

# HUAWEI

## Exam Questions H19-301\_V3.0

HCSA-Presales-IP Network Certification V3.0



#### NEW QUESTION 1

Data center networks need to be scalable and efficient to connect tens or even hundreds of thousands of servers to handle the growing demands of cloud computing.

- A. TRUE
- B. FALSE

**Answer:** A

#### Explanation:

Modern data center networks require high scalability and efficiency to handle cloud computing workloads. Key requirements include:  
Support for large-scale server connectivity (tens or hundreds of thousands of servers). High-bandwidth networking (100G/400G Ethernet links).  
Automated network management using AI-driven controllers like iMaster NCE-Fabric. Software-Defined Networking (SDN) for dynamic traffic optimization.  
Reference: HCSA-Presales-IP Network Official Study Guide, Data Center Network Architecture

#### NEW QUESTION 2

The address that functions at the data link layer is called an IP address. Each network adapter that complies with the IEEE 802 standard must have an IP address.

- A. TRUE
- B. FALSE

**Answer:** B

#### Explanation:

The statement is incorrect because IP addresses function at the network layer (Layer 3) of the OSI model, not the data link layer (Layer 2). At the data link layer, devices use MAC addresses (Media Access Control addresses) to identify each other. MAC addresses are unique identifiers assigned to network adapters and are defined by the IEEE 802 standard. While IP addresses are essential for routing data across networks, they are not directly related to the data link layer. Therefore, the claim that "the address that functions at the data link layer is called an IP address" is false.

References:

HCSA-Presales-IP Network Study Guide, Section: "OSI Model and Addressing." IEEE 802 Standards Documentation.

#### NEW QUESTION 3

Which AP architecture is also called autonomous network architecture? Because it requires no dedicated device for centralized control and can implement functions such as wireless user access, service data encryption, and service data packet forwarding.

- A. Leader
- B. Distributed
- C. Fat
- D. Fit

**Answer:** C

#### Explanation:

Fat APs (Autonomous APs) operate independently and do not require a centralized wireless controller. They perform all wireless functions, including: Wireless authentication  
Encryption  
User access management  
Data packet forwarding  
Fit APs, on the other hand, depend on a wireless controller for centralized management. Fat APs are best suited for small-to-medium networks where centralized control is unnecessary.  
Reference: HCSA-Presales-IP Network Official Documentation – Fat vs. Fit APs

#### NEW QUESTION 4

Typical transport layer protocols include TCP and UDP. Which of the following is not a characteristic of TCP?

- A. Connectionless
- B. Flow control and window mechanism
- C. Connection-oriented
- D. Reliable transmission

**Answer:** A

#### Explanation:

TCP (Transmission Control Protocol) is a connection-oriented protocol with several key characteristics:  
Connectionless : This is not a characteristic of TCP. TCP establishes a connection before transmitting data using a three-way handshake.  
Flow control and window mechanism : TCP uses flow control and sliding window mechanisms to manage data transmission rates and prevent buffer overflow.  
Connection-oriented : TCP establishes, maintains, and terminates connections between endpoints.  
Reliable transmission : TCP ensures reliable delivery of data through acknowledgments, retransmissions, and error detection.  
UDP, not TCP, is a connectionless protocol. Therefore, the correct answer is A . References:  
Huawei Transport Layer Protocols Overview, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 5

Which of the following Huawei products is best suited to defend against application-layer DDoS attacks?

- A. AntiDDoS
- B. FireHunter
- C. USG6000E
- D. HiSec Insight

**Answer:** A

**Explanation:**

Application-layer DDoS attacks target specific applications or services, such as HTTP floods or DNS amplification. Below is an analysis of each option:

AntiDDoS : This product is specifically designed to detect and mitigate DDoS attacks, including application-layer attacks. It provides real-time traffic analysis and automated mitigation capabilities.

FireHunter : This is a sandbox solution used for detecting advanced threats and malware. It is not designed to defend against DDoS attacks.

USG6000E : This is a next-generation firewall that provides basic DDoS protection but lacks the specialized capabilities of AntiDDoS for large-scale attacks.

HiSec Insight : This is a security analytics platform that provides visibility into threats and vulnerabilities. While it can help identify DDoS activity, it does not actively mitigate attacks. Thus, the correct answer is A , as AntiDDoS is the best-suited product for defending against application-layer DDoS attacks.

References:

Huawei AntiDDoS Solution Overview, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 6**

MACsec is an important feature to ensure security and reliability. Which model of CloudEngine S6730 Series can support MACsec?

- A. S6730-H48X6C
- B. S6730-H24X6C
- C. S6730-S24X6Q
- D. S6730-H24X4Y4C

**Answer:** ABD

**Explanation:**

MACsec (Media Access Control Security) is a Layer 2 encryption protocol that ensures secure communication between devices in a network. It provides data confidentiality, integrity, and replay protection at the Ethernet layer.

The following models in the Huawei CloudEngine S6730 series support MACsec:

S6730-H48X6C : This switch supports MACsec on its high-speed ports, ensuring secure communication for critical applications.

S6730-H24X6C : Similar to the H48X6C, this model also supports MACsec, making it suitable for environments requiring robust security.

S6730-H24X4Y4C : This model also includes MACsec support, providing advanced security features for enterprise networks.

However, the S6730-S24X6Q does not support MACsec. It is designed for scenarios where Layer 2 encryption is not a primary requirement.

Thus, the correct answers are A , B , and D . References:

Huawei CloudEngine S6730 Series Switch Product Documentation, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 7**

Enterprise networks, no matter campus networks or DCNs, are facing a lot of potential attacks. What are the common types of attack methods we are facing? (Select All that Apply)

- A. Command line injection
- B. Brute-force attacks
- C. Cross-site attacks
- D. Remote code execution

**Answer:** ABCD

**Explanation:**

Common Attack Methods in Enterprise Networks:

Enterprise networks are vulnerable to various cyberattacks, targeting both infrastructure and applications.

Explanation of Each Attack Method:

Command line injection:Exploits vulnerabilities in command-line interfaces to execute unauthorized commands.

Brute-force attacks:Attempts to guess passwords or encryption keys through exhaustive trial-and-error methods.

Cross-site attacks:Includes cross-site scripting (XSS) and cross-site request forgery (CSRF), targeting web applications.

Remote code execution:Exploits vulnerabilities to execute arbitrary code on a target system, often leading to full system compromise.

Conclusion:All four options represent common attack methods faced by enterprise networks.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 11: Security Solutions. Huawei Cybersecurity White Paper.

**NEW QUESTION 8**

The SD-WAN multi-fed and selective receiving technology applies only to 5G links.

- A. TRUE
- B. FALSE

**Answer:** B

**Explanation:**

Huawei'sSD-WAN multi-fed and selective receiving technologyis not limited to5G links. This technology can be applied to various types of WAN links, including MPLS, Internet, LTE, and 5G, to optimize traffic steering and improve reliability.The multi-fed feature allows multiple links to be used simultaneously, while selective receiving ensures that the best path is chosen for each application based on real-time conditions. This flexibility makes the technology applicable across diverse network environments, not just 5G.

References:

HCSA-Presales-IP Network Study Guide, Section: "SD-WAN Multi-Fed and Selective Receiving Technology."

Huawei SD-WAN Solution Documentation, Link Aggregation and Optimization.

**NEW QUESTION 9**

What challenges do large numbers of branches bring to enterprise WAN interconnection?

- A. Difficulties in rectifying faults on branch networks

- B. Long time to provision new services in branches
- C. Poor experience with key applications
- D. High O&M costs

**Answer:** ABCD

**Explanation:**

Managing a large number of branches in an enterprise WAN environment presents several challenges. Below is an analysis of each option:

Difficulties in rectifying faults on branch networks : With numerous branches, identifying and resolving network faults becomes complex, especially when relying on manual troubleshooting.

Long time to provision new services in branches : Deploying new services across multiple branches requires significant coordination and configuration effort, leading to delays.

Poor experience with key applications : Limited bandwidth, high latency, and inefficient traffic steering can degrade the performance of critical applications like video conferencing and ERP systems.

High O&M costs : Managing distributed branch networks involves substantial operational and maintenance costs, including personnel, tools, and infrastructure expenses.

All four options accurately describe the challenges faced in enterprise WAN interconnection with large numbers of branches.

References:

Huawei SD-WAN Solution Challenges and Benefits, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 10**

Which of the following statements are TRUE about Huawei's audio and video service experience assurance? (Select All that Apply)

- A. By default, scheduling is performed based on the priorities in descending order: VI -> VO -> BK -> BE.
- B. Beacon frames can be broadcast to instruct APs to suppress heavy-traffic users.
- C. According to Huawei lab test data, the delay of voice and video services in congestion scenarios is 56% lower than the industry average.
- D. By default, scheduling is performed based on the priorities in descending order: VI -> VO -> BE -> BK.
- E. Heavy-traffic services are automatically suppressed.

**Answer:** BCD

**Explanation:**

Overview of Audio and Video Service Assurance:

Huawei provides advanced mechanisms to ensure high-quality audio and video services in wireless networks, even under congestion.

Analysis of Each Statement:

Option A: This is incorrect. The correct default priority order is VI -> VO -> BE -> BK (Voice > Video > Best Effort > Background).

Option B: This is correct. Beacon frames can be used to instruct APs to suppress heavy-traffic users, ensuring fair resource allocation.

Option C: This is correct. Huawei's lab tests show that delays for voice and video services in congestion scenarios are 56% lower than the industry average.

Option D: This is correct. The default scheduling priority order is VI -> VO -> BE -> BK. Option E: This is incorrect. Heavy-traffic services are not automatically suppressed; suppression requires explicit configuration.

Conclusion: The correct statements are Options B, C, and D. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: WLAN Solutions.

Huawei AirEngine Product Documentation.

**NEW QUESTION 10**

Huawei firewalls have been listed in the Gartner Magic Quadrant every year since 2013, for nine consecutive years.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Huawei firewalls, particularly the USG series, have consistently demonstrated strong performance in terms of innovation, functionality, and market presence. As a result, they have been included in the Gartner Magic Quadrant for Network Firewalls every year since 2013, achieving recognition for nine consecutive years.

This consistent inclusion reflects Huawei's leadership in the firewall market and its ability to meet evolving customer requirements.

Thus, the statement is TRUE. References:

Gartner Magic Quadrant for Network Firewalls, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 11**

A local area network (LAN) connects computers, servers, and network devices in a geographic area, generally within several thousand square meters. A typical LAN can be a company's office network, an Internet cafe's network, or a home network.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

A Local Area Network (LAN) connects devices within a limited geographic area such as an office, campus, or home.

LANs typically include: Switches

Routers Access Points

Computers, printers, and other end devices

LANs operate using Ethernet or Wi-Fi and provide high-speed communication and resource sharing within the network.

Unlike WANs (Wide Area Networks), LANs do not rely on carrier-leased connections and cover smaller areas.

Reference: HCSA-Presales-IP Network Official Documentation – LAN and Network Fundamentals

**NEW QUESTION 16**

In Huawei's SD-WAN solution, overlay topologies can be planned based on services. Different service topologies are independent of each other.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Understanding Overlay Topologies in SD-WAN:

In Huawei's SD-WAN solution, overlay networks are created on top of the physical underlay network. These overlays can be customized based on specific services or applications.

Service Independence:

Different service topologies (e.g., voice, video, data) are independent of each other, allowing granular control over traffic paths, QoS policies, and security settings.

Conclusion: The statement is TRUE because overlay topologies in Huawei's SD-WAN solution are service-specific and operate independently.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: SD-WAN Solutions.

Huawei SD-WAN Solution Brochure.

**NEW QUESTION 18**

MACsec is an important feature to make sure security and reliability. Which model of CloudEngine S6730 Series can support MACsec?

- A. S6730-S24X6Q
- B. S6730-H24X6C
- C. S6730-H24X4Y4C
- D. S6730-H48X6C

**Answer:** B

**Explanation:**

The S6730-H24X6C model in the CloudEngine S6730 series supports MACsec (Media Access Control Security), providing Layer 2 encryption for secure data transmission. MACsec ensures confidentiality, integrity, and replay protection for Ethernet traffic, making it ideal for sensitive environments like financial institutions and government networks. Other models in the series, such as the S6730-S24X6Q, do not support MACsec, limiting their use in scenarios requiring advanced security features.

References:

HCSA-Presales-IP Network Study Guide, Section: "MACsec Support in Huawei Switches." Huawei CloudEngine S6730 Series Product Documentation, Security Features.

**NEW QUESTION 19**

SRv6 can traverse all types of private lines for traffic optimization. Huawei NetEngine AR821 E can support SRv6.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Understanding SRv6 Capabilities:

SRv6 (Segment Routing over IPv6) is a next-generation networking technology that enables flexible traffic engineering and seamless traversal across different types of private lines.

Huawei NetEngine AR821 E Support for SRv6:

The NetEngine AR821 E router supports SRv6, making it suitable for SD-WAN and WAN deployments where traffic optimization and path control are critical.

Conclusion: The statement is TRUE because SRv6 can traverse all types of private lines, and the NetEngine AR821 E supports SRv6.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 4: Router Product Portfolio. Huawei NetEngine Router Product Documentation.

**NEW QUESTION 20**

Which protocol does iMaster NCE use to deliver configurations to devices?

- A. NETCONF
- B. Telemetry
- C. SDN
- D. RESTful

**Answer:** A

**Explanation:**

iMaster NCE (Network Cloud Engine) uses NETCONF (Network Configuration Protocol) to deliver configurations to network devices. NETCONF is an XML-based protocol that provides a standardized way to configure and manage network devices programmatically. Telemetry : Used for collecting operational data from devices, not for configuration delivery. SDN : Refers to a broader concept of software-defined networking, not a specific protocol. RESTful : Used for API interactions but not for device configuration.

Thus, the correct answer is A, as NETCONF is the primary protocol used by iMaster NCE for configuration delivery.

References:

Huawei iMaster NCE Protocol Guide, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 22**

By default, the USG6000E-B supports hardware bypass. If hardware bypass is required, you do not need to purchase an external bypass device.

- A. TRUE
- B. FALSE

**Answer:** B



**Explanation:**

The USG6000E-B firewall does not support hardware bypass by default. If hardware bypass functionality is required, an external bypass device must be purchased and configured. Hardware bypass ensures network continuity in case of a firewall failure by physically rerouting traffic around the device. Since this feature is not included by default in the USG6000E-B, additional hardware is necessary to achieve it.

References:

HCSA-Presales-IP Network Study Guide, Section: "USG6000E-B Hardware Bypass." Huawei USG6000E Series Product Documentation, Bypass Configuration.

**NEW QUESTION 24**

In the hyper-converged data center network solution, which of the following is responsible for analyzing traffic in the data center network and quickly locating faults?

- A. VAS controller
- B. Network controller
- C. Network analyzer
- D. Computing manager

**Answer: C**

**Explanation:**

In Huawei's hyper-converged data center network solution, the network analyzer plays a critical role in monitoring and analyzing traffic flows. It provides real-time insights into network performance, identifies anomalies, and helps locate faults quickly. Other components serve different purposes:

VAS controller: Manages value-added services like firewalls and load balancers. Network controller: Handles overall network orchestration and policy enforcement.

Computing manager: Focuses on compute resource allocation and optimization.

The network analyzer is specifically designed for traffic analysis and fault detection, making it the correct answer.

References:

HCSA-Presales-IP Network Study Guide, Section: "Hyper-Converged Data Center Components."

Huawei Hyper-Converged Solution Documentation, Network Analyzer Role.

**NEW QUESTION 28**

Which of the following series of switches are multi-GE switches? (Select All that Apply)

- A. S5731-H
- B. S5736-S
- C. S6730-H
- D. S5732-H

**Answer: ACD**

**Explanation:**

Understanding Multi-GE Switches:

Multi-GE switches support ports with speeds higher than 1 Gbps but lower than 10 Gbps, such as 2.5 Gbps or 5 Gbps. These switches are ideal for high-density Wi-Fi 6 deployments and other bandwidth-intensive applications.

Analysis of Each Series:

S5731-H: This series includes multi-GE ports, making it suitable for high-speed access and aggregation scenarios.

S5736-S: This series does not include multi-GE ports; it primarily supports standard 1 Gbps and 10 Gbps interfaces.

S6730-H: This series supports multi-GE ports and is designed for high-performance campus networks.

S5732-H: This series includes multi-GE ports and is optimized for enterprise campus and branch networks.

Conclusion: The S5731-H, S6730-H, and S5732-H series switches are multi-GE switches. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Switch Product Portfolio. Huawei Campus Switch Product Documentation.

**NEW QUESTION 30**

Wired and wireless convergence is one of the trends of campus network development. Switches with WAC cards can implement Wired and Wireless Network Convergence at both hardware and software levels.

- A. TRUE
- B. FALSE

**Answer: A**

**Explanation:**

Wired and wireless convergence is a key trend in modern campus networks, enabling unified management and seamless connectivity across wired and wireless devices. Huawei switches equipped with Wireless Access Controller (WAC) cards integrate wired and wireless functions into a single platform. This integration provides:

Hardware-level convergence: Combines switching and wireless control capabilities in one device.

Software-level convergence: Enables centralized management, policy enforcement, and traffic optimization for both wired and wireless networks.

This approach simplifies network architecture, reduces costs, and improves operational efficiency, making it a preferred solution for converged campus networks.

References:

HCSA-Presales-IP Network Study Guide, Section: "Wired and Wireless Convergence Trends."

Huawei Campus Network Solution Documentation, WAC Card Features.

**NEW QUESTION 33**

SecoManager is a security controller developed by Huawei for various security scenarios. Based on different scenarios, SecoManager has several deployment modes. Which of the following is not a SecoManager deployment mode?

- A. Integrated deployment with iMaster NCE-IP
- B. Integrated deployment with iMaster NCE-Fabric
- C. Integrated deployment with iMaster NCE-Campus
- D. Independent deployment

**Answer:** C

**Explanation:**

Understanding SecoManager Deployment Modes:

SecoManager is a security controller that integrates with Huawei's iMaster NCE platforms to manage security policies across networks.

Analysis of Each Mode:

Integrated deployment with iMaster NCE-IP: Supported for managing security in IP/MPLS networks.

Integrated deployment with iMaster NCE-Fabric: Supported for data center and cloud fabric security management.

Integrated deployment with iMaster NCE-Campus: Not supported because SecoManager focuses on specialized security scenarios, while iMaster NCE-Campus manages campus networks.

Independent deployment: Supported for standalone security management. Conclusion: The correct answer is Option C, as integrated deployment with iMaster NCE-Campus is not a valid SecoManager deployment mode.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 11: Security Solutions. Huawei SecoManager Product Documentation.

**NEW QUESTION 37**

A router forwards packets based on its routing table. To implement route-based packet forwarding, a router needs to obtain routes. Which of the following are common types of routes that a router can obtain?

- A. Dynamic route
- B. Blackhole route
- C. Direct route
- D. Static route

**Answer:** ACD

**Explanation:**

A router forwards packets based on its routing table, which contains different types of routes. Common types of routes include:

Dynamic route: Learned from routing protocols like OSPF, BGP, and RIP.

Direct route: Automatically generated when an interface is assigned an IP address. Static route: Manually configured by administrators to forward traffic to a specific destination.

A blackhole route (B) is not commonly used for forwarding but is instead a special type of route that discards traffic, preventing loops or attacks.

Reference: HCSA-Presales-IP Network Official Documentation – Routing Basics and Types of Routes

**NEW QUESTION 41**

The maximum SD-WAN forwarding performance of the AR8140 is 20 Gbit/s.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

The Huawei AR8140 is a high-performance SD-WAN router designed for large enterprises. It supports:

Maximum SD-WAN forwarding performance of 20 Gbit/s.

Multiple WAN interfaces, including 5G, LTE, MPLS, and Internet links. Advanced traffic steering for cloud and SaaS applications.

Reference: HCSA-Presales-IP Network Official Study Guide, Huawei AR8140 Specifications

**NEW QUESTION 44**

As one of the important advantages of Huawei L3 autonomous driving solution, quick intelligent O&M improves network performance. Which options are the capability of Huawei intelligent O&M to improve network performance?

- A. Precise fault analysis
- B. Intelligent network optimization
- C. Real-time experience visualization

**Answer:** ABC

**Explanation:**

Huawei's L3 Autonomous Driving Network (ADN) solution leverages AI and automation to enhance network operations and maintenance (O&M). Key capabilities include:

Precise fault analysis: Uses AI algorithms to identify root causes of faults quickly and accurately, reducing downtime.

Intelligent network optimization: Dynamically adjusts network parameters to optimize performance and resource utilization.

Real-time experience visualization: Provides a comprehensive view of network health and user experience, enabling proactive issue resolution.

These features collectively improve network performance, reduce operational complexity, and enhance user satisfaction.

References:

HCSA-Presales-IP Network Study Guide, Section: "Autonomous Driving Network Levels and Features."

Huawei ADN Solution Documentation, Intelligent O&M Capabilities.

**NEW QUESTION 49**

Which of the following switches does not support two power modules?

- A. S5735-L
- B. S5732-H
- C. S5731-S24P4X
- D. S5736-S24T4XC

**Answer:** A

**Explanation:**

The Huawei CloudEngine S5735-L series switches are entry-level switches designed for small to medium-sized networks. These switches do not support dual power modules, as they are intended for environments where redundancy is not a primary requirement.

In contrast:

The S5732-H, S5731-S24P4X, and S5736-S24T4XC switches all support dual power modules, providing redundancy and ensuring stable operation in more demanding environments.

Thus, the switch that does not support two power modules is the S5735-L. References:

Huawei CloudEngine S5735-L Series Switch Hardware Guide, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 52**

Which of the following AP models have uplink optical ports?

- A. AirEngine 6760-X1
- B. AirEngine 5760-51
- C. AirEngine 5762-15HW
- D. AP7060DN
- E. AirEngine 6761-21

**Answer:** ACDE

**Explanation:**

Huawei offers Wi-Fi 6 APs with optical uplink ports to support high-speed backhaul:

(A) AirEngine 6760-X1 (True): Supports optical ports for high-speed uplink.

(B) AirEngine 5760-51 (False): Does not have optical ports.

(C) AirEngine 5762-15HW (True): Equipped with fiber uplink ports.

(D) AP7060DN (True): Supports 10G optical uplink, ensuring high-speed data transmission.

(E) AirEngine 6761-21 (True): Provides optical uplink ports for high-bandwidth backhaul. Reference: HCSA-Presales-IP Network Official Study Guide, Huawei Wi-Fi 6 APs Specifications

**NEW QUESTION 56**

Which of the following statements are TRUE about Huawei's wireless backhaul solution for rail transportation?

- A. The handover delay can be as low as 30 ms.
- B. Highly reliable active-active links are available.
- C. Backhaul is unavailable when a train is traveling at 160 km/h.
- D. The solution can be used to carry the train control signal system.

**Answer:** ABD

**Explanation:**

Huawei's wireless backhaul solution for rail transportation is designed to meet the unique demands of high-speed mobility and mission-critical communications.

Key features include: Low handover delay: Achieves handover delays as low as 30 ms, ensuring seamless connectivity even at high speeds.

Active-active links: Provides highly reliable redundancy through active-active link configurations, minimizing downtime.

Support for train control systems: The solution can carry critical train control signals, ensuring safety and operational efficiency.

The claim that backhaul is unavailable at speeds of 160 km/h is incorrect. Huawei's solution supports reliable backhaul even at high speeds, making it suitable for modern high-speed rail networks.

References:

HCSA-Presales-IP Network Study Guide, Section: "Wireless Backhaul for Rail Transportation."

Huawei Rail Transportation Solution Documentation, Wireless Backhaul Features.

**NEW QUESTION 60**

In Huawei's SD-WAN solution, the RR is a key node and does not participate in service traffic forwarding. However, if the RR fails, service traffic on the entire network will be interrupted. Therefore, the RR is typically deployed in redundancy mode.

- A. TRUE
- B. FALSE

**Answer:** B

**Explanation:**

In Huawei's SD-WAN solution, the Route Reflector (RR) plays a critical role in distributing routing information across the network. However, the RR does not directly participate in service traffic forwarding. Its primary function is to facilitate efficient route exchange between SD-WAN nodes.

If the RR fails, it may temporarily disrupt the distribution of routing updates, but it will not interrupt service traffic on the entire network. Service traffic continues to flow through established paths until the RR is restored or redundancy mechanisms take effect.

To ensure high availability, the RR is often deployed in redundancy mode, but the claim that its failure will interrupt all service traffic is FALSE.

References:

Huawei SD-WAN Solution Architecture, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 65**

Which of the following campus network challenges are enterprises facing as they move towards the all-cloud era?

- A. Slow fault locating
- B. Wi-Fi discontinuous networking
- C. Cloud outpacing network
- D. Difficult network scaling
- E. Cross-domain fragile infrastructure

**Answer:** ABCDE



**Explanation:**

As enterprises transition to cloud-centric architectures, campus networks face several challenges:  
Slow fault locating: Traditional networks lack intelligent tools for rapid fault detection and resolution, leading to prolonged downtime.  
Wi-Fi discontinuous networking: Poorly designed wireless networks result in coverage gaps and inconsistent user experiences.  
Cloud outpacing network: Cloud services evolve faster than traditional networks can adapt, creating bottlenecks.  
Difficult network scaling: Legacy networks struggle to scale dynamically to meet growing demands.  
Cross-domain fragile infrastructure: Fragmented management across domains (e.g., wired, wireless, WAN) leads to inefficiencies and vulnerabilities.  
Addressing these challenges requires modern solutions like SDN (Software-Defined Networking), AI-driven O&M, and unified management platforms.  
References:  
HCSA-Presales-IP Network Study Guide, Section: "Campus Network Challenges in the Cloud Era."  
Huawei Campus Network Solution Documentation, Trends and Challenges.

**NEW QUESTION 67**

Huawei NetEngine AR6100 series routers are mainly used in small- and medium-sized branches.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

The Huawei NetEngine AR6100 series is a line of enterprise-class SD-WAN routers designed for:  
Small- and medium-sized branch offices, offering cost-effective connectivity.  
Supports SD-WAN features for intelligent traffic steering, application acceleration, and cloud access.  
Integrates security functions, including firewalls, IPS, and VPNs, for branch security. Reference: HCSA-Presales-IP Network Official Study Guide, Huawei NetEngine AR Series Overview

**NEW QUESTION 71**

Which of the following are characteristics of SD-WAN?

- A. It provides automatic and intelligent O&M capabilities to implement centralized management and control and network-wide status visualization.
- B. It uses Zero Touch Provisioning (ZTP) to implement fast deployment and provisioning of branches, improving deployment efficiency.
- C. It dynamically adjusts traffic paths by application type, making traffic steering more flexible and convenient.
- D. It provides value-added services such as WAN optimization and security to implement fast service provisioning.

**Answer:** ABCD

**Explanation:**

SD-WAN (Software-Defined Wide Area Network) is a transformative technology that enhances traditional WAN architectures. Its key characteristics include:  
Automatic and intelligent O&M: Centralized management and real-time visibility simplify operations and improve troubleshooting.  
Zero Touch Provisioning (ZTP): Enables rapid deployment of branch offices without manual configuration, reducing time and effort.  
Dynamic traffic steering: Adjusts traffic paths based on application priorities, ensuring optimal performance for critical applications.  
Value-added services: Integrates WAN optimization, security, and other services to enhance network capabilities and streamline service delivery.  
These features make SD-WAN a preferred solution for modern enterprises seeking agility, scalability, and cost efficiency.  
References:  
HCSA-Presales-IP Network Study Guide, Section: "SD-WAN Features and Benefits." Huawei SD-WAN Solution Documentation, Key Characteristics.

**NEW QUESTION 76**

Huawei NetEngine 8000 MIA and NetEngine 8000 M6 routers are 220 mm in depth.

- A. TRUE
- B. FALSE

**Answer:** B

**Explanation:**

The Huawei NetEngine 8000 MIA and NetEngine 8000 M6 routers are compact, high-performance routers, but their depth is not 220 mm.  
These routers are designed for high-capacity edge computing with ultra-high-density interfaces.  
The actual depth varies by model and configuration but exceeds 220 mm due to high-performance hardware requirements.  
Reference: HCSA-Presales-IP Network Official Study Guide, NetEngine 8000 Series Specifications

**NEW QUESTION 78**

Which of the following protocols operate at the network layer? (Select All that Apply)

- A. IPv6
- B. ICMPv6
- C. IPv4
- D. OSPF
- E. ICMP

**Answer:** ABCE

**Explanation:**

Understanding the Network Layer:  
The network layer (Layer 3 of the OSI model) is responsible for end-to-end packet delivery, including routing and addressing. Protocols operating at this layer handle logical addressing and path determination.  
Explanation of Each Protocol:  
IPv6: The next-generation Internet Protocol, which operates at the network layer to provide addressing and routing for packets.

ICMPv6:Internet Control Message Protocol version 6, used for error reporting and diagnostic functions in IPv6 networks. It operates at the network layer.  
IPv4:The current widely-used Internet Protocol, which operates at the network layer to provide addressing and routing for packets.  
OSPF:Open Shortest Path First is a dynamic routing protocol that operates at the network layer to exchange routing information between routers.  
ICMP:Internet Control Message Protocol, used for error reporting and diagnostic functions in IPv4 networks. It operates at the network layer.  
Conclusion:IPv6, ICMPv6, IPv4, and ICMP all operate at the network layer. OSPF is also correct because it is a routing protocol that works at Layer 3.  
References:  
HCSA-Presales-IP Network V3.0 Training Material, Chapter 2: IP Routing Fundamentals. Huawei Networking Technology and Device (HNTD) Documentation.

### NEW QUESTION 83

Which of the following are the hardware characteristics of the S8700? (Select All that Apply)

- A. Ultra-high PoE++ output capability, supporting ultra-long-distance high-performance PoE transmission.
- B. The main control boards work in 1:1 backup mod
- C. When a main control board is removed and then installed, no packet loss occurs and the performance does not deteriorate.
- D. Service subcards are integrated on the main control board panel, separating the forwarding plane from the control plane and enriching port combinations.
- E. Cards with ultra-high-density GE optical/GE electrical/10GE optical ports.

**Answer:** ABD

#### Explanation:

Overview of the S8700 Switch:

The S8700 series is part of Huawei's high-end campus core switches, designed for large- scale enterprise networks. It offers advanced hardware features to meet demanding requirements.

Analysis of Each Option:

Option A:The S8700 supports ultra-high PoE++ output capability, enabling long-distance power delivery for devices such as Wi-Fi access points and IP cameras.

Option B:The main control boards in the S8700 operate in 1:1 backup mode, ensuring seamless failover without packet loss or performance degradation.

Option C:This statement is incorrect. Service subcards are not integrated on the main control board panel; they are separate components that enhance flexibility.

Option D:The S8700 supports ultra-high-density cards with GE optical, GE electrical, and 10GE optical ports, providing versatile connectivity options.

Conclusion:The correct hardware characteristics are Options A, B, and D. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Core Switch Product Portfolio.

Huawei S8700 Series Switch Product Documentation.

### NEW QUESTION 84

Huawei's data center autonomous driving network sits at which level?

- A. L1: assisted O&M
- B. L2: partially autonomous network
- C. L4: highly autonomous network
- D. L0: manual O&M
- E. L3: conditional autonomous network

**Answer:** C

#### Explanation:

Understanding Autonomous Driving Network Levels:

The Autonomous Driving Network (ADN) framework defines six levels of automation, ranging from L0 (manual operations) to L5 (full autonomy).

Huawei's Data Center ADN Level:

Huawei's data center autonomous driving network solution is designed to achieve L4: highly autonomous network capabilities. At this level, the network can self-optimize, self-heal, and handle most tasks without human intervention, requiring minimal oversight for complex scenarios.

Conclusion:The correct answer is Option C, as Huawei's data center ADN operates at L4. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: Data Center Solutions. Huawei Autonomous Driving Network White Paper.

### NEW QUESTION 85

An enterprise SD-WAN network can be divided into two layers: physical underlay network and virtual overlay network, which are completely decoupled from each other.

- A. TRUE
- B. FALSE

**Answer:** A

#### Explanation:

Huawei SD-WAN architecture consists of: Physical Underlay Network:

Composed of MPLS, Internet, or LTE links.

Provides basic connectivity between branches and data centers. Virtual Overlay Network:

Uses tunnels (IPSec, GRE, VXLAN) to create logical connections between sites. Completely decoupled from the physical underlay, enabling flexible traffic management. Reference: HCSA-Presales-IP Network Official Study Guide, SD-WAN Architecture

### NEW QUESTION 87

What is the meaning of "one-click fast scheduling, cloud-network coordinated scheduling"?

- A. SDN + intelligent cloud-map algorithm, improving the utilization of cloud-network resources by 30%
- B. Hierarchical slicing, 1000+ slices (10x the industry average)
- C. Industry-unique hop-by-hop measurement technology, real-time visualization of network- wide status, troubleshooting within minutes
- D. SRv6-based service provisioning within minutes, enabling agile service rollout

**Answer:** A

#### Explanation:

"One-click fast scheduling, cloud-network coordinated scheduling" refers to Huawei's ability to optimize resource allocation across cloud and network infrastructures using SDN (Software-Defined Networking) and an intelligent cloud-map algorithm. This approach improves the utilization of cloud-network resources by up to 30%, ensuring efficient and dynamic resource management. The feature is part of Huawei's broader efforts to integrate cloud and network operations, enabling faster service deployment and better resource efficiency. Other options describe related but distinct features, such as hierarchical slicing or SRv6-based provisioning.

References:

HCSA-Presales-IP Network Study Guide, Section: "Cloud-Network Coordination and SDN." Huawei CloudFabric Solution Documentation, Resource Scheduling and Optimization.

#### NEW QUESTION 90

Among the core values of the hyper-converged data center network solution, which of the following improvements is the result of full-lifecycle automation?

- A. 100% unleashing of computing power
- B. TTM reduced by 90%
- C. Proactive prediction of 90% of faults
- D. Storage performance improved by 90%

**Answer: B**

#### Explanation:

Hyper-converged data center network solutions emphasize automation across the entire lifecycle, from deployment to operations. Below is an analysis of each option:

100% unleashing of computing power : While automation can optimize resource allocation, achieving 100% utilization of computing power is not directly tied to full-lifecycle automation.

TTM reduced by 90% : Full-lifecycle automation streamlines processes such as provisioning, configuration, and scaling, significantly reducing Time-to-Market (TTM). This is a direct benefit of automation.

Proactive prediction of 90% of faults : Proactive fault prediction is typically achieved through AI-driven analytics, not solely through automation.

Storage performance improved by 90% : Improvements in storage performance are more closely related to advancements in hardware (e.g., NVMe over Fabrics) and software optimizations, rather than automation.

Thus, the correct answer is B , as full-lifecycle automation primarily reduces TTM. References:

Huawei Hyper-Converged Data Center Network Solution Overview, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 95

Which of the following controllers supports unified LAN-WAN management?

- A. iMaster NCE-Fabric
- B. iMaster NCE-WAN
- C. iMaster NCE-Campus
- D. iMaster NCE-IP

**Answer: C**

#### Explanation:

Overview of Huawei Controllers:

Huawei offers a range of controllers under the iMaster NCE series, each designed for specific use cases.

Analysis of Each Controller:

iMaster NCE-Fabric: Focuses on data center network automation and management. It does not support unified LAN-WAN management.

iMaster NCE-WAN: Specializes in WAN management, particularly for SD-WAN solutions. It does not manage LANs.

iMaster NCE-Campus: Designed for campus networks, this controller supports unified LAN- WAN management, enabling centralized control of both wired and wireless networks.

iMaster NCE-IP: Focuses on traditional IP/MPLS network management and does not support unified LAN-WAN management.

Conclusion: The correct answer is Option C, as iMaster NCE-Campus supports unified LAN-WAN management.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: Network Management Solutions.

Huawei iMaster NCE Product Documentation.

#### NEW QUESTION 98

Which of the following methods can be used to integrate IoT modules or functions into Huawei IoT APs?

- A. USB interface
- B. Built-in IoT chip
- C. PCIe interface
- D. PoE out port

**Answer: ABC**

#### Explanation:

Comprehensive and Detailed in Depth Explanation: Huawei IoT APs support multiple methods for integrating IoT modules or functionalities:

Option A: The USB interface allows external IoT modules to be connected to the AP, enabling flexible expansion.

Option B: Some Huawei IoT APs come with built-in IoT chips, providing native support for IoT protocols like RFID and Bluetooth.

Option C: The PCIe interface is another method for integrating IoT modules, offering high-speed connectivity for advanced IoT applications.

Option D: The PoE out port is used to power external devices but does not directly integrate IoT functionality.

These integration methods ensure that Huawei IoT APs can adapt to various IoT use cases, such as asset tracking, environmental monitoring, and smart building management. References:

Huawei HCSA-Presales-IP Network Documentation: IoT Integration in WLAN APs Huawei AirEngine Series Product Specifications

#### NEW QUESTION 103

Unlike managing a device through a console port, managing a device through Telnet does not require connecting to the device with a cable. The only requirement is that the Telnet client has a reachable address and can communicate with the Telnet service port of the device. Which kind of address should the client have?

- A. VLAN
- B. AS
- C. MAC
- D. IP

**Answer:** D

**Explanation:**

Understanding Telnet: Telnet is a protocol used for remote management of network devices. Unlike console port management, which requires a physical connection, Telnet operates over the network.

Address Requirement: For Telnet communication to occur, the client must have an IP address. This is because Telnet relies on the TCP/IP protocol suite, and communication is established using IP addresses. Why Not Other Options?

VLAN: A VLAN (Virtual Local Area Network) is a logical segmentation of a network but does not directly represent an address for communication.

AS: An Autonomous System (AS) is a collection of IP networks under a single administrative domain, not an address type.

MAC: A MAC address is a hardware identifier used at Layer 2 of the OSI model. While important for local network communication, it is not sufficient for Telnet, which operates at Layer 3.

Conclusion: The correct answer is IP, as it is the fundamental addressing scheme required for Telnet communication.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 5: Network Management Protocols.

Huawei Enterprise Networking Product Documentation.

**NEW QUESTION 106**

Huawei keeps innovating and advancing datacom technologies, with 26 years of expertise. Currently, Huawei has 14 research centers worldwide.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Huawei's Expertise in Datacom Technologies:

Huawei has been a leader in data communication technologies for over two decades, investing heavily in research and development.

Research Centers Worldwide:

As of the latest documentation, Huawei operates 14 research centers globally. These centers focus on innovation in areas such as 5G, AI, cloud computing, and networking technologies.

Conclusion: The statement is TRUE, as Huawei has indeed established 14 research centers worldwide and has over 26 years of expertise in datacom technologies. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 1: Huawei Overview. Huawei Annual Report and Official Website.

**NEW QUESTION 108**

What are the basic roles of devices in the typical MPLS VPN technical architecture? (Select All that Apply)

- A. PE
- B. Aggregation
- C. P
- D. Core
- E. CE

**Answer:** ACE

**Explanation:**

MPLS VPN Architecture Overview:

MPLS (Multiprotocol Label Switching) VPN is a widely used technology for creating virtual private networks over a shared infrastructure. It involves specific roles for devices in the network.

Explanation of Each Role:

PE (Provider Edge): These devices sit at the edge of the service provider's network and connect to customer sites. They are responsible for assigning labels and managing VPN routes.

P (Provider): These devices are located in the core of the service provider's network. They perform label switching but do not participate in VPN-specific functions.

CE (Customer Edge): These devices belong to the customer and connect to the PE devices. They are unaware of the MPLS network and simply forward traffic to the PE. Aggregation and Core: These terms are not specific to MPLS VPN architecture. "Aggregation" refers to a general networking concept, and "Core" is too broad to describe a specific role in MPLS VPNs.

Conclusion: The correct roles in MPLS VPN architecture are PE, P, and CE. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: MPLS and VPN Technologies.

Huawei MPLS Solution Guide.

**NEW QUESTION 111**

Which of the following IT transformations drive data center networks towards all-Ethernet?

- A. PCIe is replaced.
- B. Storage media evolves from HDDs to SSDs.
- C. The IT architecture evolves from centralized to distributed.
- D. The deployment mode evolves from single-cloud mode to multiple deployment modes such as multi-cloud mode.

**Answer:** BC

**Explanation:**

The transition to all-Ethernet data center networks is driven by several IT transformations. Below is an analysis of each option:

PCIe is replaced : PCIe is a local bus standard used for high-speed device connections within servers. Its replacement does not directly contribute to the shift toward all-Ethernet networks.



Storage media evolves from HDDs to SSDs : The adoption of SSDs increases storage performance and reduces latency, making Ethernet-based storage protocols like NVMe over Fabrics (NVMe-oF) viable alternatives to traditional Fibre Channel.

The IT architecture evolves from centralized to distributed : Distributed architectures require scalable and flexible networking solutions, which Ethernet-based networks are well- suited to provide.

The deployment mode evolves from single-cloud mode to multiple deployment modes such as multi-cloud mode : While multi-cloud deployments influence network design, they do not directly drive the shift to all-Ethernet networks.

Thus, the correct answers are B and C . References:

Huawei All-Ethernet Data Center Network Solution Overview, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 115**

Huawei's CloudWAN 3.0 solution propels WANs into the intelligent cloud-network era.

Which of the following are the key highlights of CloudWAN 3.0? (Select All that Apply)

- A. One-network wide connection
- B. One-click maintenance
- C. One-hop cloud access
- D. One-click fast scheduling
- E. One-fiber multipurpose transport

**Answer:** ABCDE

**Explanation:**

Overview of Huawei CloudWAN 3.0:

Huawei CloudWAN 3.0 is designed to address the challenges of modern WANs by integrating intelligence, automation, and cloud-native capabilities. It aims to simplify operations, improve efficiency, and enable seamless cloud connectivity. Explanation of Each Highlight:

One-network wide connection:Provides unified connectivity across various domains, including branches, data centers, and clouds.

One-click maintenance:Simplifies network operations through automated tools, reducing manual intervention and improving efficiency.

One-hop cloud access:Enables direct and secure access to cloud services with minimal latency, enhancing user experience.

One-click fast scheduling:Allows dynamic resource allocation and traffic optimization through AI-driven scheduling.

One-fiber multipurpose transport:Supports multiple services over a single fiber, improving bandwidth utilization and reducing costs.

Conclusion:All the listed options are key highlights of Huawei CloudWAN 3.0. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: WAN Solutions. Huawei CloudWAN Solution Brochure.

**NEW QUESTION 117**

Which of the following statements are TRUE about network service quality?

- A. Bandwidth, also called throughput, refers to the maximum number of data bits transmitted between two ends within a specified period (1 second) or the average rate at which specific data flows are transmitted between two network node
- B. Bandwidth is expressed in bit/s.
- C. Latency refers to the time required to transmit a packet from the transmit end to the receive end.
- D. The packet loss rate refers to the percentage of total sent packets that are lost during transmission.
- E. Jitter, also called latency variation, refers to the difference in latencies of packets in the same flow.

**Answer:** ABCD

**Explanation:**

Network service quality is determined by several key metrics. Below is an analysis of each option:

Bandwidth : Bandwidth measures the maximum data transfer rate of a network link, expressed in bits per second (bit/s). It represents the capacity of the link to transmit data between two nodes.

Latency : Latency is the time it takes for a packet to travel from the source to the destination. Lower latency improves real-time communication and application performance. Packet loss rate : This metric indicates the percentage of packets that fail to reach their destination due to network congestion, errors, or other issues. High packet loss degrades user experience.

Jitter : Jitter refers to variations in packet arrival times, which can disrupt real-time applications like voice and video. Consistent latency is critical for smooth performance.

All four options are correct and accurately describe key aspects of network service quality. References:

Huawei Network Quality Metrics Guide, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 122**

Which of the following are factors affecting the wireless rate (throughput) of a Wi-Fi AP?

- A. CPU performance
- B. Spatial stream
- C. Frequency bandwidth
- D. SNR

**Answer:** ABCD

**Explanation:**

The wireless rate (throughput) of a Wi-Fi AP is influenced by several factors. Below is an analysis of each option:

CPU performance : The AP's CPU processes data packets and manages wireless communication. Higher CPU performance enables faster packet processing and better throughput.

Spatial stream : Wi-Fi uses multiple spatial streams (MIMO) to transmit data simultaneously. More spatial streams increase the data rate and improve throughput.

Frequency bandwidth : The bandwidth of the frequency channel determines how much data can be transmitted at once. For example, 160 MHz channels provide higher throughput than 20 MHz channels.

SNR (Signal-to-Noise Ratio) : A higher SNR indicates a stronger signal relative to noise, resulting in better data transmission quality and higher throughput. Poor SNR leads to retransmissions and reduced performance.

All four factors significantly impact the wireless rate of a Wi-Fi AP. References:

Huawei Wi-Fi 6 Technology White Paper, HCSA-Presales-IP Network Documentation.



#### NEW QUESTION 127

The data center autonomous driving network standard promoted by both industry and Huawei falls into six levels. The highest level is L5: full autonomous network.

- A. TRUE
- B. FALSE

**Answer:** A

#### Explanation:

Autonomous Driving Network (ADN) Levels:

The ADN standard defines six levels (L0 to L5), ranging from manual operations (L0) to fully autonomous operations (L5).

Highest Level (L5):

At L5, the network achieves full autonomy, capable of self-configuration, self-optimization, and self-healing without human intervention.

Conclusion: The statement is TRUE because the highest level of the ADN standard is indeed L5: full autonomous network.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: Data Center Solutions. Huawei Autonomous Driving Network White Paper.

#### NEW QUESTION 129

Which of the following are factors affecting the wireless rate (throughput) of a Wi-Fi AP? (Select All that Apply)

- A. CPU performance
- B. SNR
- C. Spatial stream
- D. Frequency bandwidth

**Answer:** ABCD

#### Explanation:

Factors Affecting Wireless Rate:

The wireless rate (throughput) of a Wi-Fi AP depends on multiple factors, including hardware capabilities, environmental conditions, and configuration settings.

Explanation of Each Factor:

CPU performance: The AP's CPU processes data packets and performs tasks like encryption/decryption. Higher CPU performance enables better throughput.

SNR (Signal-to-Noise Ratio): A higher SNR indicates a stronger signal relative to noise, resulting in better data rates.

Spatial stream: Wi-Fi 6 supports multiple spatial streams (MIMO), increasing throughput by transmitting multiple data streams simultaneously.

Frequency bandwidth: Wider channels (e.g., 20 MHz, 40 MHz, 80 MHz, or 160 MHz) allow higher data rates but may increase interference in crowded environments.

Conclusion: All four options are factors that affect the wireless rate of a Wi-Fi AP. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: WLAN Solutions. Huawei AirEngine Product Documentation.

#### NEW QUESTION 133

On a large-scale network consisting of multiple ASs, which protocol is required to exchange routes between these ASs?

- A. Static routing
- B. BGP
- C. IS-IS
- D. OSPF

**Answer:** B

#### Explanation:

To exchange routes between Autonomous Systems (ASs), BGP (Border Gateway Protocol) is used. BGP is specifically designed for inter-AS routing and supports scalable and policy-based route distribution across large networks.

Static routing : Requires manual configuration and is not scalable for large networks.

IS-IS and OSPF : These are Interior Gateway Protocols (IGPs) used for intra-AS routing, not inter-AS routing.

Thus, the correct answer is B , as BGP is the standard protocol for inter-AS route exchange.

References:

Huawei BGP Protocol Overview, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 134

SecoManager is a security controller developed by Huawei for a variety of security scenarios. Based on different scenarios, SecoManager has several deployment modes. Which of the following is not the SecoManager deployment mode?

- A. Independent deployment
- B. Integrated deployment with iMaster NCE-IP
- C. Integrated deployment with iMaster NCE-Campus
- D. Integrated deployment with iMaster NCE-Fabric

**Answer:** C

#### Explanation:

SecoManager supports multiple deployment modes to meet the needs of different security scenarios. Below is an analysis of each option:

Independent deployment : SecoManager can be deployed as a standalone solution for managing security devices across the network.

Integrated deployment with iMaster NCE-IP : SecoManager can integrate with iMaster NCE-IP to provide unified management of IP/MPLS networks and security policies. Integrated deployment with iMaster NCE-Campus : This is not a supported deployment mode for SecoManager. SecoManager focuses on security management, while iMaster NCE-Campus is tailored for campus network management.

Integrated deployment with iMaster NCE-Fabric : SecoManager can integrate with iMaster NCE-Fabric to manage security policies in cloud data centers and intent-driven networks. Thus, the correct answer is C , as SecoManager does not support integration with iMaster NCE-Campus.

References:

Huawei SecoManager Deployment Guide, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 139**

Huawei S5731-L remote unit (RU) switches support multiple types of uplink ports, including optical, electrical, and hybrid optical-electrical ports. An RU to be connected to the central switch can be flexibly selected based on the distance between them.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Overview of S5731-L Remote Units (RUs):

The S5731-L series includes remote units (RUs) designed for distributed campus networks. These RUs connect to a central switch via uplink ports.

Uplink Port Flexibility:

The RUs support optical, electrical, and hybrid optical-electrical ports, allowing flexible selection based on the distance between the RU and the central switch. Optical ports are used for long-distance connections, while electrical ports are suitable for shorter distances. Hybrid ports combine both options for maximum versatility. Conclusion: The statement is TRUE because the S5731-L RUs support multiple uplink port types for flexible deployment.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Switch Product Portfolio. Huawei Campus Switch Product Documentation.

**NEW QUESTION 141**

Huawei's vision for the datacom industry is "IP on everything".

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Huawei's vision for the datacom industry is indeed "IP on everything," reflecting its commitment to building ubiquitous, intelligent, and converged IP networks. This vision emphasizes the integration of IP technologies into all aspects of communication, including data centers, campuses, and wide-area networks, to support digital transformation and innovation.

The statement is therefore TRUE . References:

Huawei Datacom Vision White Paper, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 143**

MOX is a general term for various ministries, one of government WAN scenarios and market opportunities for routers. In MOX government network scenario, which Huawei model is the backbone router we normally recommend?

- A. NetEngine 8000 M6
- B. NetEngine 8000 MIC
- C. NetEngine 8000 F1A
- D. NetEngine 8000 X

**Answer:** D

**Explanation:**

In the MOX (Ministries of Government) scenario, where high-performance and scalable WAN connectivity is required, Huawei recommends the NetEngine 8000 X series as the backbone router. Key reasons for this recommendation:

NetEngine 8000 X: Designed for ultra-high-capacity WAN backbones, supporting terabit-level throughput and advanced features like SRv6 and EVPN.

NetEngine 8000 M6/MIC/F1A: These models are more suited for aggregation or access roles rather than backbone routing.

The NetEngine 8000 X is ideal for government networks due to its ability to handle massive traffic volumes, ensure low latency, and support future-proof technologies.

References:

HCSA-Presales-IP Network Study Guide, Section: "Government WAN Scenarios and Router Recommendations."

Huawei NetEngine 8000 Series Product Documentation, Backbone Router Use Cases.

**NEW QUESTION 145**

In order to increase the redundancy of leaf switches, we can use stack or M-LAG technology. However, Huawei CloudEngine 6881 cannot support M-LAG.

- A. TRUE
- B. FALSE

**Answer:** B

**Explanation:**

The Huawei CloudEngine 6881 is a high-performance data center switch that supports both stacking and M-LAG (Multichassis Link Aggregation Group) technologies. M-LAG is a key feature for increasing redundancy and reliability in leaf-spine architectures by enabling two switches to act as a single logical device for link aggregation.

The claim that the CE6881 does not support M-LAG is FALSE , as this model fully supports M-LAG to enhance network availability and fault tolerance.

References:

Huawei CloudEngine 6881 Product Documentation, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 147**

In Huawei's SD-WAN solution, to reduce the impact of packet loss on user services, you are advised to enable Forward Error Correction (FEC) for all traffic.

- A. TRUE
- B. FALSE

**Answer:**

B

**Explanation:**

While Forward Error Correction (FEC) is a valuable feature in Huawei's SD-WAN solution for mitigating packet loss, it is not recommended to enable FEC for all traffic. FEC introduces additional overhead by transmitting redundant data, which can consume bandwidth and degrade performance for non-critical traffic. Instead, FEC should be selectively enabled for sensitive applications (e.g., real-time voice and video) where packet loss has a significant impact. This approach balances performance and resource utilization effectively. References:

HCSA-Presales-IP Network Study Guide, Section: "SD-WAN Packet Loss Mitigation Techniques."

Huawei SD-WAN Solution Documentation, FEC Configuration Guidelines.

**NEW QUESTION 151**

Which of the following Huawei products is best suited to defend against application-layer DDoS attacks?

- A. HiSec Insight
- B. USG6000E
- C. AntiDDoS
- D. FireHunter

**Answer: C**

**Explanation:**

To defend against application-layer DDoS attacks, Huawei's AntiDDoS product is the most suitable choice. Key details about the options:

HiSec Insight: A security analytics platform for threat detection and response, but not specifically designed for DDoS mitigation.

USG6000E: A next-generation firewall with basic DDoS protection, but limited in handling large-scale or sophisticated attacks.

AntiDDoS: A dedicated solution for detecting and mitigating DDoS attacks, including application-layer attacks like HTTP floods.

FireHunter: A sandboxing solution for advanced threat detection, not DDoS defense. The AntiDDoS product excels in identifying and mitigating application-layer attacks by analyzing traffic patterns and applying granular mitigation policies.

References:

HCSA-Presales-IP Network Study Guide, Section: "Anti-DDoS Solutions." Huawei AntiDDoS Product Documentation, Application-Layer Protection.

**NEW QUESTION 156**

What O&M services does iMaster NCE-FabricInsight provide based on knowledge graph modeling?

- A. "1-3-5" troubleshooting
- B. Data plane verification (DPV)
- C. Network snapshot comparison
- D. Network health evaluation

**Answer: ABCD**

**Explanation:**

Huawei's iMaster NCE-FabricInsight is an intelligent O&M platform for data center networks that leverages knowledge graph modeling to enhance network management and troubleshooting. Below is an explanation of each option:

"1-3-5" troubleshooting : This refers to a structured approach for fault detection, isolation, and resolution within 1 minute of fault detection, 3 minutes of fault location, and 5 minutes of fault recovery. FabricInsight uses AI-driven analytics to achieve this level of efficiency. Data plane verification (DPV) : DPV ensures the correctness of the data forwarding path by verifying configurations and detecting anomalies in real time. This helps prevent issues like misconfigurations or routing errors.

Network snapshot comparison : This feature allows administrators to compare network states at different points in time, helping identify changes that may have caused performance degradation or faults.

Network health evaluation : FabricInsight continuously monitors the network and evaluates its health status, providing insights into potential risks and optimization opportunities.

All four options are valid O&M services provided by iMaster NCE-FabricInsight. References:

Huawei iMaster NCE-FabricInsight Solution Overview, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 157**

Government industry is one of the key industries Huawei CloudWAN solution and products focus on. Which are government WAN scenarios and market opportunities for routers?

- A. Asset management network
- B. Dedicated networks for cities
- C. National broadband network
- D. Dedicated networks for provinces
- E. Dedicated networks for ministries (e.g., Ministry of the Interior (MOI), Ministry of Education (MOE), Ministry of Finance (MOF), Ministry of Defense (MOD))

**Answer: BCDE**

**Explanation:**

Huawei's CloudWAN solution targets several key government WAN scenarios and market opportunities:

Dedicated networks for cities: Provides connectivity for smart city initiatives, including public safety, transportation, and utilities.

National broadband network: Supports nationwide broadband infrastructure for government services and citizens.

Dedicated networks for provinces: Enables regional connectivity for provincial governments and agencies.

Dedicated networks for ministries: Serves specific government departments like MOI, MOE, MOF, and MOD, ensuring secure and reliable communication.

Asset management network is not a typical WAN scenario but rather a subset of IoT or enterprise applications, making it irrelevant in this context.

References:

HCSA-Presales-IP Network Study Guide, Section: "Government WAN Scenarios and Opportunities."

Huawei CloudWAN Solution Documentation, Government Use Cases.

**NEW QUESTION 159**

Based on different customers' requirements, Huawei USG firewalls can provide different management modes for O&M. Which type of management modes can

USG firewalls support?

- A. SecoManager
- B. Commands
- C. CloudWAN
- D. Web NMS

**Answer:** ABD

**Explanation:**

Huawei USG firewalls offer flexible management options to meet diverse operational needs. Below is an analysis of each option:

SecoManager : USG firewalls can be managed centrally through SecoManager, which provides unified security policy orchestration and monitoring.

Commands : Administrators can use CLI (Command-Line Interface) commands to configure and manage the firewall directly.

CloudWAN : This is not a management mode for USG firewalls. CloudWAN is a solution for wide-area network management and is unrelated to firewall O&M.

Web NMS : USG firewalls support web-based Network Management Systems (NMS) for graphical configuration and monitoring.

Thus, the correct answers are A , B , and D . References:

Huawei USG Firewall Management Guide, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 163**

In 2021, China Communications Standards Association (CCSA) released the IPv6 Enhanced standard system, and Huawei helped set up the IPv6 national standard team.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

In 2021, the China Communications Standards Association (CCSA) introduced the IPv6 Enhanced standard system to drive IPv6+ adoption.

Huawei played a major role in the standardization process, contributing expertise in areas such as SRv6, network slicing, and intelligent O&M.

This initiative aligns with China's strategy to accelerate IPv6 deployment for next-generation networks.

Reference: HCSA-Presales-IP Network Official Documentation – IPv6 Enhanced Standardization

**NEW QUESTION 165**

Compared with non-Huawei switches that use subcards to expand uplink ports, Huawei S6730-H24X6C / S6730-H48X6C supports six 100GE uplink ports and has higher reliability, which is an advantage in project response.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Huawei's S6730-H24X6C and S6730-H48X6C switches are part of the CloudEngine S series and are designed for high-performance campus networks. These models support six fixed 100GE uplink ports, eliminating the need for additional subcards to expand uplink capacity. This design offers several advantages:

Higher reliability: Fixed ports reduce points of failure compared to modular subcards. Simplified deployment: No need for additional hardware or configuration.

Better performance: Optimized for high-speed connectivity and scalability.

Non-Huawei switches that rely on subcards may face limitations in terms of reliability and flexibility, making Huawei's fixed-port design a competitive advantage.

References:

HCSA-Presales-IP Network Study Guide, Section: "Huawei Campus Switch Portfolio." Huawei CloudEngine S6730 Series Product Documentation.

**NEW QUESTION 169**

Which of the following statements are TRUE about fixed ports and cards of AR routers? (Select All that Apply)

- A. All Layer 2 cards support LAN/WAN switching.
- B. Layer 2 cards configured with VLANIF interfaces support simple Layer 3 forwarding, but do not support NAT, MPLS, IPsec, and HQoS.
- C. On some models, WAN ports can be switched to LAN ports.
- D. LAN ports can be switched to WAN ports using the undo portswitch command.

**Answer:** BCD

**Explanation:**

Overview of Fixed Ports and Cards in AR Routers:

AR routers have fixed ports and modular cards that support various networking functions, including Layer 2 and Layer 3 operations.

Analysis of Each Statement:

Option A: This is incorrect. Not all Layer 2 cards support LAN/WAN switching; it depends on the specific model and card type.

Option B: This is correct. Layer 2 cards with VLANIF interfaces can perform simple Layer 3 forwarding but lack advanced features like NAT, MPLS, IPsec, and HQoS.

Option C: This is correct. Some AR router models allow WAN ports to be reconfigured as LAN ports, providing flexibility in deployment.

Option D: This is correct. The undo portswitch command can be used to switch LAN ports to WAN ports, enabling Layer 3 functionality.

Conclusion: The correct statements are Options B, C, and D. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 4: Router Architecture. Huawei AR Router Product Documentation.

**NEW QUESTION 172**

On a network where SNMP is used for network management, each managed device needs to run an agent process. Which protocol message do the management process and agent process communicate with each other through?

- A. NETCONF



- B. HTTP
- C. YANG
- D. SNMP

**Answer:** D

**Explanation:**

SNMP (Simple Network Management Protocol) is a widely used protocol for managing and monitoring network devices. In an SNMP-based network:

Each managed device runs an agent process that collects and stores management information.

The management process (typically running on a Network Management System, or NMS)

communicates with the agent using SNMP messages.

SNMP defines several types of messages, such as GET, SET, and TRAP, which allow the NMS to query or modify device configurations and receive notifications from the agent. Other options like NETCONF, HTTP, and YANG are unrelated to SNMP communication. References:

HCSA-Presales-IP Network Study Guide, Section: "Network Management Protocols and SNMP."

Huawei Network Management Documentation, SNMP Overview.

**NEW QUESTION 175**

What are the differentiators of Huawei CloudFabric 3.0 data center network solution? (Select All that Apply)

- A. Full-lifecycle automation
- B. Network-wide intelligent O&M
- C. All-wireless access
- D. All-Ethernet storage and HPC network

**Answer:** ABD

**Explanation:**

Overview of Huawei CloudFabric 3.0:

Huawei CloudFabric 3.0 is a next-generation data center network solution that emphasizes automation, intelligence, and unified connectivity for diverse workloads.

Analysis of Each Differentiator:

Full-lifecycle automation: CloudFabric 3.0 provides end-to-end automation for provisioning, configuration, and management, reducing operational complexity.

Network-wide intelligent O&M: AI-driven tools enable proactive fault detection, analysis, and resolution, improving network reliability.

All-wireless access: This is incorrect. CloudFabric 3.0 focuses on wired Ethernet networks rather than all-wireless access.

All-Ethernet storage and HPC network: CloudFabric 3.0 supports unified Ethernet-based connectivity for storage, high-performance computing (HPC), and other workloads, simplifying infrastructure.

Conclusion: The correct differentiators are Options A, B, and D. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: Data Center Solutions. Huawei CloudFabric 3.0 Solution Brochure.

**NEW QUESTION 177**

Which option is the product having a wired side and a wireless side? On the wired side, APs connect to the campus network using Ethernet. On the wireless side, APs connect to downstream wireless terminals using the 802.11 protocol.

- A. LAN
- B. WAN
- C. WLAN
- D. MAN

**Answer:** C

**Explanation:**

AWLAN (Wireless Local Area Network) is a network that connects wireless devices (Wi-Fi terminals) via access points (APs) using the 802.11 protocol.

(A) LAN – False: A LAN is a broader concept that includes both wired and wireless networks.

(B) WAN – False: A WAN connects geographically distant networks, not local wireless devices.

(C) WLAN – True: APs connect to the wired network via Ethernet and provide wireless connectivity to devices.

(D) MAN – False: A MAN (Metropolitan Area Network) spans a city or large area, not limited to wireless connectivity.

Reference: HCSA-Presales-IP Network Official Study Guide, WLAN Fundamentals Section

**NEW QUESTION 181**

Yet Another Next Generation (YANG) is a data modeling language. Which data content can YANG standardize?

- A. NETCONF
- B. SNMP
- C. CLI
- D. Telemetry

**Answer:** A

**Explanation:**

YANG (Yet Another Next Generation) is a data modeling language used to define the structure of configuration and state data manipulated by network management protocols. NETCONF (Network Configuration Protocol) is a network management protocol that relies on YANG to provide a standardized way to configure and manage network devices. YANG defines the structure, while NETCONF provides the transport mechanism to read, modify, and delete configurations.

Other options explained:

SNMP (Simple Network Management Protocol) is used for monitoring but does not use YANG.

CLI (Command-Line Interface) is a manual method for device configuration and not standardized by YANG.

Telemetry is used for real-time data streaming but is not dependent on YANG. Reference: HCSA-Presales-IP Network Official Documentation – YANG & NETCONF Standardization

**NEW QUESTION 183**

Which of the following statements is TRUE about Huawei's IoT Wi-Fi 6 APs?



- A. Currently, IoT expansion is only available for RFID and Bluetooth protocols.
- B. IoT expansion can be implemented through PCIe cards or USB ports.
- C. Radios used by IoT and Wi-Fi do not transmit on the same channel, so there is no need to consider interference between IoT and Wi-Fi signals.
- D. The outdoor Wi-Fi 6 AP AirEngine 5761R-11 supports IoT expansion.

**Answer:** BD

**Explanation:**

Huawei's IoT-enabled Wi-Fi 6 APs integrate wireless networking with IoT capabilities, enabling converged solutions for various industries. Let us evaluate each statement: Currently, IoT expansion is only available for RFID and Bluetooth protocols : This is false . While RFID and Bluetooth are common IoT protocols, Huawei's IoT-enabled APs support additional protocols like Zigbee and LoRa, depending on the model.

IoT expansion can be implemented through PCIe cards or USB ports : This is true . Huawei APs support IoT expansion modules that can be connected via PCIe cards or USB ports, enabling flexible integration of IoT functionalities.

Radios used by IoT and Wi-Fi do not transmit on the same channel, so there is no need to consider interference between IoT and Wi-Fi signals : This is false . Depending on the frequency bands used, IoT and Wi-Fi signals may interfere with each other. Proper planning and configuration are required to minimize interference.

The outdoor Wi-Fi 6 AP AirEngine 5761R-11 supports IoT expansion : This is true . The AirEngine 5761R-11 is an outdoor AP that supports IoT expansion, making it suitable for scenarios like smart cities and industrial IoT.

Thus, the correct answers are B and D .

References:

Huawei IoT Wi-Fi 6 AP Product Documentation, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 186**

Which of the following statements is TRUE about Huawei AirEngine 5762-12?

- A. It supports a device rate of 2.975 Gbps.
- B. It has one USB port.
- C. It does not support the leader AP feature.
- D. It has two GE uplink ports.

**Answer:** D

**Explanation:**

Huawei AirEngine 5762-12 is a Wi-Fi 6 AP designed for enterprise networks. Key specifications:

Supports a maximum device rate of 5.95 Gbps (not 2.975 Gbps) Does not include a USB port

Supports the leader AP feature for intelligent network management

Equipped with two GE (Gigabit Ethernet) uplink ports, ensuring high-speed connectivity and redundancy.

Reference: HCSA-Presales-IP Network Official Documentation – AirEngine 5762-12 Datasheet

**NEW QUESTION 190**

To meet service requirements in different industries, the campus network architecture and technical applications are designed based on industry characteristics. Which of the following options are the service requirements of large and midsize campus networks?

- A. Unknown threats must be detected and contained to prevent intrusion and spread.
- B. Diversified access terminals and services are calling for a converged network.
- C. As applications and services surge, the network needs to be automated to address the deployment and policy complexity.
- D. Network O&M needs to be automated and intelligent to perceive user experience anytime and anywhere.

**Answer:** ABCD

**Explanation:**

Large and midsize campus networks face unique challenges due to their scale, diversity of devices, and evolving service demands. Below is an analysis of each option:

Unknown threats must be detected and contained to prevent intrusion and spread :

Security is a top priority in campus networks. Advanced threat detection mechanisms, such as AI-driven analytics and sandboxing, are essential to identify and mitigate unknown threats before they impact the network.

Diversified access terminals and services are calling for a converged network : Modern campus networks must accommodate a wide range of devices (e.g., smartphones, IoT devices, laptops) and services (e.g., voice, video, data). A converged network architecture simplifies management and ensures seamless connectivity across all devices.

As applications and services surge, the network needs to be automated to address the deployment and policy complexity : Automation tools, such as SDN and intent-driven networking (IDN), help streamline network deployment and policy enforcement, reducing manual intervention and minimizing errors.

Network O&M needs to be automated and intelligent to perceive user experience anytime and anywhere : Intelligent O&M solutions leverage AI and machine learning to monitor network performance, predict issues, and optimize user experience in real time.

All four options accurately describe the service requirements of large and midsize campus networks.

References:

Huawei Campus Network Solution Overview, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 193**

In order to provide customers a fully-wireless experience, break down boundaries, and inspire enterprise innovation, Huawei developed a lot of advanced Wi-Fi technologies. In the face of common signal blind spots problem, which key technology does Huawei Wi-Fi solution use to achieve zero signal blind spot?

- A. Dynamic frequency assignment (DFA)
- B. Unique AI roaming algorithm
- C. Unique dynamic-zoom smart antenna
- D. 6 GHz frequency band

**Answer:** C

**Explanation:**

Huawei Wi-Fi 6 solutions eliminate signal blind spots using their "Unique Dynamic-Zoom Smart Antenna" technology.

(C) True – Dynamic-Zoom Smart Antenna:

Automatically adjusts antenna beamforming based on terminal location. Improves signal coverage and reduces interference in complex environments.

Ensures seamless roaming across APs with stronger signal stability.

Other options:

(A) DFA (False): DFA optimizes frequency selection but does not eliminate signal blind spots.

(B) AI Roaming Algorithm (False): Enhances handover between APs, but does not directly eliminate blind spots.

(D) 6 GHz Band (False): Provides more spectrum, but coverage depends on the AP's antenna design.

Reference: HCSA-Presales-IP Network Official Study Guide, Huawei Wi-Fi 6 Technologies Section

#### NEW QUESTION 198

Huawei keeps innovating and advancing datacom technologies, with 26 years of expertise. Huawei has more than 11,000 R&D staff.

A. TRUE

B. FALSE

**Answer:** A

#### Explanation:

Huawei has been a leader in the telecommunications and networking industry for over two decades. The company invests heavily in research and development (R&D), with over 11,000 R&D staff dedicated to advancing data communication technologies. This extensive R&D effort has enabled Huawei to innovate across various domains, including routing, switching, wireless, and security. The claim aligns with Huawei's official statements about its R&D capabilities and commitment to technological advancement.

References:

HCSA-Presales-IP Network Study Guide, Section: "Huawei's R&D Investment and Innovation."

Huawei Annual Report, R&D Statistics and Achievements.

#### NEW QUESTION 200

Huawei aggregation router NetEngine 8000 M14 is 220 mm deep and supports control/forwarding separation and hardware redundancy.

A. TRUE

B. FALSE

**Answer:** A

#### Explanation:

The NetEngine 8000 M14 is a high-performance aggregation router designed for enterprise and carrier networks. Key features include:

Compact design: With a depth of 220 mm, it fits well in space-constrained environments like edge locations.

Control/forwarding separation: Ensures efficient processing by separating control plane and forwarding plane functions.

Hardware redundancy: Provides high reliability through redundant components like power supplies and fans.

These features make the NetEngine 8000 M14 a robust choice for aggregation roles in WAN architectures.

References:

HCSA-Presales-IP Network Study Guide, Section: "NetEngine 8000 Series Aggregation Routers."

Huawei NetEngine 8000 M14 Product Documentation, Technical Specifications.

#### NEW QUESTION 202

All Huawei NetEngine routers support IPsec, VXLAN, MACsec, and FlexE.

A. TRUE

B. FALSE

**Answer:** B

#### Explanation:

Features Supported by Huawei NetEngine Routers:

Huawei NetEngine routers are designed for various use cases, including WAN, data center interconnect (DCI), and enterprise networking. However, not all models support every advanced feature.

Analysis of Features:

IPsec: Most NetEngine routers support IPsec for secure communication over public networks.

VXLAN: VXLAN support is limited to specific models optimized for data center or cloud environments.

MACsec: MACsec is supported only on certain high-end models for Layer 2 encryption. FlexE: FlexE is a feature available only on select high-end NetEngine routers designed for 5G transport and DCI.

Conclusion: The statement is FALSE because not all NetEngine routers support all four features (IPsec, VXLAN, MACsec, and FlexE).

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 4: Router Product Portfolio. Huawei NetEngine Router Product Documentation.

#### NEW QUESTION 207

In order to simplify Huawei many access switches network configuration, we need to use dedicated stack ports or stack cards with iStack technology to support.

A. TRUE

B. FALSE

**Answer:** A

#### Explanation:

Understanding iStack Technology:

iStack is Huawei's stacking technology that allows multiple switches to be managed as a single logical device. This simplifies network configuration, management, and troubleshooting.

Dedicated Stack Ports or Stack Cards:

To enable iStack functionality, Huawei switches require either dedicated stack ports or stack cards. These ports/cards facilitate high-speed interconnection

between stacked switches.

Benefits of iStack:

Simplifies network topology by reducing the number of managed devices. Enhances scalability and reliability through unified management.

Conclusion: The statement is TRUE because dedicated stack ports or stack cards are required to support iStack technology.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Switch Product Portfolio. Huawei Campus Switch Product Documentation.

#### NEW QUESTION 211

Which of the following statements is FALSE about Huawei AirEngine 5761-11W?

- A. It supports a device rate of 1.775 Gbps.
- B. It has no USB port.
- C. It has one GE uplink port and four GE electrical downlink ports.
- D. It supports the leader AP feature.

**Answer:** B

#### Explanation:

The Huawei AirEngine 5761-11W is a Wi-Fi 6 access point (AP) designed for enterprise networks. Let us analyze each statement:

It supports a device rate of 1.775 Gbps : This is true . The AirEngine 5761-11W supports a maximum device rate of 1.775 Gbps, making it suitable for high-speed wireless connectivity.

It has no USB port : This is false . The AirEngine 5761-11W does have a USB port, which can be used for IoT expansion or other purposes.

It has one GE uplink port and four GE electrical downlink ports : This is true . The device includes one Gigabit Ethernet (GE) uplink port and four GE electrical downlink ports for wired connections.

It supports the leader AP feature : This is true . The leader AP feature allows the device to act as a controller for other APs in small-scale deployments, simplifying network management.

Thus, the false statement is B . References:

Huawei AirEngine 5761-11W Product Documentation, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 212

Fat APs need to work with an AC, which is costly to deploy. Managed and configured by the AC in a unified manner, fat APs provide various functions and have high requirements on network maintenance personnel's skills.

- A. TRUE
- B. FALSE

**Answer:** B

#### Explanation:

The statement contains several inaccuracies. Fat APs (Autonomous Access Points) are standalone devices that do not require a Wireless Access Controller (AC) to function. They are fully capable of managing their own configurations and operations independently. In contrast, Fit APs (Lightweight Access Points) rely on a centralized AC for management and configuration. While Fit APs offer centralized control and scalability, they require the deployment of an AC, which can increase costs. Fat APs are simpler to deploy in small-scale networks but may lack the advanced features and scalability of Fit APs.

The claim that Fat APs "need to work with an AC" is incorrect, making the entire statement false.

References:

HCSA-Presales-IP Network Study Guide, Section: "Wireless Network Architectures and AP Types."

Huawei WLAN Product Documentation, Fat AP vs. Fit AP Comparison.

#### NEW QUESTION 217

Which of the following are involved in the evolution phases for a typical data center?

- A. Centralized
- B. Multi-site and multi-cloud
- C. Distributed
- D. Virtualization

**Answer:** ABCD

#### Explanation:

The evolution of data centers has progressed through several distinct phases, driven by advancements in technology and changing business requirements. Below is an analysis of each phase:

Centralized : Early data centers were centralized, with all resources (servers, storage, and networking) located in a single physical location. This model was simple but lacked scalability and flexibility.

Multi-site and multi-cloud : Modern data centers often span multiple physical locations and integrate with public, private, and hybrid clouds. This phase emphasizes distributed architectures and cloud-native applications.

Distributed : As workloads grew, data centers evolved into distributed models, where resources are spread across multiple sites to improve redundancy, scalability, and performance.

Virtualization : Virtualization technologies enabled the abstraction of physical resources, allowing multiple virtual machines (VMs) or containers to run on a single physical server. This phase significantly improved resource utilization and flexibility.

All four options represent key phases in the evolution of data centers. References:

Huawei Data Center Network Evolution White Paper, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 218

Huawei CE6863E-48S6CQ supports hardware-based BFD, minimum packet sending interval of 3.3s.

- A. TRUE
- B. FALSE

**Answer:** B

**Explanation:**

The Huawei CE6863E-48S6CQ switch supports hardware-based Bidirectional Forwarding Detection (BFD), which enables rapid fault detection in the network. However, the claim that the minimum packet sending interval is 3.3 seconds is incorrect. Hardware-based BFD typically supports much shorter intervals, often in the range of milliseconds (e.g., 3.3 ms, not 3.3 seconds). This ensures fast detection of link failures and minimizes downtime. Thus, the statement is FALSE due to the incorrect interval value. References: Huawei CloudEngine CE6863E-48S6CQ Product Documentation, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 223**

MACsec is an important feature to ensure security and reliability. Which of the following routers can support MACsec? (Select All that Apply)

- A. NetEngine 8000 M6
- B. NetEngine 8000 MIC
- C. NetEngine 8000 F1A
- D. NetEngine 8000 MIA

**Answer:** AC

**Explanation:**

Understanding MACsec:  
MACsec (Media Access Control Security) provides Layer 2 encryption to secure data transmission between network devices, ensuring confidentiality and integrity.  
Analysis of Each Model:  
NetEngine 8000 M6: This model supports MACsec, making it suitable for secure WAN and DCI deployments.  
NetEngine 8000 MIC: This model does not support MACsec.  
NetEngine 8000 F1A: This model supports MACsec, enabling secure communication in high-performance networks.  
NetEngine 8000 MIA: This model does not support MACsec.  
Conclusion: The correct models supporting MACsec are Options A (NetEngine 8000 M6) and C (NetEngine 8000 F1A).  
References:  
HCSA-Presales-IP Network V3.0 Training Material, Chapter 4: Router Product Portfolio.  
Huawei NetEngine 8000 Series Product Documentation.

**NEW QUESTION 227**

Redundancy is the guarantee of stable network operation and is one of the important factors to consider when selecting an aggregation switch. How many power modules does one Huawei CloudEngine S8700-10 have?

- A. 4
- B. 6
- C. 8
- D. 2

**Answer:** A

**Explanation:**

The Huawei CloudEngine S8700-10 is a high-performance aggregation switch designed for enterprise campus networks. It supports up to 4 power modules, which provide redundancy and ensure stable operation even in the event of a power module failure. Redundant power supplies are critical for maintaining network uptime and reliability, especially in mission-critical environments. The other options (2, 6, and 8) do not match the specifications of the S8700-10. While some models in the S8700 series may support fewer or additional power modules, the S8700-10 specifically accommodates up to 4 power modules. References: Huawei CloudEngine S8700 Series Switch Hardware Guide, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 230**

An enterprise WAN mainly implements cross-region interconnection. Which of the following interconnections are implemented on the enterprise WAN?

- A. Enterprise headquarters and branches
- B. Carrier networks and enterprise networks
- C. Enterprise campus networks and data centers
- D. Enterprise office networks and enterprise production networks

**Answer:** ACD

**Explanation:**

An enterprise WAN (Wide Area Network) is designed to connect geographically dispersed locations within an organization. The primary interconnections include:  
Option A: Enterprise headquarters and branches are commonly interconnected via WAN to enable centralized management and resource sharing.  
Option B: Carrier networks and enterprise networks are not part of the enterprise WAN itself but represent external connectivity provided by service providers.  
Option C: Enterprise campus networks and data centers are interconnected to ensure seamless access to centralized resources and applications.  
Option D: Enterprise office networks and production networks are interconnected to facilitate collaboration and operational efficiency.  
These interconnections form the backbone of an enterprise WAN, enabling cross-region communication and resource sharing. References: Huawei HCSA-Presales-IP Network Documentation: Enterprise WAN Architecture Huawei Enterprise Networking Solutions Overview

**NEW QUESTION 231**

The AR6300 provides high reliability and supports dual SRUs, dual power supplies, and redundant fans.

- A. TRUE
- B. FALSE

**Answer:** A



**Explanation:**

Huawei AR6300 routers are high-reliability enterprise routers designed for mission-critical applications.

Key features:

Dual SRUs (Service Routing Units) for redundancy. Dual power supplies to ensure continuous operation.

Redundant fans to prevent overheating and hardware failure.

Reference: HCSA-Presales-IP Network Official Documentation – AR6300 Router High- Availability Features

**NEW QUESTION 234**

MACsec is an important feature to ensure security and reliability. Which of the following features does MACsec provide?

- A. Data frame integrity check
- B. Service data encryption
- C. Data source authenticity verification
- D. Replay protection

**Answer:** ABCD

**Explanation:**

MACsec (Media Access Control Security) is a Layer 2 encryption protocol that protects Ethernet frames from tampering and eavesdropping. It provides:

(A) Data Frame Integrity Check (True): Ensures that transmitted frames are not altered.

(B) Service Data Encryption (True): Encrypts Ethernet frames for data confidentiality.

(C) Data Source Authenticity Verification (True): Verifies the source of Ethernet frames using cryptographic authentication.

(D) Replay Protection (True): Prevents replay attacks by detecting and discarding duplicate frames.

Reference: HCSA-Presales-IP Network Official Study Guide, MACsec Security Features Section

**NEW QUESTION 238**

A higher antenna gain indicates stronger signals and more coverage. Therefore, an AP with a higher antenna gain which is within the specified range of country is preferred.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Understanding Antenna Gain:

Antenna gain refers to the ability of an antenna to focus or direct radio frequency (RF) energy in a specific direction. Higher gain antennas provide stronger signals and extended coverage in the direction they are focused.

Impact on AP Selection:

In scenarios where long-range coverage or better signal strength is required, an AP with a higher antenna gain (within regulatory limits) is preferred.

However, it is important to ensure that the antenna gain complies with the regulatory requirements of the country where it is deployed.

Conclusion: The statement is TRUE because higher antenna gain improves signal strength and coverage, making such APs desirable for specific use cases.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: WLAN Solutions. Huawei AirEngine Product Documentation.

**NEW QUESTION 239**

The major difference between Huawei S5731-H and S5731-S switches in software features is the VXLAN function.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

The S5731-H and S5731-S are part of Huawei's CloudEngine S series switches, but they differ in their software capabilities. Specifically:

S5731-H: Supports advanced features like VXLAN (Virtual Extensible LAN), which enables network virtualization and scalable overlay networks.

S5731-S: Lacks VXLAN support, making it suitable for simpler deployments without virtualization requirements.

This distinction is critical when selecting switches for environments that require advanced virtualization and cloud integration.

References:

HCSA-Presales-IP Network Study Guide, Section: "Huawei Campus Switch Models and Features."

Huawei CloudEngine S5731 Series Product Documentation.

**NEW QUESTION 242**

Huawei's data center autonomous driving network sits at which level?

- A. L1: assisted O&M
- B. L2: partially autonomous network
- C. L4: highly autonomous network
- D. L3: conditional autonomous network
- E. L0: manual O&M

**Answer:** D

**Explanation:**

Huawei's data center autonomous driving network is classified as L3: conditional autonomous network. This level represents a significant advancement in network automation, where the system can handle most tasks autonomously but still requires human oversight for complex or exceptional scenarios. The levels of autonomous driving networks are defined as follows:

L0: Fully manual operations with no automation. L1: Basic automation with assisted O&M tools. L2: Partial autonomy, where some tasks are automated.

L3: Conditional autonomy, enabling self-driving capabilities under specific conditions. L4: High autonomy, capable of handling nearly all tasks without human



intervention. Huawei's L3 implementation ensures efficient and reliable operations while maintaining flexibility for human intervention when needed.

References:

HCSA-Presales-IP Network Study Guide, Section: "Autonomous Driving Network Levels." Huawei Autonomous Driving Network Documentation, L3 Capabilities.

#### NEW QUESTION 243

Huawei enterprise security product portfolio comprises many products. Which of the following security products are included?

- A. AntiDDoS
- B. Modular firewall
- C. SecoManager Security Controller
- D. Desktop firewall

**Answer:** ABC

#### Explanation:

Huawei offers a comprehensive enterprise security portfolio, including:

(A) AntiDDoS (True): Protects against Distributed Denial-of-Service (DDoS) attacks.

(B) Modular Firewall (True): Provides scalable, high-performance security for enterprise networks.

(C) SecoManager Security Controller (True): A centralized security management platform.

(D) Desktop Firewall (False): Not part of Huawei's enterprise security product portfolio. Reference: HCSA-Presales-IP Network Official Study Guide, Huawei Security Products Overview

#### NEW QUESTION 245

Which of the following are advantageous technologies of Huawei Wi-Fi 6?

- A. SmartRadio for Air Interface Optimization
- B. AI roaming steering
- C. Intelligent multimedia scheduling
- D. Industry-leading smart antennas

**Answer:** ABCD

#### Explanation:

Huawei's Wi-Fi 6 solutions incorporate several advanced technologies to deliver superior performance, reliability, and user experience. Below is an explanation of each option: SmartRadio for Air Interface Optimization : This technology optimizes the air interface by dynamically adjusting parameters such as channel allocation, power levels, and interference mitigation. It ensures efficient use of spectrum and improves overall network performance.

AI roaming steering : AI-driven roaming algorithms ensure seamless handover between APs, minimizing latency and packet loss during device movement. This is particularly important for applications like VoIP and video conferencing.

Intelligent multimedia scheduling : This feature prioritizes traffic for multimedia applications, ensuring smooth streaming and low latency for video, voice, and other real-time services. Industry-leading smart antennas : Huawei's smart antenna technology enhances signal coverage and reduces interference, providing better connectivity in challenging environments like open spaces or areas with obstacles.

All four options represent key advantages of Huawei's Wi-Fi 6 solutions. References:

Huawei Wi-Fi 6 Solution Overview, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 246

Which of the following are characteristics of traditional IP routing and forwarding? (Select All that Apply)

- A. All routers need to know the network-wide routes.
- B. Each router needs to obtain the network layer information about the packet and selects routing entries for packet forwarding based on the longest match rule.
- C. It is connectionless and cannot provide good end-to-end QoS guarantee.
- D. It uses the hop-by-hop forwarding mode, in which a packet is decapsulated by all routers that receive the packet.

**Answer:** ABCD

#### Explanation:

Option A: In traditional IP routing, each router in the network must maintain a routing table that contains network-wide routes or at least the routes relevant to its operation. This ensures that packets can be forwarded correctly to their destination.

Option B: Traditional IP routing operates on the principle of the "longest match rule." When a router receives a packet, it examines the destination IP address and matches it against the entries in its routing table. The longest prefix match determines the next hop for the packet.

Option C: Traditional IP networks are inherently connectionless, meaning there is no dedicated path established between the source and destination before data transmission. This lack of connection-oriented mechanisms makes it challenging to guarantee Quality of Service (QoS) across the entire network.

Option D: In traditional IP networks, packets are forwarded using a hop-by-hop mechanism. Each router along the path decapsulates the packet, inspects its headers, and forwards it to the next hop based on its routing table.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 2: IP Routing Fundamentals. Huawei Networking Technology and Device (HNTD) Documentation.

#### NEW QUESTION 249

Huawei's data center autonomous driving network can locate faults within 1 minute, analyze faults within 3 minutes, and rectify faults within 5 minutes.

- A. TRUE
- B. FALSE

**Answer:** A

#### Explanation:

Fault Management in Autonomous Driving Networks:

Huawei's autonomous driving network leverages AI and machine learning to achieve rapid fault detection, analysis, and resolution.

Fault Management Metrics:

Locate faults within 1 minute: AI-driven tools quickly identify the root cause of issues. Analyze faults within 3 minutes: Advanced analytics provide detailed insights

into the nature and impact of faults.

Rectify faults within 5 minutes:Automated remediation workflows resolve issues promptly, minimizing downtime.

Conclusion:The statement is TRUE because Huawei's autonomous driving network meets these fault management metrics.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: Data Center Solutions. Huawei Autonomous Driving Network White Paper.

#### NEW QUESTION 250

Wide area network (WAN) covers a large geographical area, ranging from dozens of kilometers to thousands of kilometers. It can connect multiple cities or even countries and provide long-distance communication to form an international large-scale network.

- A. TRUE
- B. FALSE

**Answer:** A

#### Explanation:

A Wide Area Network (WAN) is designed to span large geographical areas, such as cities, regions, or even countries. WANs enable long-distance communication and are typically used to connect multiple Local Area Networks (LANs) or Metropolitan Area Networks (MANs). They rely on technologies like MPLS, SD-WAN, and leased lines to provide connectivity over vast distances.

The description provided in the question accurately reflects the characteristics and purpose of a WAN. Therefore, the statement is TRUE .

References:

Huawei WAN Solution Overview, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 253

Which of the following are dynamic routing protocols? (Select All that Apply)

- A. OSPF
- B. IS-IS
- C. RIP
- D. BGP

**Answer:** ABCD

#### Explanation:

Dynamic Routing Protocols Overview:

Dynamic routing protocols enable routers to exchange routing information dynamically, allowing them to adapt to changes in the network topology automatically.

Explanation of Each Protocol:

OSPF (Open Shortest Path First):A link-state routing protocol that uses the Dijkstra algorithm to calculate the shortest path to destinations. It is widely used in enterprise networks.

IS-IS (Intermediate System to Intermediate System):Another link-state routing protocol, similar to OSPF, but primarily used in service provider networks.

RIP (Routing Information Protocol):A distance-vector routing protocol that uses hop count as its metric. It is simple but less scalable compared to OSPF and IS-IS.

BGP (Border Gateway Protocol):A path-vector routing protocol used for inter-domain routing (e.g., between autonomous systems). It is the backbone of the

Internet. Conclusion:All four options (OSPF, IS-IS, RIP, and BGP) are dynamic routing protocols. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 2: IP Routing Protocols. Huawei Enterprise Networking Product Documentation.

#### NEW QUESTION 254

Which of the following are the mainstream models of Huawei CloudEngine 16800 series data center switches?

- A. CloudEngine 16812
- B. CloudEngine 16816
- C. CloudEngine 16804
- D. CloudEngine 16808

**Answer:** ABCD

#### Explanation:

TheCloudEngine 16800 seriesis Huawei's flagship data center switch lineup, designed for high-performance, scalable, and reliable networking in modern data centers. The mainstream models in this series include:

CloudEngine 16812:A high-density switch with 12 line cards, supporting up to 576 x 400GE ports.

CloudEngine 16816:The largest model in the series, with 16 line cards, supporting up to 768 x 400GE ports.

CloudEngine 16804:A compact model with 4 line cards, suitable for smaller deployments or edge data centers.

CloudEngine 16808:A mid-sized model with 8 line cards, balancing performance and scalability for medium to large data centers.

These models cater to a wide range of use cases, from small-scale deployments to hyperscale cloud environments.

References:

HCSA-Presales-IP Network Study Guide, Section: "CloudEngine 16800 Series Overview." Huawei CloudEngine 16800 Series Product Documentation, Model Specifications.

#### NEW QUESTION 256

Which of the following methods can be used to integrate IoT modules or functions into Huawei IoT APs? (Select All that Apply)

- A. Built-in IoT chip
- B. USB interface
- C. PCIe interface
- D. PoE out port

**Answer:** ABC

#### Explanation:

Overview of IoT Integration in Huawei APs:

Huawei IoT APs support various methods to integrate IoT modules or functions, enabling unified management of Wi-Fi and IoT devices.

Explanation of Each Method:

Built-in IoT chip: Some Huawei APs come with built-in IoT chips, providing native support for IoT protocols like Zigbee, Bluetooth, or RFID.

USB interface: External IoT modules can be connected via the USB interface, allowing flexible integration of additional IoT functionalities.

PCIe interface: High-speed IoT modules can be integrated using the PCIe interface, offering enhanced performance and scalability.

PoE out port: While PoE out ports provide power to external devices, they do not directly integrate IoT modules or functions.

Conclusion: The correct methods are Options A, B, and C. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: IoT Solutions.

Huawei IoT AP Product Documentation.

#### NEW QUESTION 258

Wi-Fi standards are formulated by IEEE 802.11 working groups. Huawei serves as the chair of the 802.11ax Working Group.

- A. TRUE
- B. FALSE

**Answer:** B

#### Explanation:

While Huawei is a major contributor to the development of Wi-Fi standards and actively participates in IEEE 802.11 working groups, it does not serve as the chair of the 802.11ax Working Group. The 802.11ax standard, also known as Wi-Fi 6, was developed under the leadership of the IEEE 802.11 working group, with contributions from multiple vendors and organizations. Huawei has played a significant role in advancing Wi-Fi technologies, but the claim that it chairs the 802.11ax Working Group is incorrect.

References:

HCSA-Presales-IP Network Study Guide, Section: "Wi-Fi Standards and IEEE Contributions."

IEEE 802.11ax Standard Documentation, Working Group Leadership.

#### NEW QUESTION 263

What are the common Huawei WLAN networking modes?

- A. Independent Fat AP networking
- B. Cloud management networking
- C. WAC + Fit AP networking
- D. AC-free self-networking of the leader AP

**Answer:** ABCD

#### Explanation:

Huawei WLAN solutions support multiple networking modes to adapt to different enterprise requirements:

- (A) Independent Fat AP Networking (True): Each AP operates independently without a Wireless Access Controller (WAC). Suitable for small-scale networks.
  - (B) Cloud Management Networking (True): Uses Huawei CloudCampus to manage APs remotely via iMaster NCE-Campus. Ideal for large, multi-branch enterprises.
  - (C) WAC + Fit AP Networking (True): Centralized WAC (Wireless Access Controller) manages Fit APs, optimizing performance and security.
  - (D) AC-Free Self-Networking of the Leader AP (True): A leader AP acts as a mini-controller, managing other APs without a WAC. Used in small to medium networks.
- Reference: HCSA-Presales-IP Network Official Study Guide, WLAN Networking Modes

#### NEW QUESTION 266

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