

# HUAWEI

## Exam Questions H19-301\_V3.0

HCSA-Presales-IP Network Certification V3.0



#### NEW QUESTION 1

Huawei datacom portfolio comprises "Four Engines" products + Integrated management, control, and analysis platform. Which one is not part of Huawei datacom "Four Engines"?

- A. NetEngine
- B. CloudEngine
- C. AREngine
- D. AirEngine

**Answer:** C

#### Explanation:

Huawei's datacom portfolio includes the "Four Engines" product families: NetEngine : Routers for wide-area networks.  
CloudEngine : Switches for data center networks. AirEngine : Wireless access points for Wi-Fi networks.  
HiSecEngine : Security products for comprehensive protection.  
AREngine is not part of the "Four Engines." It is unrelated to Huawei's datacom portfolio and focuses on augmented reality (AR) technologies.  
Thus, the correct answer is C . References:  
Huawei Datacom Portfolio Overview, HCSA-Presales-IP Network Documentation.

#### NEW QUESTION 2

A Layer 2 switch provides only the Layer 2 switching function. In addition to this function, a Layer 3 switch supports routing and forwarding through a Layer 3 interface, such as a VLANIF interface.

- A. TRUE
- B. FALSE

**Answer:** A

#### Explanation:

Layer 2 Switches operate at the Data Link Layer (Layer 2) and forward packets based on MAC addresses.  
Layer 3 Switches provide both Layer 2 switching and Layer 3 routing capabilities, allowing IP-based communication between VLANs via VLANIF interfaces (VLAN Interfaces).  
VLANIF interfaces act as virtual interfaces assigned to VLANs, enabling inter-VLAN communication without an external router.  
Reference: HCSA-Presales-IP Network Official Documentation – Layer 2 vs. Layer 3 Switches

#### 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

Huawei CloudEngine 8700 is the highest-density modular access switch in the industry. How many 10G ports can one unit of Huawei CloudEngine 8700-10 provide at maximum?

- A. 384
- B. 480
- C. 288
- D. 336

**Answer:** B

#### Explanation:

The CloudEngine 8700-10 is part of Huawei's high-density modular access switch lineup, designed for large-scale campus networks. It supports up to 480 10G ports in a single chassis, making it the highest-density modular access switch in the industry. This high port density enables organizations to consolidate their network infrastructure, reducing space and power requirements while supporting growing bandwidth demands.  
References:  
HCSA-Presales-IP Network Study Guide, Section: "Huawei Campus Switch Portfolio." Huawei CloudEngine 8700 Series Product Documentation, Port Density Specifications.

#### NEW QUESTION 5

Redundancy is the guarantee of network stable operation, which is one of the important factors to consider when selecting an aggregation switch. Huawei CloudEngine S8700 supports microsecond-level active/standby MPLS switchover, one-tenth the industry average.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Redundancy ensures network reliability by providing backup mechanisms to avoid single points of failure.

The Huawei CloudEngine S8700 switch offers:

Microsecond-level active/standby MPLI switchover, which is 10 times faster than the industry average.

High availability through redundant components, such as dual power supplies, dual main processing units (MPUs), and hot-swappable fans.

Reference: HCSA-Presales-IP Network Official Documentation – CloudEngine S8700 Redundancy Features

**NEW QUESTION 6**

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

**Answer:** ABD

**Explanation:**

Comprehensive and Detailed in Depth Explanation:

Huawei's wireless backhaul solution for rail transportation is designed to provide high reliability and low latency for mission-critical applications such as train control systems.

Option A: The handover delay in Huawei's solution can indeed be as low as 30 ms. This ensures seamless connectivity during transitions between base stations, which is crucial for real-time applications like train control signaling.

Option B: The solution supports carrying train control signal systems, ensuring safe and efficient operations.

Option C: This statement is incorrect. Huawei's wireless backhaul solution supports high-speed mobility, including trains traveling at speeds up to 160 km/h or higher, without losing connectivity.

Option D: Active-active links are a key feature of the solution, providing redundancy and ensuring high reliability even in challenging environments.

References:

Huawei HCSA-Presales-IP Network Documentation: Wireless Backhaul Solutions for Rail Transportation

Huawei Case Studies: Rail Transportation Networks

**NEW QUESTION 7**

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 8**

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

**Answer:** ABCD

**Explanation:**

Large and midsize campus networks face unique challenges due to their scale and diversity. Key service requirements include:

Automated and intelligent O&M: Ensures real-time monitoring and optimization of user experience, reducing manual intervention.

Automation for deployment and policy management: Simplifies the handling of complex configurations and policies as applications grow.

Threat detection and containment: Protects against unknown threats using AI-driven security solutions.

Converged networks: Supports diverse access terminals (e.g., IoT devices, smartphones) and services through unified infrastructure.

These requirements drive the adoption of modern technologies like SDN, AI, and network virtualization.

References:

HCSA-Presales-IP Network Study Guide, Section: "Campus Network Requirements by Industry."

Huawei Campus Network Solution Documentation, Large and Midsize Campus Design.

#### NEW QUESTION 9

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 10

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 10

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 12

What are the three types of resources connected to the data center network?

- A. Storage
- B. High-performance computing
- C. General-purpose computing

**Answer:** ABC

#### Explanation:

In a data center network, three primary types of resources are connected: Storage: Includes storage arrays and systems that provide data persistence and retrieval capabilities.

High-performance computing (HPC): Supports compute-intensive workloads like scientific simulations and AI training.

General-purpose computing: Handles everyday workloads such as web hosting, application servers, and virtual machines.

These resources are interconnected through the data center network, enabling seamless communication and resource sharing. Each type serves a distinct purpose, catering to different application requirements.

References:

HCSA-Presales-IP Network Study Guide, Section: "Data Center Network Resources." Huawei Data Center Network Solution Documentation, Resource Types.

#### NEW QUESTION 16

Which of the following security zones are preset on a firewall by default?

- A. DMZ
- B. Local

- C. Untrust
- D. Trust

**Answer:** ABCD

**Explanation:**

Huawei firewalls come preconfigured with several default security zones, each serving a specific purpose:

DMZ (Demilitarized Zone): A buffer zone between the internal network and external networks, often used to host public-facing servers like web servers.

Local: Represents the firewall itself. Traffic destined for the firewall (e.g., management traffic) is associated with this zone.

Untrust: Represents external, untrusted networks such as the Internet. Security policies typically restrict traffic from this zone.

Trust: Represents internal, trusted networks. Traffic within this zone is generally considered safe.

These zones form the foundation of firewall security policies, allowing administrators to control traffic flows between different parts of the network.

References:

HCSA-Presales-IP Network Study Guide, Section: "Firewall Security Zones and Policies." Huawei Firewall Product Documentation, Default Security Zones.

**NEW QUESTION 18**

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 19**

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**

Which of the following Wi-Fi 6 AP models supports three radios?

- A. AirEngine 5762-12
- B. AirEngine 6761-21T
- C. AirEngine 5761-21
- D. AirEngine 5761-11

**Answer:** B

**Explanation:**

Understanding Wi-Fi 6 AP Radios:

Wi-Fi 6 APs typically have two or three radios. Three-radio APs provide additional capacity and performance, making them ideal for high-density environments.

Analysis of Each Model:

AirEngine 5762-12: This model supports two radios (2.4 GHz and 5 GHz).

AirEngine 6761-21T: This model supports three radios, including an additional IoT radio for Internet of Things (IoT) applications.

AirEngine 5761-21: This model supports two radios. AirEngine 5761-11: This model supports two radios.

Conclusion: The correct answer is Option B, as the AirEngine 6761-21T supports three radios.

References:

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

**NEW QUESTION 25**

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**

Which of the following public cloud platforms is not supported by Huawei virtual router AR1000V?

- A. Amazon Web Services (AWS)
- B. Alibaba Cloud
- C. Baidu Cloud
- D. Tencent Cloud

**Answer: C**

**Explanation:**

The AR1000V is a virtual router designed for deployment in public and private cloud environments. It supports integration with major cloud platforms, including:

Amazon Web Services (AWS): Fully supported for hybrid cloud and SD-WAN deployments. Alibaba Cloud: Supported for seamless connectivity in Alibaba's cloud ecosystem.

Tencent Cloud: Supported for enterprise-grade cloud networking.

However, Baidu Cloud is not officially supported by the AR1000V, making it the correct answer. This limitation may be due to compatibility or strategic partnerships with other cloud providers.

References:

HCSA-Presales-IP Network Study Guide, Section: "AR1000V Cloud Platform Compatibility."

Huawei AR1000V Product Documentation, Supported Cloud Platforms.

**NEW QUESTION 32**

As more and more enterprise DCNs step into the AI era, more and more spine switch port bandwidth upgrades to 400G from 100G and leaf switch port bandwidth upgrades to 25G from 10G. If the customer requires the 25G TOR switch, which Huawei model can we propose?

- A. CE6820
- B. CE6870
- C. CE6881
- D. CE6863E

**Answer: C**

**Explanation:**

Huawei's CloudEngine series switches are designed to meet the evolving demands of modern data center networks (DCNs). For customers requiring 25G Top-of-Rack (TOR) switches, the CE6881 is the ideal choice. Key details about the models mentioned:

CE6820: A lower-end switch that does not support 25G ports. CE6870: Primarily supports 10G and 40G ports, not 25G.

CE6881: Specifically designed for 25G access and 100G uplinks, making it suitable for AI-era DCNs.

CE6863E: Focuses on high-density 100G/400G switching, not 25G TOR requirements. The CE6881 aligns perfectly with the need for 25G TOR switches, enabling higher bandwidth and scalability for AI and cloud workloads.

References:

HCSA-Presales-IP Network Study Guide, Section: "Data Center Switch Portfolio." Huawei CloudEngine Series Product Documentation, CE6881 Specifications.

**NEW QUESTION 36**

What is the maximum forwarding rate supported by Huawei AC6805?

- A. 120 Gbps
- B. 60 Gbps
- C. 40 Gbps
- D. 100 Gbps

**Answer: A**

**Explanation:**

The Huawei AC6805 is a high-performance wireless access controller designed for large-scale enterprise networks. It supports up to 120 Gbps of forwarding capacity, enabling it to handle high-density Wi-Fi deployments and demanding applications like video streaming and IoT.

The other options (60 Gbps, 40 Gbps, and 100 Gbps) do not match the specifications of the AC6805. While lower-end models in the AC series may have reduced forwarding rates, the AC6805 is specifically designed to deliver exceptional performance for large-scale networks.

Thus, the correct answer is A. References:

Huawei AC6805 Wireless Access Controller Product Documentation, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 41**

Which method does Huawei's campus network free mobility solution use to achieve a consistent experience across the entire network?

- A. IP address-based policy control
- B. User-based policy control
- C. MAC address-based policy control
- D. Terminal-based policy control

**Answer:** B

**Explanation:**

Huawei's Free Mobility solution provides consistent network access using User-Based Policy Control.

(B) True – User-Based Policy Control:

Ensures that user policies (VLAN, QoS, security) remain consistent across the network. Users can move freely across different subnets while maintaining the same network access privileges.

Other options:

(A) IP Address-Based Control (False): Users' IP addresses may change, disrupting policy continuity.

(C) MAC Address-Based Control (False): MAC addresses are device-specific, limiting user mobility.

(D) Terminal-Based Control (False): Controls access per device, not per user. Reference: HCSA-Presales-IP Network Official Study Guide, Campus Network Mobility Section

**NEW QUESTION 46**

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

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

**Answer:** B

**Explanation:**

Comprehensive and Detailed in Depth Explanation: The iMaster NCE-Campus controller is designed to provide unified management for both LAN and WAN environments. It simplifies network operations by centralizing configuration, monitoring, and policy enforcement across campus networks and WAN connections.

Option A: iMaster NCE-WAN focuses on WAN management and optimization. Option C: iMaster NCE-Fabric is tailored for data center networks.

Option D: iMaster NCE-IP is primarily used for IP/MPLS backbone networks.

By supporting unified LAN-WAN management, iMaster NCE-Campus helps enterprises streamline their network infrastructure and improve operational efficiency.

References:

Huawei HCSA-Presales-IP Network Documentation: iMaster NCE-Campus Features Huawei iMaster NCE Product Portfolio

**NEW QUESTION 51**

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**

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

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

**Answer:** ABCD

**Explanation:**

Huawei's L3 autonomous driving solution leverages AI and automation to enhance network performance through intelligent O&M. Below is an explanation of each capability: Intelligent HQoS : Hierarchical Quality of Service (HQoS) ensures optimal resource allocation for critical applications. Intelligent HQoS dynamically adjusts policies based on real-time traffic conditions, improving application performance and user experience. Intelligent network optimization : AI-driven algorithms analyze network traffic patterns and optimize routing, bandwidth allocation, and load balancing to maximize efficiency and reduce latency.

Real-time experience visualization : Visualization tools provide real-time insights into network performance and user experience. This enables administrators to quickly identify bottlenecks and take corrective actions.

Precise fault analysis : Advanced diagnostics and AI-powered analytics pinpoint the root cause of network issues with high accuracy, enabling faster troubleshooting and resolution. All four options represent key capabilities of Huawei's intelligent O&M solution. References:

Huawei Autonomous Driving Network Solution White Paper, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 61**

SecoManager is a security controller developed by Huawei for a variety of security scenarios. Which are the features of SecoManager?

- A. Identification of the real attack source IP addresses of botnets based on machine learning, enhancing defense against CC attacks

- B. Policy redundancy analysis
- C. High-performance collection, query, and storage of session logs and threat logs
- D. Unified management of multiple security devices, including firewalls, IPS devices, and anti-DDoS devices

**Answer:** ACD

**Explanation:**

SecoManager is Huawei's security controller, designed to provide centralized management and intelligent orchestration for various security devices. Below is an analysis of each option:

Identification of the real attack source IP addresses of botnets based on machine learning, enhancing defense against CC attacks : SecoManager uses AI and machine learning to analyze traffic patterns and identify malicious activities, such as botnet attacks and CC (Challenge Collapsar) attacks.

Policy redundancy analysis : This is not a feature of SecoManager. While it provides policy management, redundancy analysis is typically handled by other tools or controllers.

High-performance collection, query, and storage of session logs and threat logs : SecoManager collects and analyzes logs from security devices, enabling administrators to monitor threats and troubleshoot issues efficiently.

Unified management of multiple security devices, including firewalls, IPS devices, and anti-DDoS devices : SecoManager integrates with various security devices, providing a single platform for configuration, monitoring, and policy enforcement.

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

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

**NEW QUESTION 65**

Which of the following are Layer 2 Ethernet interfaces on a switch?

- A. Hybrid
- B. Trunk
- C. Agg
- D. Access
- E. Core

**Answer:** ABD

**Explanation:**

In Huawei switches, Layer 2 Ethernet interfaces are used to forward data at the data link layer (Layer 2) of the OSI model. These interfaces are essential for VLAN segmentation and communication within a local area network (LAN). The three main types of Layer 2 Ethernet interfaces are:

Hybrid: A hybrid interface can carry traffic from multiple VLANs and is highly flexible. It allows both tagged and untagged traffic, making it suitable for complex network designs.

Trunk: A trunk interface is used to carry traffic from multiple VLANs between switches or other network devices. It typically tags VLAN traffic using IEEE 802.1Q encapsulation.

Access: An access interface is associated with a single VLAN and is used to connect end devices like PCs or IP phones. It carries untagged traffic by default.

The options "Agg" (likely referring to aggregation) and "Core" are not Layer 2 interface types but rather refer to higher-level concepts like link aggregation or core network architecture.

References:

HCSA-Presales-IP Network Study Guide, Section: "Switching Basics and VLAN Configuration."

Huawei Switch Product Documentation, VLAN Interface Types.

**NEW QUESTION 66**

Which of the following are the hardware characteristics of the S8700?

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

**Answer:** ABCD

**Explanation:**

The Huawei CloudEngine S8700 series switches are designed for enterprise campus networks and aggregation layers, offering advanced hardware features that ensure high performance, scalability, and reliability. Below is an explanation of each option:

Cards with ultra-high-density GE optical/GE electrical/10GE optical ports : The S8700 supports high-density interfaces, including Gigabit Ethernet (GE) and 10 Gigabit Ethernet (10GE) ports, making it suitable for large-scale campus networks.

Ultra-high PoE++ output capability, supporting ultra-long-distance high-performance PoE transmission : The switch provides Power over Ethernet (PoE++) support, delivering up to 90W per port. This capability is ideal for powering devices like IP cameras, wireless access points, and IoT devices over long distances.

Service subcards are integrated on the main control board panel, separating the forwarding plane from the control plane and enriching port combinations : This design enhances

modularity and flexibility, allowing users to customize port configurations based on their specific requirements.

The main control boards work in 1:1 backup mode. When a main control board is removed and then installed, no packet loss occurs and the performance does not deteriorate : The S8700 ensures high availability through redundant main control boards. This feature guarantees uninterrupted operation even during maintenance or failures.

All four options accurately describe the hardware characteristics of the S8700, making them all correct.

References:

Huawei CloudEngine S8700 Series Switch Product Documentation, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 68**

What is the maximum forwarding rate supported by Huawei AC6805?

- A. 120 Gbps
- B. 40 Gbps
- C. 100 Gbps
- D. 60 Gbps



**Answer:** A

**Explanation:**

The AC6805 is a high-performance wireless access controller (AC) designed for large-scale enterprise networks. It supports a maximum forwarding rate of 120 Gbps, enabling it to handle high-density wireless traffic efficiently. This capability makes the AC6805 suitable for environments with thousands of concurrent users, such as stadiums, airports, and large campuses. Its high forwarding rate ensures minimal latency and optimal performance for mission-critical applications.

References:

HCSA-Presales-IP Network Study Guide, Section: "Wireless Access Controller Specifications."

Huawei AC6805 Product Documentation, Forwarding Rate Details.

**NEW QUESTION 72**

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 74**

What are the differentiators of Huawei CloudFabric 3.0 data center network solution?

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

**Answer:** ABD

**Explanation:**

Huawei's CloudFabric 3.0 is a next-generation data center network solution with several key differentiators:

Full-lifecycle automation: Automates tasks across the entire lifecycle, from deployment to operations, reducing manual intervention and errors.

Network-wide intelligent O&M: Leverages AI to provide real-time monitoring, fault prediction, and optimization, enhancing reliability and efficiency.

All-Ethernet storage and HPC network: Supports converged Ethernet-based storage and high-performance computing (HPC), eliminating the need for separate Fibre Channel networks.

While all-wireless access is a feature of campus networks, it is not a differentiator of CloudFabric 3.0, which focuses on wired data center networks.

References:

HCSA-Presales-IP Network Study Guide, Section: "CloudFabric 3.0 Key Features." Huawei CloudFabric Solution Documentation, Differentiators.

**NEW QUESTION 77**

Labels are used in MPLS forwarding. Which option can be used to configure labels?

- A. Static routing
- B. Manual configuration
- C. Direct routes
- D. Label Distribution Protocol (LDP)

**Answer:** D

**Explanation:**

MPLS (Multiprotocol Label Switching) uses labels to forward packets efficiently along predefined paths called Label Switched Paths (LSPs). These labels are assigned dynamically using protocols like Label Distribution Protocol (LDP) or RSVP-TE (Resource Reservation Protocol - Traffic Engineering). While static routing and manual configuration

can define paths, they do not involve dynamic label assignment. Similarly, direct routes are not related to MPLS label distribution. LDP is specifically designed to exchange label information between routers, enabling MPLS forwarding.

References:

HCSA-Presales-IP Network Study Guide, Section: "MPLS Architecture and Label Distribution."

Huawei MPLS Technology Documentation, LDP Configuration.

**NEW QUESTION 78**

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 81**

Which of the following interface types are supported by WAN-side links of Huawei SD-WAN routers?

- A. LTE
- B. 5G
- C. FC
- D. VDSL

**Answer:** ABD

**Explanation:**

Huawei SD-WAN routers support multiple WAN-side link types to provide flexible connectivity options:

- (A) LTE (True): Many Huawei SD-WAN routers include LTE interfaces for mobile WAN connectivity, ensuring reliable backup connections.
- (B) 5G (True): Next-generation routers support 5G connectivity, offering higher bandwidth and lower latency than LTE.
- (C) FC (False): Fibre Channel (FC) is a technology used for storage networks (SANs), not for WAN connectivity in SD-WAN routers.
- (D) VDSL (True): Some Huawei routers support VDSL interfaces for DSL-based broadband connections, commonly used in legacy networks.

Reference: HCSA-Presales-IP Network Official Study Guide, Huawei SD-WAN Router WAN Interfaces Section

**NEW QUESTION 82**

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 83**

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 87**

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 90**

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 91**

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 92**

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 95**

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 99**

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 104**

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 107**

Transportation industry is one of the key industries Huawei CloudWAN solution and products focus on. Which is not the railway services and market opportunities for routers?

A. Integrated information network

B. Vehicle-ground communication network

C. Interconnection load balancing between backbone clouds

D. Railway signal bearer network

**Answer:** C

**Explanation:**

Huawei's CloudWAN solutions target various railway services and market opportunities. Below is an analysis of each option:

Integrated information network : This refers to the unified network infrastructure that integrates multiple railway systems, such as passenger information, ticketing, and security. It is a key focus area for Huawei routers.

Vehicle-ground communication network : This involves communication between trains and ground stations, enabling real-time monitoring, diagnostics, and control. It is a critical railway service supported by Huawei routers.

Interconnection load balancing between backbone clouds : This is more relevant to cloud data center interconnections rather than railway-specific services. It is not a primary focus for railway services.

Railway signal bearer network : This refers to the network that carries signaling and control information for safe train operations. It is a core railway service supported by Huawei routers.

Thus, the correct answer is C, as interconnection load balancing between backbone clouds is not directly related to railway services.

References:

Huawei CloudWAN Solution for Transportation Industry, HCSA-Presales-IP Network Documentation.



**NEW QUESTION 111**

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 116**

Which of the following statements are TRUE about iStack and CSS?

- A. CSS enables two or more CSS-capable switches that are connected using CSS cables to function as a single logical switch for data forwarding.
- B. iStack enables multiple iStack-capable switches that are connected using iStack cables to function as a single logical switch for data forwarding.
- C. CSS enables two CSS-capable switches to function as a single logical switch
- D. Only two switches can set up a CSS
- E. Generally, modular switches support CSS, and fixed switches support iStack.
- F. iStack enables two iStack-capable switches to function as a single logical switch
- G. Only two switches can set up a stack
- H. Generally, modular switches support iStack, and fixed switches support CSS.

**Answer:** ABC

**Explanation:**

iStack (Intelligent Stacking) and CSS (Cluster Switching System) are two high-availability networking technologies used to logically combine multiple switches for better redundancy and scalability.

(A) True – CSS (Cluster Switching System) allows two or more modular switches to function as one logical switch. CSS-capable switches connect using CSS cables.

(B) True – iStack allows multiple fixed switches to be stacked together into a single logical unit using iStack cables.

(C) True – CSS is supported by modular switches, while iStack is supported by fixed switches. Only two switches can form a CSS cluster.

(D) False – iStack supports more than two switches, making this statement incorrect. Reference: HCSA-Presales-IP Network Official Study Guide, iStack & CSS Section

**NEW QUESTION 118**

Which of the following statements are TRUE about iMaster NCE in terms of management and control?

- A. Manages and controls traditional devices through SNMP.
- B. Manages and controls traditional devices through the CLI.
- C. Manages and controls SDN-capable networks through NETCONF (based on the YANG model).

**Answer:** AC

**Explanation:**

iMaster NCE (Huawei's Network Cloud Engine) is an intent-driven network management and control system designed for SDN networks.

It supports both traditional and SDN-capable networks:

SNMP is used to manage and control traditional (non-SDN) devices.

NETCONF + YANG is used to manage SDN-capable devices in a structured and automated manner.

CLI is not a preferred method in SDN environments as it lacks automation and scalability. Reference: HCSA-Presales-IP Network Official Documentation – iMaster NCE Management Capabilities

**NEW QUESTION 119**

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 121**

MACsec is an important feature to make sure security and reliability. Which one is MACsec corresponding standard?

- A. 802.1ab
- B. 802.1p
- C. 802.1ae
- D. 802.1at

**Answer:** C

**Explanation:**

MACsec (Media Access Control Security) is a Layer 2 encryption protocol designed to secure Ethernet communications. It provides confidentiality, integrity, and replay protection for data transmitted over wired networks. The IEEE standard corresponding to MACsec is 802.1AE, which defines the protocol's mechanisms for encrypting and authenticating Ethernet frames. Other options refer to unrelated standards:

\* 802.1ab: Defines Link Layer Discovery Protocol (LLDP) for network discovery.

\* 802.1p: Specifies priority tagging for Quality of Service (QoS). 802.1at: Defines Power over Ethernet Plus (PoE+). References: HCSA-Presales-IP Network Study Guide, Section: "MACsec and Network Security." IEEE 802.1AE Standard Documentation.

**NEW QUESTION 122**

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 127**

The device's MAC address table specifications are greatly challenged by the rapidly increasing number of VMs. In order to solve this problem, we can use VXLAN with large-scale scalability. In a VXLAN scenario, which Huawei model can we propose?

- A. CE6881
- B. CE9860
- C. CE6820
- D. CE5882

**Answer:** A

**Explanation:**

VXLAN (Virtual Extensible LAN) is a network virtualization technology that addresses the limitations of traditional VLANs and MAC address tables by enabling large-scale Layer 2 networks over Layer 3 infrastructure. It is particularly useful in data centers with a growing number of virtual machines (VMs).

Among the options provided:

CE6881 : This switch supports VXLAN and is designed for high-density data center environments. It provides excellent scalability and performance for VXLAN-based networks, making it the most suitable choice.

CE9860 : While this switch is a high-end model, it is primarily used for core or aggregation layers and may not be the best fit for VXLAN at the access layer.

CE6820 : This switch does not support VXLAN, making it unsuitable for the scenario. CE5882 : This is an older model and lacks the advanced features required for modern VXLAN deployments.

Thus, the correct answer is A, as the CE6881 is the most appropriate model for VXLAN scenarios.

References:

Huawei CloudEngine VXLAN Solution Overview, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 132**

MACsec (Media Access Control Security) is an important feature to ensure security and reliability. Which of the following features does MACsec provide?

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

**Answer:** ABCD

**Explanation:**

MACsec(Media Access Control Security) is a Layer 2 security protocol that provides end-to-end encryption for Ethernet frames. It ensures confidentiality, integrity, and authenticity of data on wired networks.

A (Service data encryption): Encrypts Ethernet frames to protect against eavesdropping. B (Data frame integrity check): Prevents data tampering and corruption.

C (Replay protection): Detects and prevents replay attacks by using unique sequence numbers.

D (Data source authenticity verification): Ensures that received data is from a legitimate source by using cryptographic authentication.

Reference: HCSA-Presales-IP Network Official Documentation – MACsec Features & Security Benefits

#### NEW QUESTION 135

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 nodes.

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 138

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 143

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 148

Which of the following AR models supports SRv6?

A. AR6300

B. AR6140E

C. AR8140

D. None of the above

**Answer:** A

**Explanation:**

Understanding SRv6 Support in AR Routers:

SRv6 (Segment Routing over IPv6) is a next-generation networking technology that simplifies traffic engineering and improves scalability in WANs.

Analysis of Each Model:

AR6300: This high-end AR router supports SRv6, making it suitable for advanced SD-WAN and WAN deployments.

AR6140E: This model does not support SRv6. AR8140: This model also does not support SRv6.

None of the above: This is incorrect because the AR6300 supports SRv6. Conclusion: The correct answer is Option A, as the AR6300 supports SRv6. References:

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

**NEW QUESTION 152**

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 154**

Which of the following statements is TRUE about AirEngine products?

- A. The AirEngine 5762-12 supports a maximum device rate of 1.775 Gbps.
- B. The AirEngine 6761-21 supports a device rate of 3.55 Gbps.
- C. The AirEngine 5762-12SW does not support the leader AP feature.
- D. The AirEngine 5761-11 has 2.5GE ports.

**Answer:** B

**Explanation:**

Huawei's AirEngine series includes a range of Wi-Fi 6 APs with varying capabilities: AirEngine 5762-12: Supports a maximum device rate of 2.975 Gbps, not 1.775 Gbps, making option A incorrect.

AirEngine 6761-21: Supports a maximum device rate of 3.55 Gbps, making option B correct. AirEngine 5762-12SW: Does support the leader AP feature, making option C incorrect. AirEngine 5761-11: Does not have 2.5GE ports, making option D incorrect.

The AirEngine 6761-21 stands out for its high performance, making it suitable for demanding environments like large enterprises and campuses.

References:

HCSA-Presales-IP Network Study Guide, Section: "AirEngine Series Performance Metrics." Huawei AirEngine Product Documentation, Device Rate Specifications.

**NEW QUESTION 158**

Compared with non-Huawei switches that use subcards to expand uplink ports, Huawei S6730-H24X6CI and S6730-H48X6C support six 100GE uplink ports and have higher reliability, which is an advantage in project response.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Comparison of Uplink Ports and Reliability:

Non-Huawei switches often rely on subcards to expand uplink ports, which can introduce complexity and potential points of failure.

Huawei S6730-H24X6CI and S6730-H48X6C switches come with built-in six 100GE uplink ports, eliminating the need for additional subcards. This design simplifies deployment and enhances reliability.

Advantages in Project Response:

Built-in uplink ports reduce configuration time and improve operational efficiency. Higher reliability ensures consistent performance, which is crucial for mission-critical applications.

Conclusion: The statement is TRUE because the S6730-H series switches offer built-in 100GE uplink ports and superior reliability compared to non-Huawei switches. References:

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

**NEW QUESTION 162**

Huawei S5731-H switches include models that provide both electrical and optical ports.

- A. TRUE
- B. FALSE

**Answer:** A



**Explanation:**

Understanding the S5731-H Series:

The S5731-H series switches are part of Huawei's high-performance access switches, designed for enterprise campus networks.

Port Types in S5731-H:

Some models in the S5731-H series support both electrical (RJ45) and optical (SFP) ports, providing flexibility for different connectivity requirements.

Conclusion: The statement is TRUE because the S5731-H series includes models with both

electrical and optical ports. References:

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

**NEW QUESTION 163**

Forwarding performance is an important metric for core routers. How much is the highest forwarding performance of Huawei core router NetEngine 40E X16A/X8A service processing unit?

- A. 1 Tbit/s
- B. 2 Tbit/s
- C. 800 Gbit/s
- D. 480 Gbit/s

**Answer:** B

**Explanation:**

The Huawei NetEngine 40E X16A/X8A is a high-performance core router used in carrier-grade networks.

Maximum forwarding performance: 2 Tbit/s per service processing unit. Supports high-density 100GE and 400GE interfaces.

Provides intelligent traffic scheduling, high reliability, and scalable architecture. Reference: HCSA-Presales-IP Network Official Study Guide, NetEngine 40E X16A/X8A Specifications

**NEW QUESTION 166**

Which of the following AP models have 2.5GE uplink ports?

- A. AirEngine 5760-51
- B. AirEngine 6761-21
- C. AirEngine 5761-21
- D. AirEngine 6761-21T
- E. AirEngine 5762-12

**Answer:** ACD

**Explanation:**

Huawei's AirEngine series access points (APs) are designed for high-performance wireless networking. Some models include 2.5GE uplink ports to support higher bandwidth requirements for modern applications like video streaming and IoT. The following models support 2.5GE uplink ports:

AirEngine 5760-51: High-performance Wi-Fi 6 AP with 2.5GE ports. AirEngine 5761-21: Compact Wi-Fi 6 AP with 2.5GE ports. AirEngine 6761-21T: Outdoor Wi-Fi 6 AP with 2.5GE ports.

The AirEngine 6761-21 and AirEngine 5762-12 do not support 2.5GE uplink ports, making them unsuitable for scenarios requiring higher bandwidth.

References:

HCSA-Presales-IP Network Study Guide, Section: "AirEngine Series Features and Specifications."

Huawei AirEngine Product Documentation, Uplink Port Details.

**NEW QUESTION 170**

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 175**

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 180

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 182

In the latest-generation WPA3 encryption standard, the key length is 192 bits, making WPA3 more secure than WPA2.

- A. TRUE
- B. FALSE

**Answer:** A

#### Explanation:

Comprehensive and Detailed in Depth Explanation: WPA3 (Wi-Fi Protected Access 3) introduces enhanced security features compared to WPA2. One of the key improvements is the use of a 192-bit encryption key in the WPA3 Enterprise mode, which provides stronger cryptographic protection. This is part of the "WPA3-Enterprise 192-bit" mode, designed for high-security environments such as government and financial institutions. The increased key length enhances resistance to brute-force attacks and ensures better protection of sensitive data. Additionally, WPA3 includes features like Simultaneous Authentication of Equals (SAE), which replaces the Pre-Shared Key (PSK) mechanism, further improving security.

References:

Huawei HCSA-Presales-IP Network Documentation: WLAN Security Features

Wi-Fi Alliance: WPA3 Security Enhancements

#### NEW QUESTION 184

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 185

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 190**

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 194**

MACsec is an important feature to ensure security and reliability. Which of the following routers can support MACsec?

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

**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. Below is an analysis of each option: NetEngine 8000 MIA : This model supports MACsec, making it suitable for secure WAN and data center interconnections.

NetEngine 8000 F1A : This model also supports MACsec, enabling secure high-speed connections.

NetEngine 8000 MIC : The MIC series does not support MACsec, as it is primarily designed for modular interfaces without encryption capabilities.

NetEngine 8000 M6 : This model supports MACsec, ensuring secure communication for enterprise networks.

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

Huawei NetEngine 8000 Series Router Product Documentation, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 195**

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?

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

**Answer:** ABCD

**Explanation:**

Enterprise networks are vulnerable to a variety of cyberattacks, including:

Remote code execution:Attackers exploit vulnerabilities to execute malicious code on target systems, potentially gaining full control.

Cross-site attacks:Includes Cross-Site Scripting (XSS) and Cross-Site Request Forgery (CSRF), where attackers manipulate web applications to steal data or perform unauthorized actions.

Command line injection:Attackers inject malicious commands into input fields, compromising system integrity.

Brute-force attacks:Attackers attempt to guess passwords or encryption keys through repeated trial-and-error attempts.

These attack methods highlight the importance of implementing robust security measures, such as firewalls, intrusion detection/prevention systems, and regular patching. References:

HCSA-Presales-IP Network Study Guide, Section: "Common Cyberattack Methods." Huawei Security Solution Documentation, Threat Landscape Overview.

**NEW QUESTION 200**

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 203

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 206

Which industries are Huawei CloudWAN products and solutions focused on?

- A. Energy
- B. Finance
- C. Government/Education
- D. ISP
- E. Transportation

**Answer:** ABCDE

#### Explanation:

Huawei's CloudWAN products and solutions are designed to address the unique WAN requirements of various industries. These include:

Energy: Supports secure and reliable connectivity for utilities, oil and gas, and renewable energy sectors.

Finance: Ensures high-performance and secure networks for banks, insurance companies, and financial institutions.

Government/Education: Provides dedicated networks for government agencies and educational institutions, enabling e-governance and digital learning.

ISP (Internet Service Providers): Helps ISPs deliver scalable and efficient broadband services to consumers and enterprises.

Transportation: Enables connectivity for smart transportation systems, including railways, airports, and highways.

CloudWAN's flexibility and scalability make it suitable for a wide range of industries, addressing their specific WAN challenges and opportunities.

References:

HCSA-Presales-IP Network Study Guide, Section: "CloudWAN Industry Focus." Huawei CloudWAN Solution Documentation, Industry Use Cases.

#### NEW QUESTION 207

Which of the following campus network challenges are enterprises facing as they move towards the all-cloud era? (Select All that Apply)

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

**Answer:** ABCDE

#### Explanation:

Challenges in Campus Networks During the All-Cloud Era:

As enterprises transition to cloud-based architectures, campus networks face several challenges due to increased complexity, scalability demands, and integration with cloud services.

Explanation of Each Challenge:

Difficult network scaling: As businesses grow, scaling traditional campus networks to meet increasing demands becomes challenging without proper automation and flexibility.

Cloud outpacing network: The rapid adoption of cloud services often surpasses the ability of traditional networks to adapt, leading to performance bottlenecks.

Wi-Fi discontinuous networking: Ensuring seamless Wi-Fi coverage and connectivity across large campuses is a significant challenge, especially in environments with high user density.

Slow fault locating: Traditional networks lack advanced tools for real-time monitoring and troubleshooting, resulting in delays in identifying and resolving issues.

Cross-domain fragile infrastructure: Managing multiple domains (e.g., wired, wireless, and cloud) introduces complexity and increases the risk of failures if not properly integrated. Conclusion: All the listed challenges are valid and commonly faced by enterprises moving toward the all-cloud era.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: Campus Network Challenges.

Huawei CloudCampus Solution Brochure.

#### NEW QUESTION 212

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 217**

Huawei datacom portfolio comprises "Four Engines" products + Integrated management, control, and analysis platform. Which one is not belong to Huawei datacom "Four Engines"?

- A. AREngine
- B. NetEngine
- C. CloudEngine
- D. AirEngine

**Answer:** A

**Explanation:**

Huawei's datacom portfolio includes the "Four Engines," which represent key product lines for different networking domains:

NetEngine:High-performance routers for enterprise WAN and data center interconnects. CloudEngine:Data center switches designed for high-density, low-latency environments. AirEngine:Wireless access points (APs) for Wi-Fi 6 and beyond.

HiSecEngine:Security products, including firewalls and intrusion prevention systems. The optionAREngine does not belong to the "Four Engines" lineup. It appears to be unrelated to Huawei's official datacom product categories.

References:

HCSA-Presales-IP Network Study Guide, Section: "Huawei Datacom Portfolio Overview." Huawei Product Catalog, Four Engines Framework.

**NEW QUESTION 222**

Huawei datacom product line covers six domains as follows: campus network, metro router, data center network, cyber security, network management, and backbone router.

- A. TRUE
- B. FALSE

**Answer:** A

**Explanation:**

Huawei Datacom Product Line Overview:

Huawei's datacom product line provides comprehensive solutions across multiple domains to meet diverse customer needs.

Domains Covered by Huawei Datacom:

Campus Network:Solutions for enterprise campuses, including switches, Wi-Fi, and IoT integration.

Metro Router:Routers designed for metropolitan area networks (MANs).

Data Center Network:Solutions for high-performance data center networking, including switches and SDN controllers.

Cyber Security:Products and solutions for network security, including firewalls and intrusion detection systems.

Network Management:Tools for managing and monitoring networks, such as iMaster NCE.

Backbone Router:High-capacity routers for core and backbone networks.

Conclusion:The statement is TRUE, as Huawei's datacom product line indeed covers these six domains.

References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 1: Huawei Overview. Huawei Datacom Product Portfolio Documentation.

**NEW QUESTION 227**

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 232

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 236

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

- A. Its cover can be flexibly changed based on the project and deployment environment requirements.
- B. It can serve as the leader AP to manage up to eight Fit APs.
- C. It supports a maximum wireless rate of 2.975 Gbps.
- D. It has two GE ports, one for uplink and the other for downlink.

**Answer: D**

#### Explanation:

The AirEngine 5762-12SW is a versatile Wi-Fi 6 AP designed for small and medium-sized enterprises. Key features include:

Flexible covers: The AP's cover can be customized to match the deployment environment. Leader AP functionality: It can manage up to eight Fit APs, simplifying network architecture. Maximum wireless rate: Supports up to 2.975 Gbps, ensuring high-speed connectivity. However, the statement that it has two GE ports (one for uplink and one for downlink) is FALSE. The AirEngine 5762-12SW has only one GE port for uplink, which limits its wired connectivity options.

References:

HCSA-Presales-IP Network Study Guide, Section: "AirEngine 5762-12SW Features." Huawei AirEngine 5762-12SW Product Documentation, Port Configuration.

#### NEW QUESTION 241

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 M1A

**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 M1A: 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 243

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 245

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 250

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 251

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 256

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

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

**Answer:** ABC

#### Explanation:

Huawei offers a comprehensive enterprise security portfolio, including:

(A) Anti-DDoS (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 260**

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 262**

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 263**

On a data communication network, the network layer header of a packet sent by the source node carries the network layer addresses of both the source and destination nodes of the packet. Network devices with the routing function maintain the routing table. When receiving the packet, which address carried in the network layer do these network devices read and search their routing tables for a matching entry? After one is found, the packet is forwarded accordingly.

- A. Source MAC
- B. Destination IP
- C. Source IP
- D. Destination MAC

**Answer:** B

**Explanation:**

In IP-based networks, routers use the destination IP address in the network layer header to determine the next hop for forwarding packets. The routing table contains entries that map destination IP addresses to outgoing interfaces or next-hop routers.

Source MAC and Destination MAC are Layer 2 (data link layer) addresses and are not used for routing decisions.

Source IP is irrelevant for routing, as the router focuses on delivering the packet to the destination IP address.

Thus, the correct answer is B , as routers use the destination IP address to make forwarding decisions.

References:

Huawei Routing Fundamentals Guide, HCSA-Presales-IP Network Documentation.

**NEW QUESTION 268**

Which of the following statements is FALSE about RR in Huawei's SD-WAN solution?

- A. It can implement communication between SD-WAN networks and legacy MPLS networks.
- B. It can be deployed on a physical AR router or software AR1000V vCPE.
- C. It can be deployed independently or co-deployed with the CPE at a site.
- D. It distributes VPN routes and tunnel information between CPEs based on VPN topology policies.

**Answer:** A

**Explanation:**

Understanding the Role of RR (Route Reflector):



In Huawei's SD-WAN solution, the Route Reflector (RR) plays a critical role in distributing routing information and ensuring efficient communication between CPEs (Customer Premises Equipment).

Analysis of Each Statement:

Option A: This is FALSE. The RR in Huawei's SD-WAN solution does not directly implement communication between SD-WAN networks and legacy MPLS networks. Instead, it focuses on distributing VPN routes and tunnel information within the SD-WAN overlay network. Communication with legacy MPLS networks typically requires additional integration mechanisms.

Option B: This is correct. The RR can be deployed on a physical AR router or as a virtualized instance (AR1000V vCPE).

Option C: This is correct. The RR can be deployed independently or co-located with a CPE at a site, depending on the network design.

Option D: This is correct. The RR distributes VPN routes and tunnel information between CPEs based on predefined VPN topology policies.

Conclusion: The FALSE statement is Option A. References:

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

#### NEW QUESTION 269

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 270

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:

The CloudEngine 16800 series is 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 274

For USG6000F series firewalls, 10 virtual systems and 100 concurrent SSL VPN users are provided for free by default.

- A. TRUE
- B. FALSE

**Answer:** B

#### Explanation:

Virtual Systems and SSL VPN Licenses:

Virtual systems allow a single firewall to act as multiple logical firewalls, each with its own policies and resources.

Concurrent SSL VPN users require licenses for secure remote access. Default Licensing for USG6000F Series:

By default, the USG6000F series provides free licenses for 10 virtual systems. However, SSL VPN licenses are not included by default and must be purchased separately. Conclusion: The statement is FALSE because only 10 virtual systems are provided for free,

while SSL VPN licenses are not included by default. References:

HCSA-Presales-IP Network V3.0 Training Material, Chapter 11: Security Solutions. Huawei USG6000F Series Firewall Product Documentation.

#### NEW QUESTION 279

Which of the following statements is TRUE about AirEngine products?

- A. The AirEngine 5762-12 supports a maximum device rate of 1.775 Gbps.
- B. The AirEngine 5762-12SW does not support the leader AP feature.
- C. The AirEngine 5761-11 has 2.5GE ports.

D. The AirEngine 6761-21 supports a device rate of 3.55 Gbps.

**Answer:** C

**Explanation:**

Overview of AirEngine Products:

Huawei's AirEngine series includes Wi-Fi 6 access points (APs) designed for high-density and high-performance wireless networks.

Analysis of Each Statement:

Option A: The AirEngine 5762-12 supports a maximum device rate of 2.976 Gbps, not 1.775 Gbps.

Option B: The AirEngine 5762-12SW does support the leader AP feature, which simplifies network management.

Option C: The AirEngine 5761-11 has 2.5GE ports, making it suitable for high-bandwidth applications.

Option D: The AirEngine 6761-21 supports a device rate of 5.375 Gbps, not 3.55 Gbps. Conclusion: The correct statement is Option C.

References:

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

**NEW QUESTION 280**

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 285**

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