E. The hierarchical flexibility of IPv6 addressing avoids the requirements for routing traffic reduction using aggregation.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Answer A is incorrect as a default route is still required Answer B & D are incorrect as Redistribution, summarization, and filtering are used in the Distribution Layer Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 1, Page 36 37
Answer C is incorrect as route filter can occur at either a routing domain boundary or at a routing redistribution point. Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter Answer E is correct as IPv6 allow the aggregation (summarization) of routing prefixes to reduction of the number of routes in the global routing table. Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 9

Note: Core Layer
The core layer is the network's high-speed switching backbone that is crucial to corporate communications. It is also referred as the backbone. The core layer should have the following characteristics:

Distribution Layer
The network's distribution layer is the isolation point between the network's access and core layers. The distribution layer can have many roles, including implementing the following functions:

You can use several Cisco IOS Software features to implement policy at the distribution layer:
Route Filtering
Filtering of routes can occur on either a redistribution point or in the routing domain to prevent some parts of the network from accessing other sections of the network.

Filtering at a redistribution point provides the following:

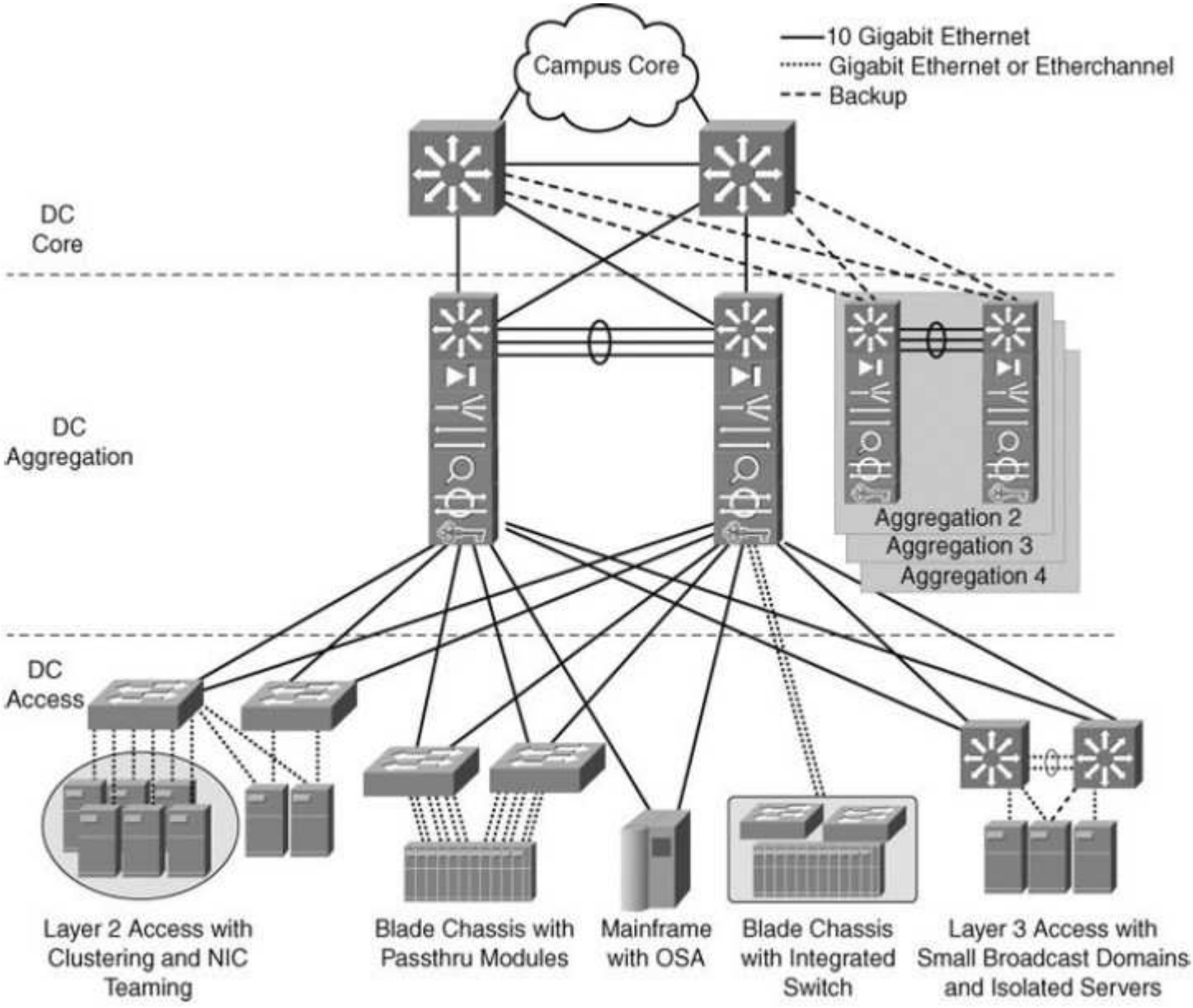
Global Aggregatable IPv6 Address
Global aggregatable unicast addresses allow the aggregation of routing prefixes. This allows a reduction of the number of routes in the global routing table. These addresses are used in links to aggregate (summarize) routes upwards to the core in large organizations or to ISPs. Global aggregatable addresses are identified by the fixed prefix of 2000:/3. As shown in Figure 9-5, the format of the global aggregatable IPv6 address is a global routing prefix starting with binary 001, followed by the subnet ID and then the 64-bit interface identifier (ID). The device MAC address is normally used as the interface ID.
Cisco 640-864: Practice Exam

QUESTION 6
Which two statements about designing the Data Center Access layer are correct? (Choose two)

A. Multiport NIC servers should each have their own IP address
B. Layer 3 connectivity should never be used in the access layer
C. Layer 2 connectivity is primarily implemented in the access layer
D. Multiport NIC servers should never be used in the access layer
E. Layer 2 clustering implementation requires servers to be Layer 2 adjacent

Correct Answer: CE
Section: (none)
Explanation

Explanation/Reference:
Explanation: User access is primarily layer 2 in nature, layer 2 clustering is possible only in layer Here is the explanation from the Cisco press CCDA certification guide Figure 4-8. Enterprise Data Center Infrastructure Overview



Defining the DC Access Layer
The data center access layer's main purpose is to provide Layer 2 and Layer 3 physical port density for various servers in the data center. In addition, data center access layer switches Cisco 640-864: Practice Exam

provide high-performance, low-latency switching and can support a mix of oversubscription requirements. Both Layer 2 and Layer 3 access (also called routed access) designs are available, but most data center access layers are built using Layer 2 connectivity. The Layer 2 access design uses VLAN trunks upstream, which allows data center aggregation services to be shared across the same VLAN and across multiple switches. Other advantages of Layer 2 access are support for NIC teaming and server clustering that requires network connections to be Layer 2 adjacent or on the same VLAN with one another.

CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 4

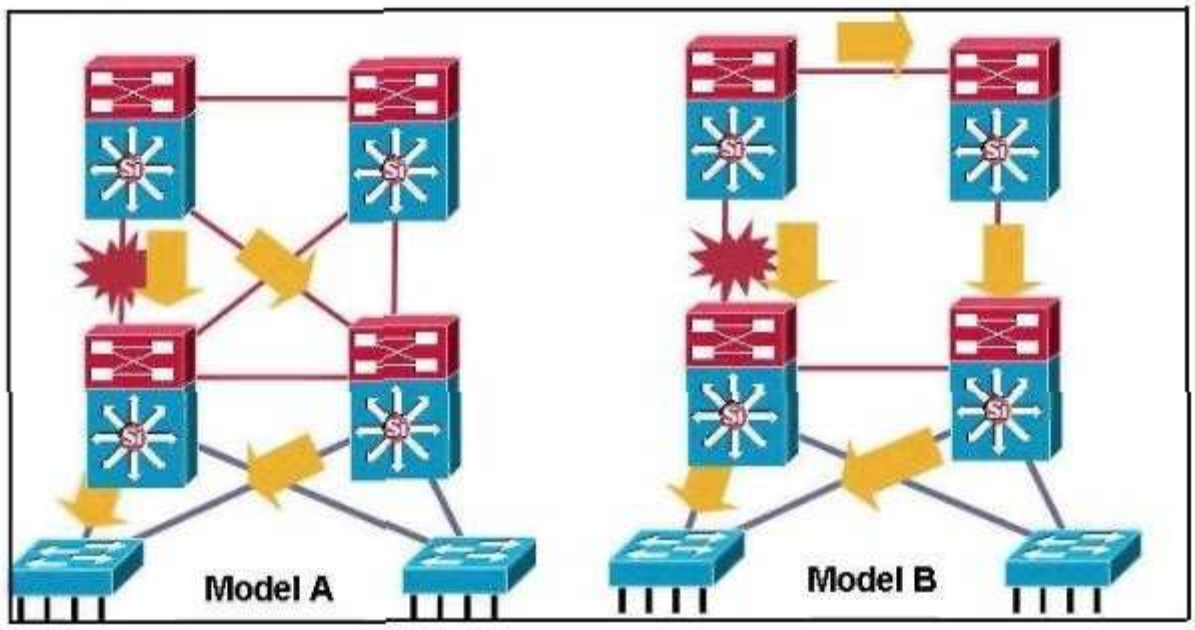
QUESTION 7
Which IPv6 feature enables routing to distribute connection requests to the nearest content server?

A. Link-local
B. Site-local
C. Anycast
D. Multicast
E. Global aggregatable

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: Anycast is a network addressing and routing methodology in which datagrams from a single sender are routed to the topologically nearest node in a group of potential receivers all identified by the same destination address.
Link: http://en.wikipedia.org/wiki/Anycast

QUESTION 8
Refer to the exhibit.



Model A is the recommended design for routing between Building Distribution switches and Campus Core switches. Which two statements describe the reasons? (Choose two)

A. Model A uses timer-based non-deterministic convergence.
B. Mode A uses timer-based, providing fast convergence to the remaining path.
C. In Model A, a link or box failure does not require routing protocol convergence.

D. In Model A, the Layer 3 redundant equal cost links support fast convergence.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation: Due to redundant links in place the routing protocols can select multiple equal cost paths and installs them as soon as one of the links goes down, such topology also can support load-balancing.
Link:
http://www.cisco.com/en/US/docs/solutions/Enterprise/Campus/HA_campus_DG/hacampusdg.ht ml

QUESTION 9
Which Cisco security management solution provides the means to identify, isolate, and counter security threats to the network?

A. Adaptive Security Device Manager
B. Intrusion Prevention Device Manager
C. Security Device Manager
D. Cisco Security Manager
E. Cisco Security Monitoring, Analysis, and Response System

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation: Cisco Security MARS is a security threat mitigation (STM) system. It delivers a range of information about your networks' health as reported by devices in your network.

Cisco Security Monitoring, Analysis, and Response System (Cisco Security MARS) is an appliance-based solution for network security administrators to monitor, identify, isolate, and respond to security threats. MARS understands the network topology and device congurations from routers, switches, rewalls, and IPS devices. MARS also can model packet ows on the network.

Note:
Cisco has a variety of security management products and technologies that allow scalable administration and enforcement of security policy for the Cisco SCF architecture. These solutions reduce the operational management and automate many of the common tasks, including Cisco 640-864: Practice Exam

configuration, analysis, incident response, and reporting. Security management platforms include the following:
·Cisco Security Manager (CSM) is an integrated solution for GUI configuration management of firewall, VPN, and IPS policies on Cisco security appliances, firewalls, routers, and switch modules. CSM has capabilities for security policies to be deployed by device, by group, or globally for all devices.
·Cisco Secure Access Control Server (ACS) provides centralized control for administrative access to Cisco devices and security applications. ACS provides for AAA security services and supports routers, switches, VPN services, ASAs, and Cisco NAC clients. In addition, Cisco ACS also supports back-end directory integration with Lightweight Directory Access Protocol (LDAP) and Microsoft Active Directory (AD) for authentication services. ·Cisco Security Monitoring, Analysis, and Response System (Cisco Security MARS) is an appliance-based solution for network security administrators to monitor, identify, isolate, and respond to security threats. MARS understands the network topology and device configurations from routers, switches, firewalls, and IPS devices. MARS also can model packet flows on the network.
·Cisco NAC Manager is an appliance that manages the Cisco NAC servers. NAC Manager has a web-based interface for managing security policies and online users that are part of the NAC infrastructure. Cisco NAC Manager acts as an authentication proxy using Cisco ACS or Microsoft AD.
·System Administration Host provides a centralized host used to stage configuration, software images, and implement network changes.
·Network Time Protocol (NTP) server provides time synchronization to NTP clients such as routers and

switches. Time synchronization is crucial in the analysis of event correlations

QUESTION 10
Which of these is the best routing deployment for a single dedicated link to an ISP for internal access?

A. EIGRP
B. RIP
C. BGP
D. Static
E. OSPF

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation: Static routing reduces the complexity and is best way of routing when there are no redundant paths to be maintained.
Link: http://oreilly.com/catalog/cisco/chapter/ch05.html

QUESTION 11
Which two statements about the data Center Aggregation layer are correct? (Choose two)

A. Layer 4 through layer 7 services are provided in that layer
B. STP should never be supported in that layer
C. That layer is the critical point for control and application services Cisco 640-864: Practice Exam
D. Layer 2 connectivity is provided in that layer from the data center to the core

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation: Data Center aggregation layer connects various network modules together. Link: http:// www.cisco.com/en/US/docs/solutions/Enterprise/Campus/campover.html

QUESTION 12
When designing the infrastructure protection portion for the enterprise edge, which of these solutions would be the most appropriate solution to consider?

A. 802. IX
B. ACLs in the core layer
C. Cisco Security MARS
D. AAA

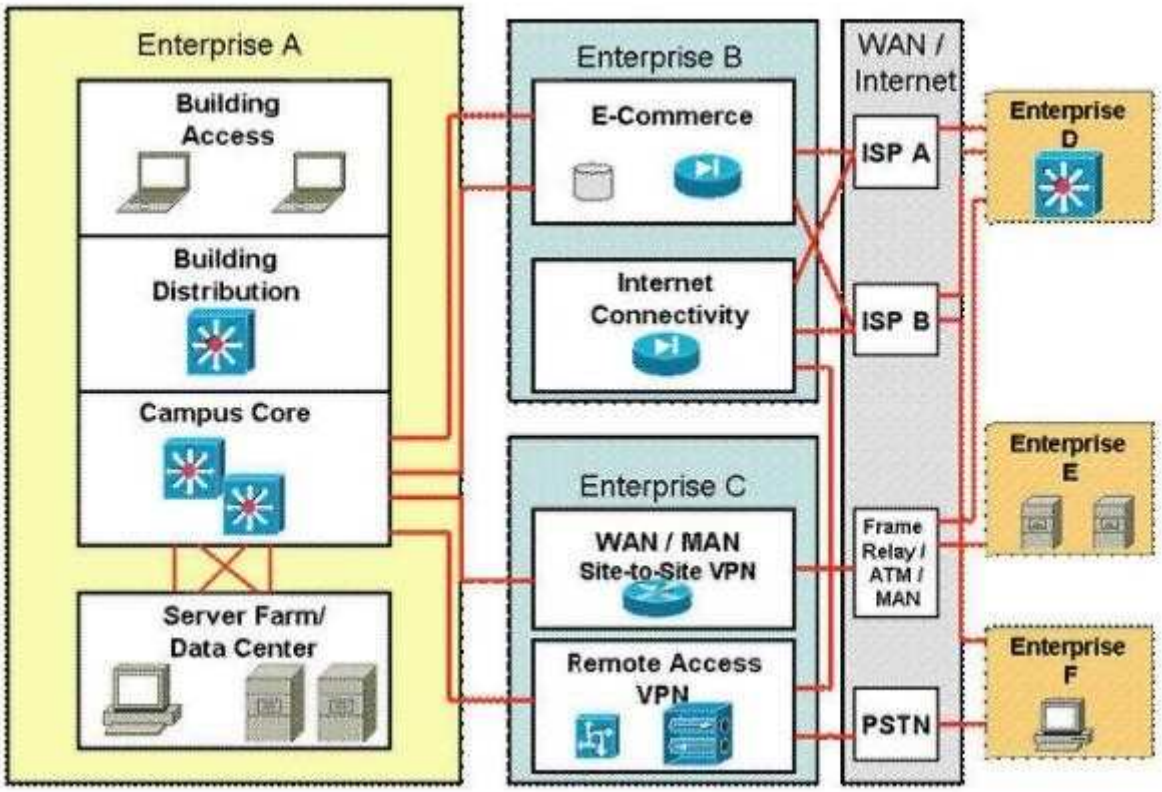
Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Explanation
Security in the Enterprise Edge

Cisco Security Category	Security Solutions
Identity and access control	Firewalls, IPsec, SSL VPN, and ACLs
Threat detection and mitigation	NetFlow, syslog, SNMP, RMON, IDS modules, CS-MARS, and NIPS
Infrastructure protection	AAA, CoPP, TACACS, RADIUS, SSH, SNMP v3, IGP/EGP MD5, RFC 2827 ingress filtering and Layer 2 security features
Security management	CSM, CS-MARS, and ACS

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 13 Cisco 640-864: Practice Exam

QUESTION 13
Refer to the exhibit.



Which module is the Enterprise WAN module?

A. Enterprise A
Cisco 640-864: Practice Exam
B. Enterprise B
C. Enterprise C
D. Enterprise D
E. Enterprise E

F. Enterprise F

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: WAN module consists of WAN link terminal devices, routers, firewalls, remote access services.
Link: http://www.cisco.com/en/US/docs/solutions/Enterprise/Campus/campover.html#wp708780

QUESTION 14
A large enterprise requires sensitive information be transmitted over a public infrastructure. It requires confidentiality integrity, and authenticity. Which security solution best meets these requirements?

A. Cisco IOS Firewall
B. Intrusion Prevention
C. IPSEC
D. AAA
E. Traffic Guard Protector
F. SECURE CONECTIVITY

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: IPSec provides CIA (Confidentiality, Integrity & Authencity) Link: http://nl.wikipedia.org/wiki/IPsec

QUESTION 15
There are a number of advantages to using virtualization within the data center module. Which the following two are samples of these advantages?

A. Virtualization consolidates many low-performance devices into a few high performance devices, providing a more efficient utilization of hardware and increasing the price/performance ratio.
B. Virtualization compartmentalizes a single device into a few high-performance devices, providing a more efficient utilization of hardware and increasing the price/performance ratio.
C. Dynamic forcibility eliminates the need to add, reassign, or repurpose resources in the system.
D. Virtualization separates user via different physical networks into groups with visibility into only their logical network.
E. Virtualization provides distinct security policies per physical device.

Correct Answer: BE
Section: (none)
Explanation

Explanation/Reference:
Explanation: Virtualization is concept of sharing a single physical device as multiple logical devices.
Link:
http://www.cisco.com/en/US/docs/solutions/Enterprise/Network_Virtualization/ServEdge.html

QUESTION 16
Which one of these statements describes why, from a design perspective, a managed VPN approach for enterprise teleworkers is a most effective?

A. A managed VPN solution uses a cost effective, on-demand VPN tunnel back to the enterprise
B. This solution supports all teleworkers who do not require voce or video

C. This architecture provides centralized management where the enterprise can apply security policies and push configurations.
D. It provides complete flexibility for remote access through a wireless hotspot or a guest network at a host, in addition to a home office.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Here is the answer from the Cisco Certification guide.

Enterprise Teleworker Design
Enterprise teleworkers need to be differentiated from the occasional remote worker. The full-time enterprise teleworker has more extensive application access and requirements than the occasional remote worker. Occasionally, remote users connect to the corporate network at a hotspot, but generally they do not have the same application demands of an enterprise teleworker. Generally, enterprise teleworkers connect to a local ISP through a cable or DSL connection in their residence.'
Cisco 640-864: Practice Exam

The Cisco Virtual Office Solution for the Enterprise Teleworker is implemented using the Cisco 800 series ISRs. Each ISR has integrated switch ports that then connect to the user's broadband connection. The solution uses a permanent always-on IPsec VPN tunnel back to the corporate network. This architecture provides for centralized IT security management, corporate-pushed security policies, and integrated identity services. In addition, this solution supports the enterprise teleworker needs through advanced applications such as voice and video. For example, the enterprise teleworker can take advantage of toll bypass, voicemail, and advanced IP phone features not available in the PSTN.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 7

QUESTION 17
Which one of these statements is true when considering the design of voice video service for the campus network?

A. Access layer switches should support 802.1Q trunking and 802.1p for Layer 2 ports with IP phones connected.
B. Combining voice and data and a single VLAN simplifies QoS trust boundaries, VLAN access control and ease of management.
C. Data devices will also require access to priority queues via packet tagging.
D. Fixed network delays (serialization, propagation, and so on) are generally unpredictable and more difficult to calculate than variable network delays.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation: 802.1Q & 802.1P are required for Vlan tagging & prioritizing voice frames.
Link:
http://www.cisco.com/en/US/docs/switches/lan/catalyst3750/software/release/12.2_25_sec/configu ration/guide/swvoip.html

QUESTION 18
Which statement describes the recommended deployments of IPv4 addressing in the Cisco Network Architecture for the Enterprise?
Cisco 640-864: Practice Exam

A. private addressing throughout with public addressing n the Internet Connectivity module
B. private addressing throughout with public addressing n the Internet Connectivity and E- Commerce modules
C. private addressing throughout with public addressing m the Internet Connectivity, E-Commerce, and Remote Access and VPN modules
D. private addressing throughout with public addressing in the Internet Connectivity, E-Commerce, and Enterprise Branch modules

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: E-Commerce, and Remote Access and VPN modules provide services to external users, customer and need to be available without NAT as NAT has inherent issues with many application level services.
Link: http://leaman.org/ccna4/Chap_1.pdf

QUESTION 19
Which network scenario is static routing most appropriate?

A. parallel WAN links
B. IPSec VPN
C. expanding networks
D. hierarchical routing

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation: IPSec VPN are point to point connections and works easily with static routes.
Link: CCDA Self Study Guide: Diane Teare

QUESTION 20
When considering the three VoIP design models single site, centralized multisite, and distributed multisite which question below would help to eliminate one of these questions?

A. Will the switches be required to provide inline power?
B. Will users need to make off site calls, beyond the enterprise?
C. Will users require applications such as voice mail and interactive voice response?
D. Are there users whose only enterprise access is via a QoS-enabled WAN?

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation: VoIP designing should consider how users are connecting to campus.
Cisco 640-864: Practice Exam

Link: http://www.net130.com/tutorial/cisco-pdf/Cisco_%20IP%20Telephony%20Network%20Design_Guide.pdf

QUESTION 21
Which aspect would most likely be found in the draft design document?

A. a list of OoS requirements
B. a note that there are no segments with more than 70 percent broadcast or multicast traffic
C. the level of redundancy or high availability that currently exists or is required in the network
D. the list of network infrastructure services whir h are in use, such as voice and video

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: please refer to link.
Link: CCDA Self Study Guide: Diane Teare

QUESTION 22
When considering the enterprise campus design, which network application category, most influence the network design?
Cisco 640-864: Practice Exam

A. peer-to-peer
B. client-local server
C. client-enterprise edge server
D. client-server farm

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation: There should be considerations about traffic flow between client and servers.
Link:
http://www.cisco.com/en/US/docs/solutions/Enterprise/Campus/Borderless_Campus_Network_1.0 / BN_Campus_Models.html

QUESTION 23
Which two link state routing protocols support IPv6 routing? (Choose two)

A. BGP4+
B. OSPF
C. RIPng
D. EIGRP
E. IS-IS

Correct Answer: BE
Section: (none)
Explanation

Explanation/Reference:
Explanation: only OSPF & IS-IS are LSPs which support IPv6.
Link:
http://www.cisco.com/en/US/partner/products/ps10591/products_installation_and_configuration_guides_list.html

QUESTION 24
When describing wireless portion of an enterprise campus network, which one of these statements should serve as a strict guideline?

A. Wireless controllers should be distributed throughout the building distribution layers
B. Dynamic controller redundancy, where the access points attempt to join the least loaded controller, is a best-practice approach.
C. Wireless controllers should be centralized in the core layer
D. To improve the RF coverage, the controllers of any building should be put in the same mobility Cisco 640-864: Practice Exam
group.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation: N+N redundancy allows for logical partitioning of APs, deployed in such way the APs do not associate with WLC in random way.
Link: http://www.cisco.com/web/learning/le31/le46/cln/qlm/CCDA/design/understanding-wireless- network-controller-technology-3/player.html

QUESTION 25
When designing using the Cisco Enterprise Architecture, in which Enterprise Campus layer does the remote Access and VPN module establish its connection?

A. Building Access
B. Campus Core
C. Enterprise Branch
D. Enterprise Data Center

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation: All the modules must end up in the core for optimized routing & switching across the network modules.
Link:
http://www.cisco.com/en/US/docs/solutions/Enterprise/Campus/Borderless_Campus_Network_1.0 / BN_Campus_Technologies.html

QUESTION 26
Which of these is the equation used to derive a 64 Kbps bit rate?

A. 2 x 8 kHz x 4-bit code words
B. 8 kHz x 8-bit code words
C. 2 x 4-bit code words x 8 kHz
D. 2x4 kHz x 8-bit code words

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation : While the human ear can sense sounds from 20 to 20,000 Hz, and speech encompasses sounds from about 200 to 9000 Hz, the telephone channel was designed to operate at about 300 to 3400 Hz. This economical range carries enough fidelity to allow callers to identify the party at the far end and sense their mood. Nyquist decided to extend the digitization to 4000 Hz, to capture higher-frequency sounds that the telephone channel may deliver. Therefore, the highest frequency for voice is 4000 Hz. According to

Nyquist theory, we must double the highest frequency, so 2x4kHz = 8kHz.
Each sample will be encoded into a 8-bit code. Therefore 8kHz x 8-bit code = 64 Kbps (notice about the unit Kbps: 8kHz = 8000 samples per second so 8000 x 8-bit = 64000 bit per second = 64 Kilobit per second = 64 Kbps)
Link: http://encyclopedia2.thefreedictionary.com/Nyquist+theorem Note:
Nyquist theory:
"When sampling a signal (e.g., converting from an analog signal to digital), the sampling frequency Cisco 640-864: Practice Exam

must be greater than twice the bandwidth of the input signal in order to be able to reconstruct the original perfectly from the sampled version."

QUESTION 27
Which one of these statements best describes the challenge the designer when dealing with IP routing?

A. OSPF supports fast convergence does not require periodic routing table updates, so the optional network design is best simplified with the network as a single backbone area.
B. Manual summarization is limited to ABRs and ASBRs, therefore the designer must pay strict attention to the EIGRP topology.
C. EIGRP, as a proprietary protocol, has special challenges when dealing with networks deployed with IPv6.
D. Effective scalability with OSPF requires the designer to pay strict attention to the hierarchical network structure, localizing topology changes.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation: OSPF demands modular design, multiple areas for functioning optimally. Link: http://www.cisco.com/en/US/tech/tk365/technologies_white_paper09186a0080094e9e.shtml

QUESTION 28
When designing the identity and access control portions for the enterprise campus network, which of these solutions would be the most appropriate solution to consider?

A. 802.ax
B. ACLs in the core layer
C. Cisco Security MARS
D. NetFlow

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Answer A is incorrect as there is no such thing as 802.ax. 802.1ax is Link aggregation which has nothing to do with identity and access control. However, if this is a type-o and 802.1x was supposed to be used this would be the correct answer Answer B is incorrect as ACLs do not get used in the Core layer Answer C is questionable and appears to be the only security solution that can actually be used that is listed here. However, the MARS appliance is used for Infrastructure protection and NOT identity and access control but is used for Security management, Threat Detection, and mitigation Cisco 640-864: Practice Exam

Answer D is incorrect as it is also used for Threat detection and mitigation Table, Security in the Campus

Cisco Security Category	Security Solutions
Identity and access control	802.1X, NAC, ACLs, and firewalls
Threat detection and mitigation	NetFlow, Syslog, SNMP, RMON, CS-MARS, and NIPS
Infrastructure protection	AAA, TACACS, RADIUS, SSH, SNMPv3, IGP/ EGP MD5, and Layer 2 security features
Security management	CSM, CS-MARS, and ACS

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 13

QUESTION 29
Which three terms describe the primary functions of the distribution layer of the campus network design hierarchy? (Chose three)

A. provides end-user connectivity
B. provides high speed transport
C. provides QoS services
D. enforces security policies
E. provides WAN connection
F. connects access devices to the core backbone

Correct Answer: CDF
Section: (none)
Explanation

Explanation/Reference:
Explanation: D, C, F are properties of distribution layer. Link: http://www.cisco.com/en/US/docs/solutions/Enterprise/Campus/campover.html#wp708979

QUESTION 30
Cisco 640-864: Practice Exam
Which codec does Cisco recommend tor WAN link?

A. G.711
B. G 723
C. G 728
D. G 729

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation: When bandwidth is abundantly available, as in a LAN environment, the Cisco IP phone default G.711 is used in RTP. When bandwidth is at a premium, as on a slow WAN link, G.729 is used.
Link: http://www.globalknowledge.fr/PDF/WP_UnifiedComm.pdf

QUESTION 31
RST Corporation is planning to upgrade its current network. The chief technology officer has supplied a topology diagram and an IP addressing scheme of the current network during an interview.

RST has been growing at about twenty percent per year. It has been difficult to maintain customer support at a satisfactory level. Therefore, the RST board has met with and directed the chief technology officer to look into network improvements.

Which two items are most relevant in documenting RST's business requirements? (Choose two.)

A. existing network topologies
B. network performance requirements
C. the IP addresses assigned by the ISP
D. improved customer support requirements
E. projected growth estimates

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 32
Which two of these best describe the implementation of a WAN Backup design over the Internet? (Choose two.)

A. a best-effort method
B. bandwidth guaranteed based on interface configuration
C. designed as an alternative to a failed WAN connection
D. implemented with a point-to-point logical link using a Layer 2 tunnel
E. requires no ISP coordination or involvement

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Cisco 640-864: Practice Exam

QUESTION 33
Which two design criteria require VLANs in a proposed solution? (Choose two.)

A. the segmenting of collision domains
B. a limited corporate budget
C. the use of multivendor equipment
D. security between departments
E. video streaming on the LAN
F. the segmenting of broadcast domains

Correct Answer: DF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 34

Which three factors best justify WAN link redundancy between geographically dispersed sites? (Choose three.)

A. high expense of transmitting data
B. important traffic flows
C. excessive packet transmission rate
D. uncertain reliability
E. high link utilization
F. lack of speed

Correct Answer: BDF
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

WAN Backup Design
Redundancy is critical in WAN design for the remote site because of the unreliable nature of WAN links, when compared to LANs that they connect. Most enterprise edge solutions require high availability between the primary and remote site. Because WAN links have lower reliability and lack bandwidth, they are good candidates for most WAN backup designs.

Branch offices should have some type of backup strategy in the event of a primary link failure. Backup links can be either dialup, permanent WAN, or Internet-based connections.
WAN backup options are as follows:

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 7

QUESTION 35
Which three pieces of information should be documented for each step of each phase in a design implementation plan? (Choose three.)

A. easy guidelines in case of failure
   Cisco 640-864: Practice Exam
B. estimated rollback time in case of failure
C. simple implementation guidelines
D. estimated implementation time
E. design document references
F. step description

Correct Answer: DEF
Section: (none)
Explanation

Explanation/Reference:
Explanation:
The implementation of a network consists of several phases. The each step should contain the following information:

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 1

QUESTION 36
The topology map in the draft design document should cover which two layers of the OSI model? (Choose two.)

A. session
B. data link

C. transport
D. application
E. physical
F. network

Correct Answer: EF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 37
What are the two most likely driving forces motivating businesses to integrate voice and data into converged networks? (Choose two.)

A. Voice networks cannot carry data unless the PRI circuits aggregate the BRI circuits.
B. Their PSTNs cannot deploy features quickly enough.
C. Data, voice, and video cannot converge on their current PSTN structures.
D. Voice has become the primary traffic on networks.
E. WAN costs can be reduced by migrating to converged networks.

Correct Answer: AC
Section: (none)
Explanation

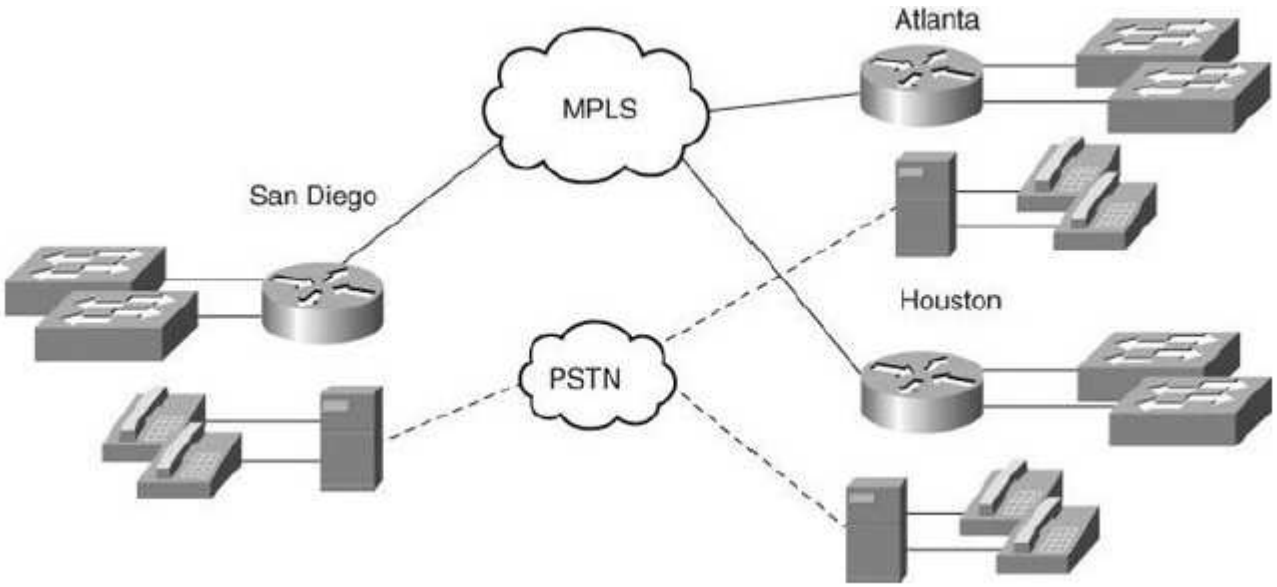
Explanation/Reference:
Explanation: Explanation

VoIP
VoIP provides transport of voice over the IP protocol family. IP makes voice globally available regardless of the data-link protocol in use (Ethernet, ATM, Frame Relay). With VoIP, enterprises do not have to build separate voice and data networks. Integrating voice and data into a single converged network eliminates duplicate infrastructure, management, and costs.

Figure 14-7 shows a company that has separate voice and data networks. Phones connect to local PBXs, and the PBXs are connected using TDM trunks. Off-net calls are routed to the PSTN. The data network uses LAN switches connected to WAN routers. The WAN for data uses Frame Relay. Separate operations and management systems are required for these networks. Each system has its corresponding monthly WAN charges and personnel, resulting in additional costs.
Cisco 640-864: Practice Exam

With separate voice and data networks,

Figure 14-7 Separate Voice and Data Networks



Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 14

QUESTION 38
A lightweight access point is added to a working network. Which sequence will it use to associate itself with a wireless LAN controller?

A. primary, secondary, tertiary, greatest AP capacity, master
B. primary, secondary, tertiary, master, greatest AP capacity
C. master, primary, secondary, tertiary, greatest AP capacity
D. greatest AP capacity, primary, secondary, tertiary, master

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation
Table. WLAN Controller Platforms

Order	WLC
First	Primary sysName (preconfigured)
Second	Second sysName (preconfigured)
Third	Tertiary sysName (preconfigured)
Fourth	Master controller
Fifth	WLC with greatest capacity for AP associations

Cisco 640-864: Practice Exam

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 5

QUESTION 39
Which two statements best describe the implementation of Overlay VPN connectivity for remote access in the Enterprise Edge WAN module? (Choose two.) Cisco 640-864: Practice Exam

A. Bandwidth is provisioned on a site-to-site basis.
B. It uses dedicated point-to-point links.
C. Optimum routing between customer sites requires a full mesh of virtual circuits.
D. It must use Layer 2 labels to forward packets
E. The ISP actively participates in customer routing.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

Network-Layer VPNs
The network layer in the TCP/IP protocol suite consists of the IP routing system--how reachability information is conveyed from one point in the network to another. There are a few methods to construct VPNs within the network layer; each is examined in the following paragraphs. A brief overview of non-IP VPNs is provided in Part II of this article.A brief overview of the differences in the "peer" and "overlay" VPN models is appropriate at this point. Simply put, the "peer" VPN model is one in which the network-layer forwarding path computation is done on a hop-by-hop basis, where each node in the intermediate data transit path is a peer with a next-hop node. Traditional routed networks are examples of peer models, where each router in the network path is a peer with its next-hop adjacencies. Alternatively, the "overlay" VPN model is one in which the network-layer forwarding path is not done on a hop-by-hop basis, but rather, the intermediate link- layer network is used as a "cut-through" to another edge node on the other side of a large cloud. Examples of "overlay" VPN models include ATM, Frame Relay, and tunneling implementations.Having drawn these simple distinctions between the peer and overlay models, it should be noted that the overlay model introduces some serious scaling concerns in cases where large numbers of egress peers are required because the number of adjacencies increases in direct proportion to the number of peers--the amount of computational and performance overhead required to maintain routing state, adjacency information, and other detailed packet forwarding and routing information for each peer becomes a liability in very large networks. If all the egress nodes in a cut-through network become peers in an effort to make all egress nodes one "Layer 3" hop away from one another, the scalability of the VPN overlay model is limited quite remarkably.

The Internet Protocol Journal - Volume 1, No. 1
What Is a VPN? - Part I

http://www.cisco.com/web/about/ac123/ac147/archived_issues/ipj_1-1/what_is_a_vpn.html

QUESTION 40
After a period of rapid growth, FloCzar Boats is seeking better network management tools.
Managers have developed this needs list:

Move from static to dynamic device information.
Cisco 640-864: Practice Exam
Gain information to assist in long-term trend analysis.

Concentrate on Layer 4 monitoring.

Which management protocol will most help FloCzar achieve its goals?

A. RMON2
B. SNMP
C. NetFlow
D. RMON
E. Cisco Discovery Protocol

Correct Answer: A

Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation
RMON2
RMON1 is focused on the data link and physical layers of the OSI model. As shown in Figure 15- 4, RMON2 provides an extension for monitoring upper-layer protocols.

Figure. RMON1 and RMON2 Compared to the OSI Model
Defined by RFC 2021, RMON2 extends the RMON group with the MIB groups listed in the following Table

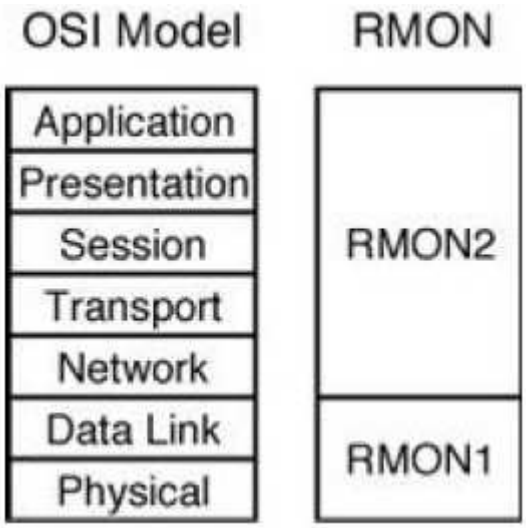


Table. RMON2 Groups
Cisco 640-864: Practice Exam

ID	Name	Description
11	Protocol Directory	Lists the protocols the device supports
12	Protocol Distribution	Traffic statistics for each protocol
13	Address Mapping	Contains network-to-MAC layer address mapping (IP to MAC)
14	Network Layer Host	Contains statistics for traffic sent to or from network layer hosts
15	Network Layer Matrix	Contains statistics for conversations between two network layer hosts
16	Application Layer Host	Contains application layer statistics for traffic sent to or from each host
17	Application Layer Matrix	Contains application layer statistics for conversations between pairs of hosts
18	User History	Contains periodic samples of specified variables
19	Probe Configuration	Probes parameter configuration

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 15

QUESTION 41
A very large organization has received its IPv6 address range from its Internet Service Provider and intends to

use only IPv6 addresses internally. Employees will access the Internet using port address translation. What is a requirement for their DNS servers? Cisco 640-864: Practice Exam

A. There are no changes required to their DNS servers.
B. Their DNS servers need to support only IPv6 addresses.
C. Their DNS servers need to support only IPv4 addresses.
D. They need additional DNS servers in their network just for IPv6 addresses.
E. They no longer need DNS servers.
F. Their DNS servers need to support both IPv4 and IPv6 addresses.

Correct Answer: F
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 42
Which two statements represent advantages that the top-down network design process has over the bottom-up network design process? (Choose two.)

A. utilizes previous experience
B. identifies appropriate technologies first
C. is able to provide the big picture
D. takes less time to design a network
E. provides a design for current and future development

Correct Answer: CE
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

By incorporating the organization's requirements, the top-down network design process provide the big picture that meets current and future requirements.

QUESTION 43
Which two statements about IPv6 addresses are true? (Choose two.)

A. Two colons (::) are used to represent successive hexadecimal fields of zeros.
B. Leading zeros are required.
C. Two colons (::) are used to separate fields.
D. A single interface will have multiple IPv6 addresses of different types.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 44
Cisco 640-864: Practice Exam
Which three security measures can be used to mitigate DoS attacks that are directed at exposed hosts within

the E-Commerce module? (Choose three.)

A. Use NIDSs and HIPSs to detect signs of attack and to identify potentially successful breaches.
B. Partition the exposed hosts into a separate LAN or VLAN.
C. Use LAN switch VTP pruning to separate hosts on the same segment.
D. Use a VPN concentrator (IPSec) to protect and verify each connection to the exposed host or hosts.
E. Use firewalls to block all unnecessary connections to the exposed hosts.

Correct Answer: ABE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 45
A customer wishes to implement VoIP using centralized call-processing. In addition, the customer wishes to ice quality and good bandwidth utilization. Which codec would you suggest?

A. G.711
B. G.729
C. G.726
D. G.723.1

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 46
Which three sources does a network designer use to collect information for characterizing an existing network? (Choose three.)

A. server statistics
B. network audit
C. traffic analysis
D. visual inventory
E. staff input

Correct Answer: BCE
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Explanation
Cisco 640-864: Practice Exam

Characterizing the Existing Network
Characterizing the network is Step 2 of the design methodology. In this section, you learn to identify a network's major features, tools to analyze existing network traffic, and tools for auditing and monitoring network traffic.

Steps in Gathering Information
When arriving at a site that has an existing network, you need to obtain all the existing documentation.

Sometimes no documented information exists. You should be prepared to use tools to obtain information and get access to log in to the network devices to obtain information.
Here are the steps for gathering information:

When gathering exiting documentation, you look for site information such as site names, site addresses, site contacts, site hours of operation, and building and room access. Network infrastructure information includes locations and types of servers and network devices, data center and closet locations, LAN wiring, WAN technologies and circuit speeds, and power used. Logical network information includes IP addressing, routing protocols, network management, and security access lists used. You need to find out whether voice or video is being used on the network.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 1

QUESTION 47
Which of the following Cisco router services performs network traffic analysis to assist in documenting a customer's existing network?

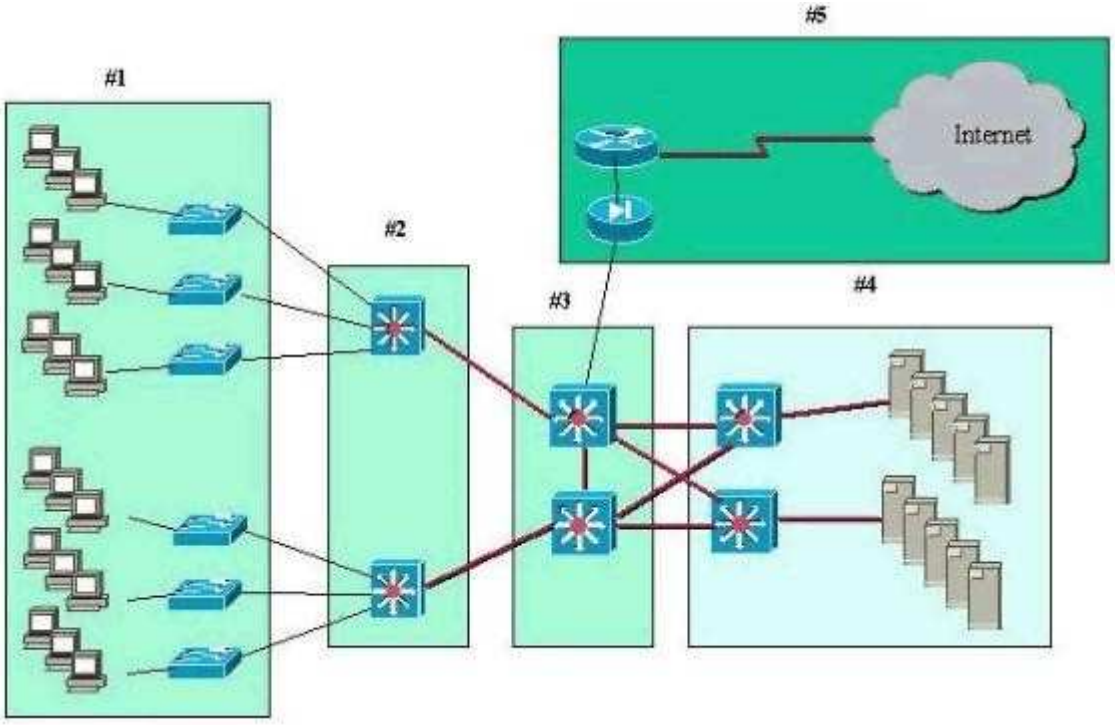
A. NetMon
B. MRTG
C. SNMP MIB compiler
D. NetFlow

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 48
Refer to the exhibit.

A standard, Layer 2 campus network design is pictured. Which numbered box represents the distribution layer?
Cisco 640-864: Practice Exam



A. #1
B. #3
C. #4
D. #2

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation: #1 Access
#2 Distribution
#3 Core
#4 Server Farm / Data Center
#5 WAN Module
#1 is the access layer, since it interfaces directly with the clients #3 is the core layer, since these switches have a direct connection (highest resiliency) and they interface directly with the WAN module
#4 is the datacenter layer, because it interfaces directly with the campus servers #5 is the WAN module, it interfaces with the internet

QUESTION 49
Cisco 640-864: Practice Exam
Which Cisco security solution can quarantine and prevent non-compliant end stations from accessing the network until they achieve security policy compliance?

A. Cisco Security Monitoring, Analysis, and Response System
B. Adaptive Security Appliance
C. Network Admission Control
D. Network Intrusion Prevention System
E. Cisco Secure Connectivity
F. Access Control Server

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation
The Network Admission Control protects the network from threats by enforcing security compliance on all devices attempting to access the network. It only allows access to endpoints only after they have passed authentication based on security policies.

QUESTION 50
A network design includes private addressing, but there is also a need for two or three network devices to each be assigned a unique public address so they can be accessed from the Internet.
Which technique will satisfy this requirement?

A. Static NAT
B. VPN tunneling
C. Dynamic NAT
D. DHCP

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation:
NAT has several forms:
·Static NAT: Maps an unregistered or private IP address to a registered IP address; it is configured manually. It is commonly used to assign a network device with internal private IP address a unique public address so that they can be accessed from the Internet. ·Dynamic NAT: Dynamically maps an unregistered or private IP address to a registered IP address from a pool (group) of registered addresses. The two subsets of dynamic NAT are overloading and overlapping:
oOverloading: Maps multiple unregistered or private IP addresses to a single registered IP address by using different ports. This is also known as PAT, single-address NAT, or port-level multiplexed NAT.
oOverlapping: Maps registered internal IP addresses to outside registered IP addresses It can also map external addresses to internal registered addresses.
Cisco 640-864: Practice Exam

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 8

QUESTION 51
A Cisco security mechanism has the following attributes:

it is a sensor appliance

it searches for potential attacks by capturing and analyzing traffic

it is a "purpose-built device"

it is installed passively

it introduces no delay or overhead

Which Cisco security mechanism is this?

A. NIDS
B. PIX
C. IKE

D. HIPS
E. HMAC

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

Inline IPS and anomaly detection: Cisco has innovated in the area of NIDS by being the first to incorporate NIDS into the IOS on routing and switching platforms. In addition, IPS solutions have inline filtering features that can remove unwanted traffic with programmable features that classify traffic patterns. The Cisco IPS 4200 sensor appliances, Cisco Catalyst 6500 IDSM-2, and the Cisco IOS IPS can identify, analyze, and stop unwanted traffic from flowing on the network. Another set of tools used to prevent distributed DoS (DDoS) attacks and ensure business continuity is the Cisco Traffic Anomaly Detector XT and Guard XT appliances, along with the Cisco Catalyst 6500 Traffic Anomaly Detector Module and Cisco Anomaly Guard Module.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 13

QUESTION 52
Which statement accurately describes one difference between a small office and medium office topology?

A. Medium offices commonly use integrated route and switching platforms.
B. Medium offices use integrated 10/100/1000 interfaces as Layer 2 trunks.
C. Medium offices use external access switches to support LAN connectivity.
D. Small offices commonly use Rapid PVST+ for Layer 3 deployments.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Medium Branch Design
The medium branch design is recommended for branch offices of 50 to 100 users, which is similar Cisco 640-864: Practice Exam

to the small branch but with an additional access router in the WAN edge (slightly larger) allowing for redundancy services. Typically, two 2921 or 2951 routers are used to support the WAN, and separate access switches are used to provide LAN connectivity.

The infrastructure components are dual-access routers, external Layer 2 / Layer 3 switches, laptops, desktops, printers, and IP phones. Dual Frame Relay links provide the private WAN services, which are used to connect back to the corporate offices via both of the access routers. Layer 3 protocols such as EIGRP are typically deployed. Because there are two routers, Hot Standby Router Protocol (HSRP) or Gateway Load Balancing Protocol (GLBP) can be used to provide redundancy gateway services. QoS can also be used to provide guaranteed bandwidth for VoIP, and policing can be used to restrict certain traffic classes from overwhelming the available bandwidth. Cisco IOS features such as QoS, access control lists (ACL), and RIP routing capabilities are available in the IP Base feature set, but IP unicast routing and multicast routing require the IP Services feature set.

The medium branch design supports using a higher-density external switch or using the EtherSwitch module with the ISR to create trunks to the external access switches. The Cisco Catalyst 3750 series switches have StackWise technology, allowing multiple switches to be connected and managed as one. This also increases the port density available for end-user connections. With Cisco StackWise technology, customers can create a single, 32-Gbps switching unit that can connect up to nine 3750 series switches using a variety of fiber and copper ports, allowing greater flexibility with the connection options.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 7

QUESTION 53
A customer has the following Enterprise Campus design requirements:

at least 10 Gbps of bandwidth

network runs of up to 40km

no concern for transmission medium cost

Which transmission medium should you recommend to this customer?

A. unshielded twisted pair
B. shielded twisted pair
Cisco 640-864: Practice Exam
C. single-mode fiber
D. wireless
E. multimode fiber

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation
Below is the comparison of transmission media

Media	Bandwidth	Distance
Twisted pair	Up to 1 Gbps	100 m
Multimode fiber	Up to 1 Gbps	2 km (FE) 550 m (GE)
Single-mode fiber	10 Gbps	90 km (FE) 40 km (GE)
Wireless	54 Mbps (27 Mbps effective)	500 m at 1 Mbps

(Reference from CCDA Official Exam Certification Guide. Some other books have different figures but we should answer it according to the "Official" book)

QUESTION 54
Which two of the following statements represent a preferred wireless LWAPP implementation? (Choose two.)

A. verify open ports for:
Layer 2 LWAPP on ethertype OxBBBB
Layer 3 LWAPP on UDP 12222 and UDP 12223
B. use of Layer 3 LWAPP is preferred over Layer 2 LWAPP
C. use of Layer 2 LWAPP is preferred over Layer 3 LWAPP
D. verify open ports for:
Layer 2 LWAPP on ethertype OxBABA
Cisco 640-864: Practice Exam
Layer 3 LWAPP on UDP 12222 and TCP 12223

E. verify open ports for:
Layer 2 LWAPP on ethertype OxABAB
Layer 3 LWAPP on TCP 12222 and TCP 12223

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

LWAPP
Lightweight Access Point Protocol (LWAPP) is a draft Internet Engineering Task Force (IETF) standard for control messaging for setup, authentication, and operations between APs and WLAN controllers (WLC).

In the LWAPP RFC draft, LWAPP control messages can be transported at Layer 2 tunnels or Layer 3 tunnels. Layer 2 LWAPP tunnels were the first method developed in which the APs did not require an IP address. The disadvantage of Layer 2 LWAPP was that the WLC needed to be on every subnet on which the AP resides. Layer 2 LWAPP is a deprecated solution for Cisco. Layer 3 LWAPP is the preferred solution. In the configuration, Layer 2 or Layer 3 transport modes can be selected. When set Layer 3, the LWAPP uses IP addresses to communicate with the access points; these IP addresses are collected from a mandatory DHCP server. When set to Layer 2, the LWAPP uses proprietary code to communicate with the access points.

Note

Layer 2 LWAPP tunnels use EtherType code 0xBBBB. Layer 3 LWAPP uses UDP ports 12222 and 12223.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 5

QUESTION 55
An organization needs a WAN Transport technology that meets these criteria:

has a low initial cost

provides low-to-medium BW

has medium-to-high latency and jitter

Which technology would you suggest?

A. ISDN
B. X.25
C. analog modem
D. DSL
E. wireless

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

Table. WAN Comparison
Cisco 640-864: Practice Exam

WAN Comparison				
WAN Technology	**Bandwidth**	**Reliability**	**Latency**	**Cost**
ISDN	Low	Medium	Medium	Low
DSL	Low/Medium	Low	Medium	Low
Cable	Low/Medium	Low	Medium	Low
Wireless	Low/Medium	Low	Medium	Medium
Frame Relay	Low/Medium	Medium	Low	Medium
TDM	Medium	High	Low	Medium
Metro Ethernet	Medium/High	High	Low	Medium

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 6

QUESTION 56
Which Cisco security solution offers protection against "day zero" attacks?

A. Cisco IOS IPS
B. Cisco IOS Firewall
C. Cisco Traffic Anomaly Detector
D. Cisco Adaptive Security Appliance
E. Cisco Security Agent

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation
The Cisco Security Agent (CSA) software protects server and desktop endpoints from the latest threats caused by malicious network attacks. CSA can identify and prevent network attacks that are considered unknown or "Day Zero"-type threats. CSAs are packed with many features, including rewall capabilities, intrusion prevention, malicious mobile code protection, operating- system integrity assurance, and audit log consolidation. (Reference: CCDA Official Exam Certification Guide 3rd) Cisco 640-864: Practice Exam

QUESTION 57
Which type of trunk is required in order to connect a fax machine to a PBX?

A. intra-office
B. Foreign Exchange Office
C. central office
D. Foreign Exchange Station
E. inter-office

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

Foreign Exchange Station (FXS) provides a connection from a switch to an analog endpoint device such as traditional telephones or fax machines. It provides line power, dial tone, and ring voltage.

Foreign Exchange Office (FXO) allows a switch such as a PBX to us a standard analog connection (FXS) from the PSTN or from another switch. In this case the PBX is emulating an endpoint device. Because this is a standard endpoint connection it uses two-wire connections just like a standard phone and often uses an RJ-11 connector interface.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 14

QUESTION 58
Cisco 640-864: Practice Exam
Which two of these represent a best practice implementation of a Split MAC LWAPP deployment in a Cisco Unified Wireless Network? (Choose two.)

A. Each wireless client authentication type maps to a unique SSID which in turn maps to a unique VLAN.
B. 802.1Q trunking extends from the wired infrastructure to the access point for translation into SSID(s).
C. 802.1Q trunking extends from the wired infrastructure to a wireless LAN controller for translation into SSID (s).
D. Each wireless client authentication type maps to a shared SSID which in turn maps to a common shared VLAN.
E. Each wireless client authentication type maps to a unique SSID which in turn maps to a common shared VLAN.
F. 802.1Q trunking extends from the wired infrastructure to a wireless LAN controller. Then the 802.1Q packet is encapsulated in LWAPP and sent to the access point for transmission over the SSID(s).

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 59
Which two statements best describe intradomain route summarization? (Choose two.)

A. EIGRP and OSPF must be manually configured to summarize at non-classful boundaries.
B. EIGRP and OSPF automatically summarize at classful network boundaries.
C. OSPF and RIP automatically summarize at classful network boundaries.
D. EIGRP and RIP automatically summarize at classful network boundaries.
E. EIGRP and OSPF automatically summarize at non-classful boundaries.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 60
A network design document is being prepared for a customer. Which three network design elements must be included? (Choose three.)

A. proof of concept
B. data sources
C. design details
D. organizational policies
E. implementation plan

Correct Answer: ACE
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation
Design Document
The design document describes the business requirements; old network architecture; network requirements; and design, plan, and configuration information for the new network. The network architects and analysts use it to document the new network changes, and it serves as documentation for the enterprise. The design document should include the following sections:

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 1

QUESTION 61
Which statement correctly describes queuing in environments supporting teleworkers?

A. Queuing occurs on the outbound interface.
B. Hardware queues are configured for appropriate PQ, CQ, or WFQ.
C. Priority queuing guarantees some level of service to all traffic.
D. WFQ is the Cisco IOS default on all WAN links regardless of speed.
E. CQ is for time-sensitive protocols.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 62
Your company uses OSPF for internal routing. The company will be connected to VendorA via a single dedicated link and to VendorB via redundant dedicated links. Both vendors also use OSPF for internal routing. Which of the following deployments describes the best intra-domain routing practice in this situation?

A. Redistribute the routes on each link between your company and the vendors to a shared EIGRP routing protocol.
B. Use IBGP to reach VendorA and EBGP to reach VendorB.
C. Use static routes to reach VendorA and EBGP to reach VendorB.
D. Use static routes to reach both VendorA and VendorB.
E. Connect your company to both VendorA and VendorB using existing OSPF.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 63
Which statement can a network designer use to describe route summarization to an IT manager?

A. It is the grouping of ISP network addresses to minimize the number of routes to the Internet.
B. It is the grouping of multiple discontiguous subnets to increase routing performance.
C. It is the grouping of multiple contiguous networks and advertising as one large network.
D. It is the grouping of multiple contiguous subnets into one Class A, B, or C IP address to minimize routing table size.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Cisco 640-864: Practice Exam

QUESTION 64
A Cisco SONA architecture layer is described as follows:

The layer's IT resources are interconnected across a converged network foundation.

The layer's IT resources include servers, storage, and clients.

The layer represents how resources exist across the network.
Cisco 640-864: Practice Exam
The customer objective for the layer is to have anywhere/anytime connectivity.

Which Cisco SONA architecture layer is being described?

A. Application
B. Integrated Transport
C. Physical
D. Networked Infrastructure
E. Interactive Services

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 65
Which information should a network summary report identify?

A. actions needed to support the existing network
B. customer requirements
C. new network features
D. customer requirement modifications
E. actions needed to support existing network features
F. infrastructure shortcomings

Correct Answer: F
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 66
Given a VoIP network with these attributes:

Codec: G.711

WAN bandwidth: 768Kbps

Packet Header: 6 bytes

Payload: 160 bytes

CRTP: No

How many calls can be made?
Cisco 640-864: Practice Exam

A. 7 calls
B. 13 calls
C. 8 calls
D. 9 calls
E. 11 calls

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 67
What are three valid methods of gathering information about an existing data network? (Choose three.)

A. Use organizational input.
B. Analyze the user-mapping of a running application.
C. Perform a traffic analysis.
D. Perform a packet-level audit to verify carrier service guarantees.
E. Use reports that analyze the metrics of the customer's existing network.
F. Perform a network audit to gather more detail about the network.

Correct Answer: ACF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 68
Cisco 640-864: Practice Exam
In the Cisco branch office design, what categorizes an office as large?

A. between 50 and 100 users and a single-tier design

B. between 100 and 200 users and a three-tier design
C. between 50 and 100 users and a three-tier design
D. over 200 users and a two-tier design
E. between 100 and 200 users and a two-tier design

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 69
A company is designing a worldwide IPv6 network with duplicated file servers at multiple locations. Each file server contains identical reference information. Which IPv6 address type would be used to allow each end station to send a request to the nearest file server using the same destination address, regardless of the location of that end station?

A. broadcast
B. multicast
C. anycast
D. unicast

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

IPv6 Anycast Addresses
The IPv6 anycast (one-to-nearest) address identifies a set of devices. An anycast address is allocated from a set of unicast addresses. These destination devices should share common characteristics and are explicitly configured for anycast.

You can use the anycast address to identify a set of routers or servers within an area. When a packet is sent to the anycast address, it is delivered to the nearest device as determined by the routing protocol. An example of the use of anycast addresses is to assign an anycast address to a set of servers--one in North America, and the other in Europe. Users in North America would be routed to the North American server, and those in Europe to the European server.

You cannot use an anycast address as a source address. Also, you must explicitly configure nodes to which the anycast address is assign to recognize the anycast address.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 9 Cisco 640-864: Practice Exam

QUESTION 70
When designing using the Cisco Enterprise Architecture, in which Enterprise Campus layer do the Enterprise Edge and Enterprise WAN modules establish their connection?

A. Building Access
B. Building Distribution
C. Campus Core
D. Enterprise Branch
E. Enterprise Data Center

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 71
Which three of these describe the best practice for Cisco wireless outdoor Mesh network deployment? (Choose three.)

A. mesh hop counts of 4 or fewer
B. RAP implemented with 20 or fewer MAP nodes
C. client access via 802.11a and backhaul with 802.11b/g
D. client access via 802.11b/g and backhaul with 802.11a
E. mesh hop counts of 8 to 4
F. RAP implemented with 20 to 32 MAP nodes

Correct Answer: ABD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 72
Which two of these are scalability benefits of designing a network that utilizes VPNs?

(Choose two.)

A. reduces dial infrastructure expenditures
B. reduces the number of physical connections
C. allows networks to be set up and restructured quickly
D. simplifies the underlying structure of a customer WAN
E. extends the network to remote users

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 73
You are designing a small branch office that requires these attributes:

support for 60 users

the growth capacity to add another 15 users soon

redundant access

higher bandwidth between the Layer 2 switch and routing to the WAN Cisco 640-864: Practice Exam
Which branch office topology or technology must be used?

A. EtherChannel
B. loop-free
C. three-tier
D. two-tier
E. integrated routing and switching

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 74
Western Associated News Agency recently acquired a large news organization with several sites, which will allow it to expand to worldwide markets. The new acquisition includes these connectivity technologies:

Frame Relay

ATM

SONET

cable

DSL

wireless

From a Layer 1 viewpoint, which Enterprise Edge module will be most affected?

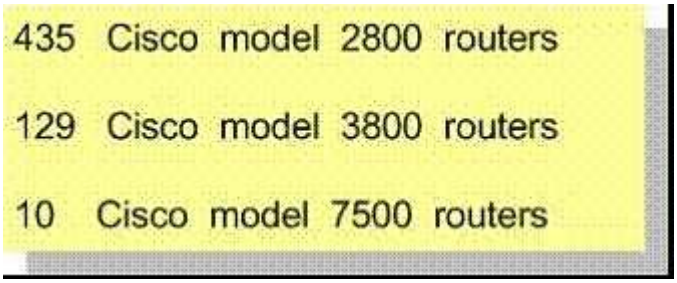
A. Internet Connectivity
B. E-Commerce
C. PSTN
D. Edge Distribution
E. ISP
F. WAN/MAN

Correct Answer: F
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 75
Refer to the exhibit. You are documenting the existing network of a customer with a large installed Cisco 640-864: Practice Exam
Cisco network. The routers listed are in use on the network.

Which two additional pieces of information would be the most valuable in completing your documentation of these routers? (Choose two.)



A. software revisions
B. interface options
C. power requirements
D. error statistics
E. management protocols

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 76
Which of these is the next step after the design phase in the PPDIOO process?

A. Develop a high-level migration plan.
B. Develop the implementation plan in as much detail as possible.
C. Create a pilot or a prototype network.
D. Identify which network management protocol will be used for which function.
E. Order the equipment.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation
The Implement phase begins after the design phase has been finished. In this phase, new devices are installed, configured and tested according to the design specifications.

QUESTION 77
You are designing IPv6 into an existing IPv4 network. Which two strategies can you use to allow Cisco 640-864: Practice Exam
both address schemes to coexist, thus facilitating migration? (Choose two)

A. translate one protocol into the other
B. redistribute between IPv6-capable and non-IPv6-capable routing protocols
C. encapsulate IPv6 packets within IPv4 packets
D. bridge between the IPv6 and IPv4 networks
E. enable anycast capability in the routing protocol

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 78
A network is being designed to meet the requirements listed.

Within the enterprise network:

All routers are Cisco 3800 Series routers running the latest Cisco IOS release.

The fastest convergence time possible is required.

Unequal cost load-balancing is required.

For Internet connections:

A single link is used to connect to a single ISP.

Which two routing protocols should be used?(Choose two.)

A. Use Internal BGP as the IGP within the enterprise.
B. Use Static (Default) routing between the enterprise and the ISP.
C. Use OSPF as the IGP within the enterprise.
D. Use EIGRP as the IGP within the enterprise.
E. Use EIGRP between the enterprise and the ISP.
F. Use External BGP between the enterprise and the ISP.

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 79
Which two statements best describe Cisco Wireless LAN Guest Access in a Cisco Unified Cisco 640-864: Practice Exam
Wireless Network? (Choose two.)

A. Dedicated guest VLANs are only extended to the wireless controllers in the network to ensure path isolation.
B. Guest tunnels have limitations on which wireless controllers can originate the tunnel.
C. Dedicated guest VLANs are extended throughout the network to the access points for path isolation.
D. Guest tunnels can originate and terminate on any wireless controller platform.
E. Guest tunnels have limitations on which wireless controllers can terminate the tunnel.
F. Dedicated guest access in the DMZ extends from the origination to the termination controllers without dedicated guest VLANs.

Correct Answer: EF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 80

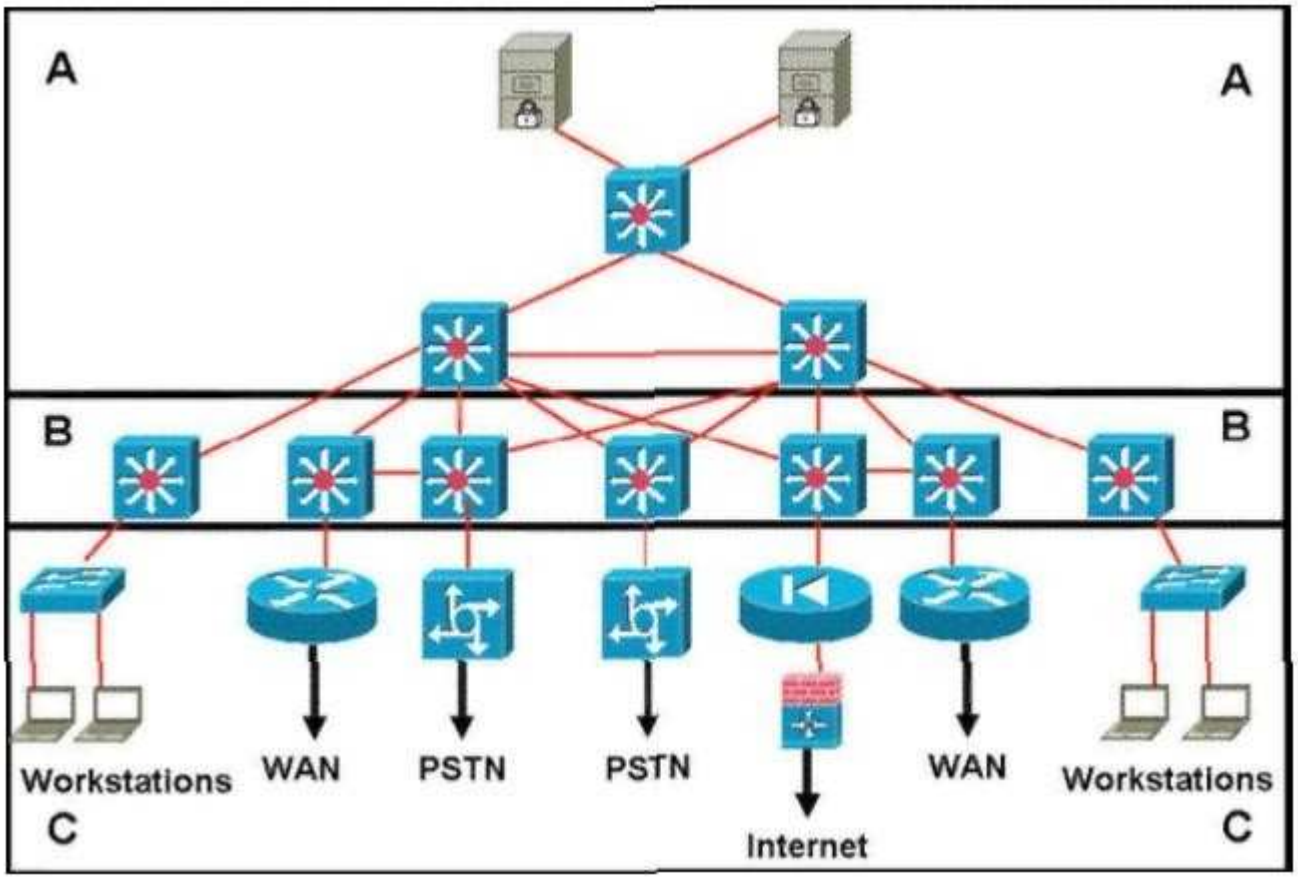
For which technology is IPsec required for a site-to-site enterprise WAN/MAN architecture?

A. self-deployed MPLS
B. ATM
C. Frame Relay
D. SP MPLS VPN
E. ISP Service

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 81
Refer to the exhibit. Which statement accurately represents the characteristics of the core layer in this design?
Cisco 640-864: Practice Exam



A. Access lists should be used in the core to perform packet manipulation.
B. QoS should be performed only in the core.
C. Load balancing should never be implemented or used in the core.
D. It is acceptable to use a partial mesh in the core if it is connected to each device by multiple paths.
E. Policy-based traffic control is implemented in the core to enable prioritization, ensuring the best performance for all time-critical applications.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 82
What does Cisco recommend as the foundation of any deployed security solution?

A. Customer needs
B. Security audit
C. Service-level agreement
D. Corporate security policy

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 83
What is the administrative distance of eBGP routes?
Cisco 640-864: Practice Exam

A. 200
B. 100
C. 20
D. 110

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 84
Which name is for the Cisco product that provides centralized, policy-based security management?

A. IDS
B. Out-of-band management
C. AAA
D. CSPM

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 85
Which statement represents a likely starting point for planning network changes?

A. Protocol assessment
B. Determining the design requirements
C. Determining the business needs
D. Determining the application requirements

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 86
What does IGMP stand for?

A. Internet Group Management Protocol
B. Interior Gateway Routing Protocol
C. Interior Group Management Protocol
Cisco 640-864: Practice Exam
D. Interior Gateway Media Protocol

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 87
ISDN is short for Integrated Services Digital Network. Under what category of WAN technologies does ISDN belong?

A. Cell-switched
B. Circuit-switched
C. Packet-switched
D. Leased lines

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Cisco 640-864: Practice Exam

QUESTION 88
As a network engineer, can you tell me accounting management on a network-management system allows a network manager to perform which function?

A. Assess the network's effectiveness and throughput
B. Charge back to users for network resources
C. Performance management
D. Identify problem areas in the network

Correct Answer: B

Section: (none)
Explanation

Explanation/Reference:
Explanation:

http://www.gratisexam.com/

QUESTION 89
Which address type is 225.10.1.1?

A. Unicast
B. Anycast
C. Multicast
D. Broadcast

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation
Answer A is incorrect as Unicast is an IPv6 address
Answer B is incorrect as Anycast is an IPv6 one to nearest address that identifies a set of devices Answer C is correct as multicast addresses range from 224.0.0.1 to 239.255.255.255. Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 8

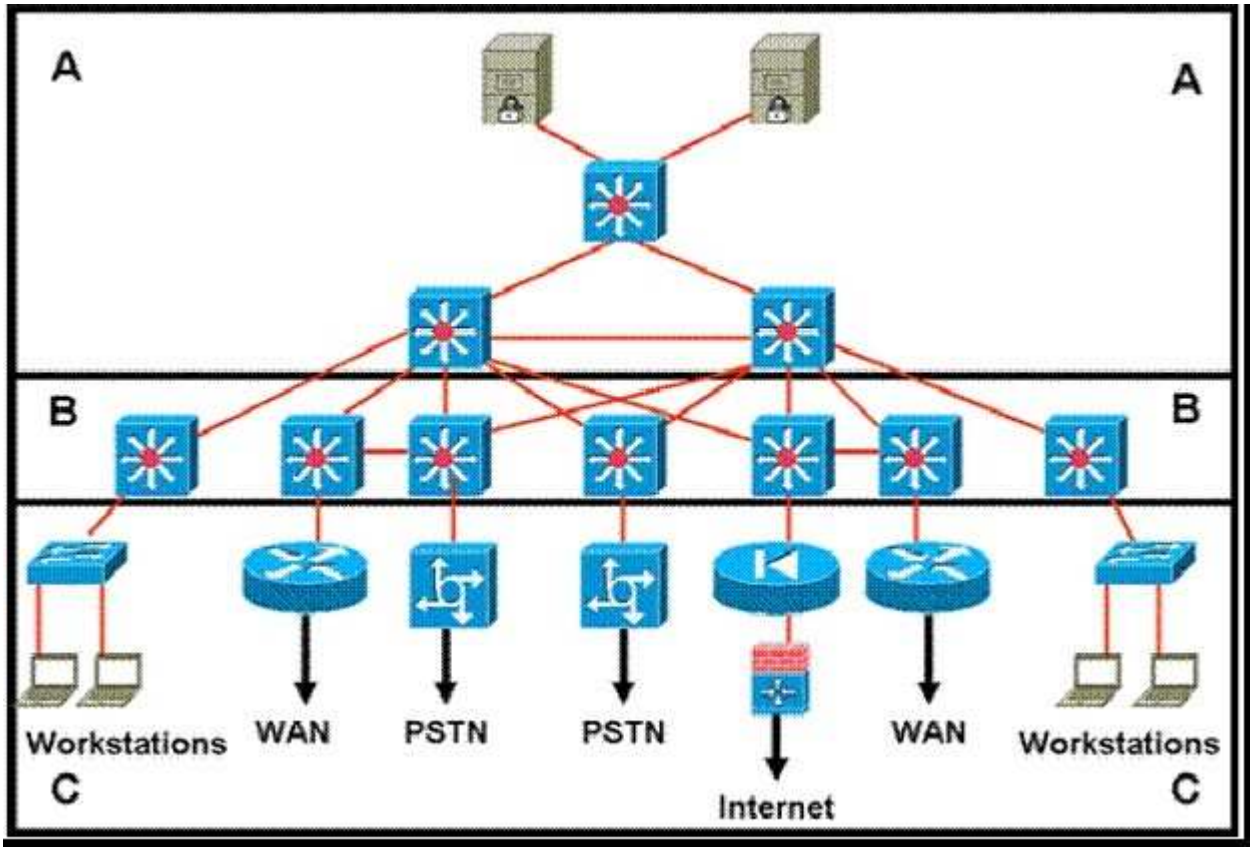
QUESTION 90
What is the length of the key used with Triple Data Encryption Standard (3DES)?

A. 64 bits
B. 168 bits
C. 128 bits
D. 56 bits

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Cisco 640-864: Practice Exam

QUESTION 91
Refer to the exhibit.



Which layer is the distribution layer?

A. Layer A
B. Layer B
C. Layer C
D. Layers A and B form a consolidated core and distribution layer

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 92
A wireless LAN or WLAN is a wireless local area network, which is the linking of two or more computers or devices without using wires. How are wireless LANs identified?

A. Service Set Identifier (SSID)
B. Internet Group Management Protocol (IGMP)
C. IP network
D. Wired Equivalent Privacy (WEP) key

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 93
Observe the following options, what is the hierarchy for IPv6 aggregatable addresses?

A. Global, site, loop
B. Multicast, anycast, unicast
C. Public, site, interface
D. Internet, site, interface

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 94
Which IGP protocol is a common choice to EIGRP and OSPF as a routing protocol for large networks?

A. RIPv2
B. IS-IS
C. IGRP
D. OSPFv2

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 95
Which type of routing protocol will be used when connecting to an Internet service provider?

A. Classless routing protocol
B. Exterior gateway protocol
C. Interior gateway protocol
D. Classful routing protocol

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Cisco 640-864: Practice Exam

QUESTION 96
Which routing protocol is classful?

A. Intermediate System-to-Intermediate System (IS-IS) and OSPF
B. Routing Information Protocol Version 1 (RIPv1) and RIPv2

C. IGRP and RIPv1
D. Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF)

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 97
Which attack type would you expect on segments that have many servers for some well-known applications?

A. Trojan horses
B. DoS attacks
C. Application-layer attacks
D. Password attacks

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 98
Which types of communicating devices compose RMON architecture ?(choose two)

A. Router
B. Switch
C. Management station
D. Monitor

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

RMON
RMON is a standard monitoring specification that enables network monitoring devices and console systems to exchange network monitoring data. RMON provides more information than SNMP, but more sophisticated data collection devices (network probes) are needed. RMON looks at MAC- layer data and provides aggregate information on the statistics and LAN traffic.
Cisco 640-864: Practice Exam

Enterprise networks deploy network probes on several network segments; these probes report back to the RMON console. RMON allows network statistics to be collected even if a failure occurs between the probe and the RMON console. RMON1 is defined by RFCs 1757 and 2819, and additions for RMON2 are defined by RFC 2021.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 15

QUESTION 99
Which FCAPS function includes finding network problems that reduce availability?

A. Security management
B. Accounting management
C. Fault management
D. Performance management

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

The ISO defines five types of network management processes that are commonly known as FCAPS. These processes are as follows:

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 15

QUESTION 100
What is the name of the organization that is in charge of creating the FCAPS architecture?

A. ISP
B. IOS
C. ITU-T
D. IEEE

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

FCAPS was actually created by the ISO not the ITU-T so if the above is a type-o than B is the correct answer. However, the ITU-T did refine FCAPS as stated below.
Cisco 640-864: Practice Exam

In the early 1980s the term FCAPS was introduced within the first Working Drafts (N1719) of ISO 10040, the Open Systems Interconnection (OSI) Systems Management Overview (SMO) standard. At that time the intention was to define five separate protocol standards, one for each functional area. Since initial experiences showed that these protocols would become very similar, the ISO working group responsible for the development of these protocols (ISO/TC97/SC16/WG4, later renamed into ISO-IEC/JTC1/SC21/WG4) decided to create a single protocol for all five areas instead. This protocol is called common management information protocol (CMIP). In the 1990s the ITU-T, as part of their work on Telecommunications Management Network (TMN), further refined the FCAPS as part of the TMN recommendation on Management Functions (M.3400). The idea of FCAPS turned out to be very useful for teaching network management functions; most text books therefore start with a section that explains the FCAPS.

QUESTION 101
Define some of the activities, tools, and techniques used in today's network-design process.(Choose three.)

A. Analyzing network traffic
B. Simulation of network traffic
C. Network auditing
D. Filtering incoming network traffic

Correct Answer: ACD

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 102
Which is the remote monitoring agent in the RMON architecture called?

A. Tree
B. Station
C. Agent
D. Probe

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 103
Cisco 640-864: Practice Exam
Which type of DSL does residential service use?

A. VDSL
B. SDSL
C. IDSL
D. ADSL

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 104
Which item is not a part of the process recommended by Cisco for WAN designs?

A. Characterize the existing network.
B. Analyze customer requirements.
C. Configure deployed services.
D. Design the new WAN topology.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 105
What does Compressed Real-Time Transport Protocol (CRTP) compress ?

A. RTP, TCP, and IP headers

B. RTP headers
C. RTP, User Datagram Protocol (UDP), and IP headers
Cisco 640-864: Practice Exam
D. Real-Time Transport Control Protocol (RTCP) headers

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 106
Which mechanism will be often used by service providers to define their service offerings and to differentiate their services from their competitors?

A. SLM
B. SLA
C. SLC
D. SAA

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 107
Which standard language will be used by SNMP to define the device information to be stored?

A. SNMPv4
B. ASN.1
C. MIBs
D. Agents

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Cisco 640-864: Practice Exam

QUESTION 108
Your boss is interested in a wireless WAN solution which provides higher bandwidth than point-to- multipoint (p2mp) wireless. Which description is correct?

A. Service providers cannot install point-to-point (p2p) links from a p2mp hub.
B. P2p wireless connections can provide up to 44 Mbps raw bandwidth.
C. P2p links tend to be slower than p2mp.
D. P2mp wireless connections can provide up to 1.544 Mbps raw bandwidth.

Correct Answer: B
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 109
Examine the following protocols, which two are used for IP Security?

A. Generic Routing Encapsulation (GRE) and Internetwork Packet Exchange (IPX)(EIGRP)
B. Border Gateway Protocol (BGP) and Enhanced Interior Gateway Routing Protocol
C. Authentication Header (AH) and Encapsulating Security Payload (ESP)
D. Virtual Private Dial-Up Network (VPDN) and GRE

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Cisco 640-864: Practice Exam

QUESTION 110
Which codec does Cisco recommend for WAN links?
Cisco 640-864: Practice Exam

A. G.711
B. G.723
C. G.728
D. G.729

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 111
What Cisco router configuration component does an implementer use to create a floating static route?

A. Primary interface
B. Administrative distance
C. Loopback
D. Description

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 112
Which Cisco proprietary protocol will be used in LAN switches to control multicast traffic at the data link layer within a LAN switch?

A. MAC filters
B. Cisco Group Management Protocol (CGMP)
Cisco 640-864: Practice Exam
C. Cisco Discovery Protocol (CDP)
D. IGMP

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 113
How many more bits does IPv6 use for addresses than IPv4?

A. 32
B. 64
C. 96
D. 128

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

IPv6 uses 128-bit addresses rather than the 32-bit addresses in IPv4. This supports more address hierarchy levels and uses simpler address autoconfiguration.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 9

QUESTION 114
Which protocol will be used to exchange IP routes between autonomous systems? Cisco 640-864: Practice Exam

A. eBGP
B. IGMP
C. IGRP
D. OSPF

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 115
You are a network technician, can you tell me how many IP addresses are available for hosts in the subnet 198.10.100.64/27?

A. 62
B. 30

C. 126
D. 14

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 116
What is SLC?

A. Standard level contracts
B. Standard level configuration
C. Service level contracts
D. Service level configuration

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 117
What does ODR stand for?

A. Open default routing
B. Optical demand routing
C. Open dedicated routing
D. On-demand routing

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Cisco 640-864: Practice Exam

QUESTION 118
Observe the following options, in which section of the network document does Cisco recommend a discussion of performance, scalability, capacity, security, and traffic needs?

A. Design summary
B. Design solution
C. Executive summary
D. Design requirements

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 119
In telephony, the local loop is the physical link or circuit. Where is the local loop located?

A. Between the loopback interfaces of two VoIP routers
B. Between phones and the central office (CO) switch
C. Between two PBXs
D. Between two PSTN switches

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

The local loop is the pair of wires that runs from the CO to the home or business office.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 14

QUESTION 120
Which advantage is of security systems that are part of the Cisco ecosystem?

A. There is a suite of products to choose from.
B. Various partners as well as supporting products increase the effectiveness of security systems.
C. There are no advantages.
D. The Cisco ecosystem ensure that partners can implement the solution.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Cisco 640-864: Practice Exam

QUESTION 121
What is ASBR short for?

A. Area Border Router
B. Auxiliary System Border Router
C. Area System Border Router
D. Autonomous System Boundary Router

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 122
Area Border Router (ABR) is defined by which protocol?

A. Enhanced Interior Gateway Routing Protocol (EIGRP)

B. OSPF
C. On-Demand Routing (ODR)
D. IS-IS

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 123
Which queuing mechanism establishes four interface output queues that will be used for traffic scheduling?

A. Priority queuing (PQ)
B. First-in, first-out (FIFO)
C. Weighted fair queuing (WFQ)
D. Custom queuing (CQ)

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

Congestion Management
Two types of output queues are available on routers: the hardware queue and the software queue. The hardware queue uses the strategy of first in, first out (FIFO). The software queue schedules packets first and then places them in the hardware queue. Keep in mind that the software queue is used only during periods of congestion. The software queue uses QoS techniques such as priority Cisco 640-864: Practice Exam

queuing, custom queuing, weighted fair queuing, class-based weighted fair queuing, low-latency queuing, and traffic shaping and policing.

Priority Queuing
Priority queuing (PQ) is a queuing method that establishes four interface output queues that serve different priority levels: high, medium, default, and low. Unfortunately, PQ can starve other queues if too much data is in one queue because higher-priority queues must be emptied before lower- priority queues.

Custom Queuing
Custom queuing (CQ) uses up to 16 individual output queues. Byte size limits are assigned to each queue so that when the limit is reached, it proceeds to the next queue. The network operator can customize these byte size limits. CQ is fairer than PQ because it allows some level of service to all traffic. This queuing method is considering legacy due to the improvements in the queuing methods.

Weighted Fair Queuing
Weighted fair queuing (WFQ) ensures that traffic is separated into individual flows or sessions without requiring that you define ACLs. WFQ uses two categories to group sessions: high bandwidth and low bandwidth. Low-bandwidth traffic has priority over high-bandwidth traffic. High- bandwidth traffic shares the service according to assigned weight values. WFQ is the default QoS mechanism on interfaces below 2.0 Mbps.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 6

QUESTION 124
Which option is not valid for using the public Internet as a backup WAN medium?

A. IP Security (IPSec) tunnels

B. Shared PVC
C. IP routing without constraints
D. Generic Routing Encapsulation (GRE) tunnels

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 125
Which method will be used to secure a network against man-in-the-middle attack?

A. Two-factor authentication
B. Management module
C. Encryption
D. Firewall

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 126
What is important for the top-down design concept?

A. Engagement of the HR representatives during the design process
B. Engagement of the top executives during the design process
C. Engagement of the employees working on the top floors in the building during the design process
D. Engagement of the top executives once the design process is finalized

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 127
Which one of the following QoS mechanisms is recommended for VoIP networks?

A. Low-latency queuing (LLQ)
B. Switched-based queuing
C. Fast queuing
D. Custom queuing

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation: Explanation

Low-Latency Queuing
Low-latency queuing (LLQ) adds a strict priority queue (PQ) to CBWFQ. The strict PQ allows delay sensitive traffic such as voice to be sent first, before other queues are serviced. That gives voice preferential treatment over the other traffic types. Unlike priority queuing, LLQ provides for a maximum threshold on the PQ to prevent lower priority traffic from being starved by the PQ.

Without LLQ, CBWFQ would not have a priority queue for real-time traffic. The additional classification of other traffic classes is done using the same CBWFQ techniques. LLQ is the standard QoS method for many VoIP networks.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 6

QUESTION 128
In which layer of the OSI model does Real-Time Transport Protocol (RTP) operate ?

A. Network
B. Application
C. Transport
D. Session

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 129
Developing a network design according to layers such as core and distribution is an example of which type of design methodology?

A. Flat design
B. Top-down
C. Hierarchical structured design
D. PDIOO

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Cisco 640-864: Practice Exam

QUESTION 130
Which parameters does the computation of the EIGRP composite metric use by default?

A. Bandwidth and reliability
B. Bandwidth and load
C. Bandwidth and maximum transmission unit (MTU)
D. Bandwidth and delay

Correct Answer: D
Section: (none)

Explanation

Explanation/Reference:
Explanation: Explanation

EIGRP for IPv4 Summary
The characteristics of EIGRP for IPv4 networks follow:

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 10

QUESTION 131
Which IPv4 field are the precedence bits located in?

A. IP destination address
B. Type-of-service field
C. IP options field
D. IP protocol field

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

ToS (Type of Service): This field is 8 bits in length. Quality of service (QoS) parameters such as IP precedence or DSCP are found in this field.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 8

QUESTION 132
Which hierarchical layer has functions such as High availability, port security, and rate limiting?

A. Core
B. Access
C. Network
D. Distribution

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

Access Layer
The access layer provides user access to local segments on the network. The access layer is characterized by switched LAN segments in a campus environment. Microsegmentation using LAN switches provides high bandwidth to workgroups by reducing the number of devices on Ethernet segments. Functions of the access layer include the following:

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 2 Cisco 640-864: Practice Exam

QUESTION 133
Cisco 640-864: Practice Exam
Which term accurately describes a specific measure of delay often used to describe voice and video networks?

A. Jitter
B. Flux
C. Latency
D. Reliability

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

Table. Network Delays

Fixed Delay	Description
Propagation delay	6 ms per km. No solution
Serialization delay	Frame length/bit rate. A faster link and smaller packets help reduce.
Processing delay	Depends on codec used: coding, compression, and packetization. Add hardware DSPs.
Queuing delay	Variable packet sizes and number of packets. Use LLQ, CBWFQ, LFI.
Jitter	Caused by variable delay. Use dejitter buffers to make delay constant; design as much as possible for an uncongested network.

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 14

QUESTION 134
Which layer is in charge of fast transport in the hierarchical network model?

A. Network
B. Distribution
C. Access
D. Core

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 135
Study the following options carefully. The corporate Internet is part of which functional area?

A. Enterprise Edge
B. Enterprise Campus
C. Service Provider (SP) Edge
D. Enterprise

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 136
Which H.323 protocol is in charge of call setup and signaling?

A. RTCP
B. H.245
C. G.711
D. H.225
Cisco 640-864: Practice Exam

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 137
What does CDP stand for ?

A. Collection Device Protocol
B. Campus Discovery Protocol
C. Cisco Device Protocol
D. Cisco Discovery Protocol

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 138
What does the Cisco SLM define as the component used to specify expected performance between a pair of devices connected by a network?

A. CM
B. SLC
C. SLA
D. SAA

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 139
In a network with Enhanced Interior Gateway Routing Protocol (EIGRP) and IGRP using the same autonomous system number, what will happen on the router configured with both protocols? Cisco 640-864: Practice Exam

A. Redistribution occurs automatically.

B. Redistribution is not necessary.
C. EIGRP assumes IGRP is a less capable protocol and overtakes it.
D. Redistribution does not occur automatically.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 140
Which item is not an SNMP operation?

A. GetNext
B. Community
C. Trap
D. Set

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 141
What does FCAPS stand for?

A. Fault, caching, application, production, security
B. Fault, configuration, accounting, performance, security
C. Fiscal, communication, application, production, security
D. Fault, consolidation, accounting, performance, security

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 142
Which two of these are functions of an access point in a Split MAC Network Architecture? (Choose two.)

A. EAP Authentication
B. MAC layer encryption or decryption
C. 802.1Q encapsulation
D. Process probe response

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation

Cisco Unified Wireless Network Split-MAC Architecture Cisco 640-864: Practice Exam

With the Cisco UWN split-MAC operation, the control and data messages are split. LWAPs communicate with the WLCs using control messages over the wired network. LWAPP or CAPWAP data messages are encapsulated and forwarded to and from wireless clients. The WLC manages multiple APs, providing configuration information and firmware updates as needed.

LWAP MAC functions are

Controller MAC functions are

Cisco Press CCDA 640-864 Official Certification Guide Fourth Edition, Chapter 5

QUESTION 143
Which three of these are components of the North American Numbering Plan? (Choose three.)

A. Numbering Plan Area
B. country code
C. prefix
D. zone
E. line number
F. trunk channel

Correct Answer: ACE
Section: (none)
Explanation

Explanation/Reference:
Explanation: Explanation
Cisco 640-864: Practice Exam

NANP has the address format of NXX-NXX-XXXX, where N is any number from 2 to 9 and X is any number from 0 to 9. The rst three digits identify the numbering plan area and are commonly called the area code. The address is further divided into the office code (also known as prefix) and line number. The prefix is three digits, and the line number is four digits. The line number identifies the phone.

QUESTION 144
When monitoring voice traffic on a converged network, which are the three most important QoS characteristics to pay attention to? (Choose three.) Cisco 640-864: Practice Exam

A. delay
B. jitter
C. packet loss
D. bit error rate
E. CRTP hop configuration

Correct Answer: ABC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 145
A company is implementing an Identity Management solution with these characteristics:

existing Cisco ACS 4.0

Cisco Catalyst switches

minimal added investments

Which Cisco Trust and Identity solution would you recommend?

A. NAC Appliance (Cisco Clean Access)
B. Cisco IBNS
C. NAC Framework
D. Cisco Security Agent
E. csm
F. Cisco Security MARS

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation: