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Exam Name: HCSA-Presales-IP Network Certification V3.0

Exam A

QUESTION 1
Which of the following deployment modes are supported by AR routers? (Select All that Apply)

A. USB-based deployment
B. DHCP option-based deployment
C. DCN deployment
D. Email-based deployment

Correct Answer: A, B, C, D
Section:
Explanation:
Deployment Modes for AR Routers:
Huawei AR routers support multiple deployment methods to simplify configuration and provisioning in various scenarios.
Explanation of Each Mode:
USB-based deployment:Configuration files can be loaded onto the router using a USB drive, enabling zero-touch provisioning.
DHCP option-based deployment:The router obtains its configuration from a DHCP server, which provides necessary parameters such as IP addresses and configuration file URLs.
DCN deployment:Devices are automatically discovered and configured through the Data Communication Network (DCN), reducing manual intervention.
Email-based deployment:Configuration files or scripts can be sent to the router via email, allowing remote provisioning.
Conclusion:All four options are valid deployment modes for AR routers.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 4: Router Deployment.
Huawei AR Router Product Documentation.

QUESTION 2
What is the maximum packet loss rate allowed by A-FEC while ensuring smooth video playback in Huawei's SD-WAN solution?

A. 0.4
B. 0.2
C. 0.1
D. 0.3

Correct Answer: A
Section:
Explanation:
Understanding A-FEC (Adaptive Forward Error Correction):
A-FEC is a technology used in Huawei's SD-WAN solution to ensure smooth video playback even in the presence of packet loss. It adds redundant data to compensate for lost packets.
Maximum Packet Loss Rate:
A-FEC can tolerate up to40% packet loss (0.4)while maintaining smooth video playback. This ensures high-quality video streaming even in challenging network conditions.
Conclusion:The correct answer is Option A, as the maximum packet loss rate allowed by A-FEC is 0.4.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: SD-WAN Solutions.
Huawei SD-WAN Solution Brochure.

QUESTION 3
Which of the following statements are TRUE about fixed ports and cards of AR routers? (Select All that Apply)

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

Correct Answer: B, C, D
Section:
Explanation:
Overview of Fixed Ports and Cards in AR Routers:
AR routers have fixed ports and modular cards that support various networking functions, including Layer 2 and Layer 3 operations.
Analysis of Each Statement:
Option A:This is incorrect. Not all Layer 2 cards support LAN/WAN switching; it depends on the specific model and card type.
Option B:This is correct. Layer 2 cards with VLANIF interfaces can perform simple Layer 3 forwarding but lack advanced features like NAT, MPLS, IPsec, and HQoS.
Option C:This is correct. Some AR router models allow WAN ports to be reconfigured as LAN ports, providing flexibility in deployment.
Option D:This is correct. Theundo portswitchcommand can be used to switch LAN ports to WAN ports, enabling Layer 3 functionality.
Conclusion:The correct statements are Options B, C, and D.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 4: Router Architecture.
Huawei AR Router Product Documentation.

QUESTION 4
Which of the following are dynamic routing protocols? (Select All that Apply)

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

Correct Answer: A, B, C, D
Section:
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.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 2: IP Routing Protocols.
Huawei Enterprise Networking Product Documentation.

QUESTION 5
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

Correct Answer: A, C, E
Section:
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.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: MPLS and VPN Technologies.
Huawei MPLS Solution Guide.

QUESTION 6
Which of the following protocols operate at the network layer? (Select All that Apply)

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

Correct Answer: A, B, C, E
Section:
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.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 2: IP Routing Fundamentals.
Huawei Networking Technology and Device (HNTD) Documentation.

QUESTION 7
Huawei keeps innovating and advancing datacom technologies, with 26 years of expertise. Currently, Huawei has 14 research centers worldwide.

A. TRUE
B. FALSE

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

QUESTION 8
Huawei CloudCampus 3.0 solution implements a fully-wireless intelligent cloud campus network, inspiring digital innovation. Which of the following benefits description of Huawei CloudCampus 3.0 solution is not correct?

A. One global network: 40% lower private line costs
B. L3 autonomous driving: 90% fewer complaints
C. Low-carbon intelligence: 60% smaller energy consumption of the entire network
D. Fully-wireless experience: 40% higher productivity

Correct Answer: C
Section:
Explanation:
Overview of Huawei CloudCampus 3.0:
Huawei CloudCampus 3.0 is designed to provide a fully-wireless, intelligent, and cloud-based campus network solution. It focuses on improving efficiency, reducing costs, and enabling digital transformation.
Analyzing Each Option:
Option A:'One global network: 40% lower private line costs' is correct. Huawei CloudCampus 3.0 reduces private line costs by leveraging cloud-based technologies and SD-WAN solutions.
Option B:'L3 autonomous driving: 90% fewer complaints' is correct. The solution uses AI-driven automation to minimize network issues and improve user satisfaction.
Option C:'Low-carbon intelligence: 60% smaller energy consumption of the entire network' isnot correct. While Huawei emphasizes energy efficiency, the claim of a 60% reduction in energy consumption is exaggerated and not supported by official documentation.
Option D:'Fully-wireless experience: 40% higher productivity' is correct. The fully-wireless architecture enhances user experience and productivity.
Conclusion:The incorrect benefit description is Option C.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: Campus Network Solutions.
Huawei CloudCampus Solution Brochure.

QUESTION 9
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

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

QUESTION 10
Which of the following are the four highlights ('EASY') of Huawei's CloudFabric Easy Solution? (Select All that Apply)

A. EasY-Maintenance
B. Expandability
C. Simplification
D. Easy Sales
E. Automation

Correct Answer: A, C, E
Section:
Explanation:
Overview of Huawei CloudFabric Easy Solution:
Huawei CloudFabric Easy Solution is designed to simplify data center networking through automation, ease of use, and scalability. Its key highlights are summarized under the acronym 'EASY.'
Explanation of Each Highlight:
EasY-Maintenance:The solution simplifies network operations and maintenance, reducing complexity and operational costs.
Expandability:While expandability is important, it is not one of the four 'EASY' highlights explicitly mentioned in the official documentation.
Simplification:The solution focuses on simplifying network deployment, configuration, and management.
Easy Sales:This is not part of the 'EASY' highlights. The term refers to technical benefits rather than sales processes.
Automation:The solution leverages automation to streamline tasks such as provisioning, monitoring, and troubleshooting.
Conclusion:The four highlights of Huawei CloudFabric Easy Solution are EasY-Maintenance, Simplification, and Automation.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 7: Data Center Network Solutions.
Huawei CloudFabric Solution Brochure.

QUESTION 11
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

Correct Answer: A, B, C, D, E
Section:
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.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: Campus Network Challenges.
Huawei CloudCampus Solution Brochure.

QUESTION 12
Huawei's CloudWAN 3.0 solution propels WANs into the intelligent cloud-network era. Which of the following are the key highlights of CloudWAN 3.0? (Select All that Apply)

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

Correct Answer: A, B, C, D, E
Section:
Explanation:
Overview of Huawei CloudWAN 3.0:
Huawei CloudWAN 3.0 is designed to address the challenges of modern WANs by integrating intelligence, automation, and cloud-native capabilities. It aims to simplify operations, improve efficiency, and enable seamless cloud connectivity.
Explanation of Each Highlight:
One-network wide connection:Provides unified connectivity across various domains, including branches, data centers, and clouds.
One-click maintenance:Simplifies network operations through automated tools, reducing manual intervention and improving efficiency.
One-hop cloud access:Enables direct and secure access to cloud services with minimal latency, enhancing user experience.
One-click fast scheduling:Allows dynamic resource allocation and traffic optimization through AI-driven scheduling.
One-fiber multipurpose transport:Supports multiple services over a single fiber, improving bandwidth utilization and reducing costs.
Conclusion:All the listed options are key highlights of Huawei CloudWAN 3.0.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: WAN Solutions.
Huawei CloudWAN Solution Brochure.

QUESTION 13
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

Correct Answer: A, C, D
Section:
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.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Switch Product Portfolio.
Huawei Campus Switch Product Documentation.

QUESTION 14
Huawei S5735-L series switches differ from Huawei S5731-S series switches in whether theysupport subcard expansion ports.

A. TRUE
B. FALSE

Correct Answer: A
Section:
Explanation:
Comparison of S5735-L and S5731-S Series Switches:
Both series belong to Huawei's campus switch portfolio but target different use cases and have distinct features.
Subcard Expansion Ports:
S5735-L Series:These switches donotsupport subcard expansion ports. They are designed for fixed configurations and are suitable for small to medium-sized networks.
S5731-S Series:These switchesdosupport subcard expansion ports, allowing for greater flexibility in terms of port types and densities. This makes them ideal for larger or more complex networks.
Conclusion:The statement is TRUE because the S5735-L series lacks subcard expansion ports, while the S5731-S series supports them.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Switch Product Portfolio.
Huawei Campus Switch Product Documentation.

QUESTION 15
Which of the following switches does not support two power modules?

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

Correct Answer: D
Section:
Explanation:
Power Module Support in Huawei Switches:
Many Huawei switches are designed with dual power module slots to ensure redundancy and reliability. However, some lower-end models may not support this feature.
Analysis of Each Switch:
S5736-S24T4XC:This switch supports dual power modules for redundancy.
S5732-H:This switch also supports dual power modules.
S5731-S24P4X:This switch supports dual power modules.
S5735-L:This switch is a lower-end model anddoes not support dual power modules, making it less suitable for environments requiring high reliability.
Conclusion:The S5735-L series switch does not support two power modules.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Switch Product Portfolio.
Huawei Campus Switch Product Documentation.

QUESTION 16
Huawei Cloud Engine S12700E is front-to-back airflow design, improving the heat dissipation efficiency of the rack.

A. TRUE
B. FALSE

Correct Answer: A
Section:
Explanation:
Airflow Design in Data Center Switches:
Airflow design is critical for efficient heat dissipation in data center switches. Front-to-back airflow ensures that cool air enters from the front and hot air exits from the back, aligning with typical data center cooling systems.
Huawei Cloud Engine S12700E:
The S12700E series switches are designed with front-to-back airflow to improve heat dissipation efficiency. This design minimizes overheating risks and ensures stable operation in high-density environments.
Conclusion:The statement is TRUE because the S12700E series uses a front-to-back airflow design.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Core Switch Product Portfolio.
Huawei Cloud Engine S12700E Product Documentation.

QUESTION 17
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

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

QUESTION 18
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 mode. When a main control board is removed and then installed, no packet loss occurs and the performance does not deteriorate.
C. Service subcards are integrated on the main control board panel, separating the forwarding plane from the control plane and enriching port combinations.
D. Cards with ultra-high-density GE optical/GE electrical/10GE optical ports.

Correct Answer: A, B, D
Section:
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 arenot integratedon 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.

HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Core Switch Product Portfolio.
Huawei S8700 Series Switch Product Documentation.

QUESTION 19
In order to simplify Huawei many access switches network configuration, we need to use dedicated stack ports or stack cards with iStack technology to support.

A. TRUE
B. FALSE

Correct Answer: A
Section:
Explanation:
Understanding iStack Technology:
iStack is Huawei's stacking technology that allows multiple switches to be managed as a single logical device. This simplifies network configuration, management, and troubleshooting.
Dedicated Stack Ports or Stack Cards:
To enable iStack functionality, Huawei switches require either dedicated stack ports or stack cards. These ports/cards facilitate high-speed interconnection between stacked switches.
Benefits of iStack:
Simplifies network topology by reducing the number of managed devices.
Enhances scalability and reliability through unified management.
Conclusion:The statement is TRUE because dedicated stack ports or stack cards are required to support iStack technology.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Switch Product Portfolio.
Huawei Campus Switch Product Documentation.

QUESTION 20
Huawei one-to-many campus network virtualization implements automatic service provisioning on multi-purpose networks. What kind of capability can Huawei campus network virtualization provide? (Select All that Apply)

A. One network carrying multiple services
B. Automatic service policy delivery
C. Automatic virtual network (VN) deployment
D. Automatic physical network deployment

Correct Answer: A, B, C
Section:
Explanation:
Overview of Huawei Campus Network Virtualization:
Huawei's campus network virtualization allows a single physical network to support multiple logical networks (VNs), enabling efficient resource utilization and simplified management.
Explanation of Each Capability:
One network carrying multiple services:This is a core feature of virtualization, where a single physical network supports multiple services (e.g., voice, video, data) through logical segmentation.
Automatic service policy delivery:Virtualization enables automated delivery of service policies to ensure consistent configuration across all devices in the network.
Automatic virtual network (VN) deployment:Huawei's solution automates the creation and deployment of virtual networks, reducing manual intervention and speeding up service provisioning.
Automatic physical network deployment:This is incorrect because physical network deployment typically involves manual setup and configuration, which cannot be fully automated.
Conclusion:The correct capabilities are Options A, B, and C.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: Campus Network Virtualization.
Huawei CloudCampus Solution Brochure.

QUESTION 21
Huawei S5731-H switches include models that provide both electrical and optical ports.

A. TRUE

B. FALSE

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

QUESTION 22
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

Correct Answer: B
Section:
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 supportstwo radios(2.4 GHz and 5 GHz).
AirEngine 6761-21T:This model supportsthree radios, including an additional IoT radio for Internet of Things (IoT) applications.
AirEngine 5761-21:This model supportstwo radios.
AirEngine 5761-11:This model supportstwo radios.
Conclusion:The correct answer is Option B, as the AirEngine 6761-21T supports three radios.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: WLAN Solutions.
Huawei AirEngine Product Documentation.

QUESTION 23
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

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

QUESTION 24
Which of the following statements are TRUE about Huawei's audio and video service experience assurance? (Select All that Apply)

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

Correct Answer: B, C, D
Section:
Explanation:
Overview of Audio and Video Service Assurance:
Huawei provides advanced mechanisms to ensure high-quality audio and video services in wireless networks, even under congestion.
Analysis of Each Statement:
Option A:This is incorrect. The correct default priority order isVI -> VO -> BE -> BK(Voice > Video > Best Effort > Background).
Option B:This is correct. Beacon frames can be used to instruct APs to suppress heavy-traffic users, ensuring fair resource allocation.
Option C:This is correct. Huawei's lab tests show that delays for voice and video services in congestion scenarios are56% lowerthan the industry average.
Option D:This is correct. The default scheduling priority order isVI -> VO -> BE -> BK.
Option E:This is incorrect. Heavy-traffic services are not automatically suppressed; suppression requires explicit configuration.
Conclusion:The correct statements are Options B, C, and D.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: WLAN Solutions.
Huawei AirEngine Product Documentation.

QUESTION 25
Which of the following are advantageous technologies of Huawei Wi-Fi 6? (Select All that Apply)

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

Correct Answer: A, B, C, D
Section:
Explanation:
Overview of Huawei Wi-Fi 6 Technologies:
Huawei Wi-Fi 6 incorporates several innovative technologies to enhanceperformance, reliability, and user experience in wireless networks.
Explanation of Each Technology:
SmartRadio for Air Interface Optimization:This technology optimizes air interface efficiency, improving throughput and reducing interference.
Intelligent multimedia scheduling:Ensures prioritized delivery of voice, video, and other critical services, enhancing user experience.
Industry-leading smart antennas:Provide better signal coverage and capacity by dynamically adjusting beamforming directions.
AI roaming steering:Uses artificial intelligence to predict and optimize client roaming behavior, ensuring seamless connectivity.
Conclusion:All four options are advantageous technologies of Huawei Wi-Fi 6.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: WLAN Solutions.

Huawei AirEngine Product Documentation.

QUESTION 26
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

Correct Answer: A, B, C, D
Section:
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.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: WLAN Solutions.
Huawei AirEngine Product Documentation.

QUESTION 27
Which of the following methods can be used to integrate IoT modules or functions into Huawei IoT APs? (Select All that Apply)

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

Correct Answer: A, B, C
Section:
Explanation:
Overview of IoT Integration in Huawei APs:
Huawei IoT APs support various methods to integrate IoT modules or functions, enabling unified management of Wi-Fi and IoT devices.
Explanation of Each Method:
Built-in IoT chip:Some Huawei APs come with built-in IoT chips, providing native support for IoT protocols like Zigbee, Bluetooth, or RFID.
USB interface:External IoT modules can be connected via the USB interface, allowing flexible integration of additional IoT functionalities.
PCIe interface:High-speed IoT modules can be integrated using the PCIe interface, offering enhanced performance and scalability.
PoE out port:While PoE out ports provide power to external devices, they do not directly integrate IoT modules or functions.
Conclusion:The correct methods are Options A, B, and C.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: IoT Solutions.
Huawei IoT AP Product Documentation.

QUESTION 28
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

Correct Answer: C
Section:
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 supportsunified 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.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: Network Management Solutions.
Huawei iMaster NCE Product Documentation.

QUESTION 29
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

Correct Answer: A
Section:
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) areindependent 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.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 9: SD-WAN Solutions.
Huawei SD-WAN Solution Brochure.

QUESTION 30
Huawei S5731-L remote unit (RU) switches support multiple types of uplink ports, including optical, electrical, and hybrid optical-electrical ports. An RU to be connected to the central switch can be flexibly selected based on the distance between them.

A. TRUE
B. FALSE

Correct Answer: A
Section:
Explanation:
Overview of S5731-L Remote Units (RUs):
The S5731-L series includes remote units (RUs) designed for distributed campus networks. These RUs connect to a central switch via uplink ports.
Uplink Port Flexibility:

The RUs supportoptical, electrical, and hybrid optical-electrical ports, allowing flexible selection based on the distance between the RU and the central switch.
Optical ports are used for long-distance connections, while electrical ports are suitable for shorter distances. Hybrid ports combine both options for maximum versatility.
Conclusion:The statement is TRUE because the S5731-L RUs support multiple uplink port types for flexible deployment.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 6: Switch Product Portfolio.
Huawei Campus Switch Product Documentation.

QUESTION 31
Which of the following statements are TRUE about Huawei's wireless backhaul solution for rail transportation? (Select All that Apply)

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

Correct Answer: A, B, C
Section:
Explanation:
Overview of Huawei's Wireless Backhaul Solution:
Huawei's wireless backhaul solution for rail transportation ensures reliable communication for train control systems, passenger services, and other applications.
Analysis of Each Statement:
Option A:The handover delay in Huawei's solution can indeed be as low as30 ms, ensuring seamless connectivity during train movement.
Option B:The solution supportshighly reliable active-active links, providing redundancy and fault tolerance.
Option C:The solution is designed to carry critical systems liketrain control signals, ensuring safety and efficiency.
Option D:This is incorrect because Huawei's solution supports backhaul even at speeds of160 km/h or higher, making it suitable for high-speed rail networks.
Conclusion:The correct statements are Options A, B, and C.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 10: Rail Transportation Solutions.
Huawei Rail Transportation Solution Brochure.

QUESTION 32
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.

Correct Answer: C
Section:
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 of2.976 Gbps, not 1.775 Gbps.
Option B:The AirEngine 5762-12SWdoes supportthe leader AP feature, which simplifies network management.
Option C:The AirEngine 5761-11 has2.5GE ports, making it suitable for high-bandwidth applications.
Option D:The AirEngine 6761-21 supports a device rate of5.375 Gbps, not 3.55 Gbps.
Conclusion:The correct statement is Option C.
HCSA-Presales-IP Network V3.0 Training Material, Chapter 8: WLAN Solutions.
Huawei AirEngine Product Documentation.