Vendor: Huawei

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QUESTION 1
Hybrid cables do not support PoE++ power supply.

A. True
B. False

Answer: B
Explanation:
This statement is False. Huawei's Hybrid Optical-Electrical Cables (Photoelectric cables) are specifically designed to overcome the 100-meter distance limitation of traditional Ethernet. They combine optical fibers for high-speed data (10G/25G/100G) and copper wires for power. These cables are a core part of the "Simplified Architecture" and do support PoE++ (up to 90W), allowing high-power Wi-Fi 7 APs to be powered over distances of up to 300?00 meters from a central switch.

QUESTION 2
What is the single-link failover time supported by Huawei's M-LAG solution?

A. < 50 ms
B. < 400 ms
C. < 2s
D. < 1s

Answer: A
Explanation:
M-LAG (Multichassis Link Aggregation Group) is a key reliability technology in the Huawei Xinghe Intelligent Campus architecture. It provides device-level redundancy by virtualizing two switches into a single logical entity. One of the primary performance requirements for M-LAG in high-availability designs is ensuring millisecond-level failover. In the event of a single link failure (e.g., an uplink from an access switch to one of the M-LAG core switches), the traffic is rerouted through the peer-link or the remaining active member of the Eth-Trunk in less than 50 ms, ensuring "hitless" service for sensitive applications like voice or industrial control.

QUESTION 3
Which of the following are slicing technology implementation solutions?

A. FlexE
B. Slice ID
C. Flex-channel
D. Channelized sub-interface

Answer: ACD
Explanation:
In the Xinghe Intelligent Campus solution, "Network Slicing" is used to provide hard or soft isolation for different services (e.g., separating video conferencing from guest Wi-Fi). The three primary implementation solutions (resource isolation methods) defined in the HCSP V2.0 curriculum are:

FlexE (Flexible Ethernet) (A): Provides physical-layer hard isolation by dividing the MAC/PHY interface into slots.

Flex-channel (Flexible Channel) (C): A Huawei-patented technology that provides dedicated

bandwidth with nearly zero interference.

Channelized sub-interface (D): Uses sub-interfaces with reserved bandwidth to provide logical isolation.

Slice ID (B) is an identifier carried in the packet header (such as the IPv6/SRv6 extension header) used to map traffic to a specific slice; it is a label/identifier, not the underlying resource isolation technology implementation itself.

QUESTION 4
iStack virtualizes multiple devices into one device, greatly simplifying network configuration and device management.

A. True
B. False

Answer: A
Explanation:
iStack (Intelligent Stack) is a horizontal virtualization technology used primarily at the access and aggregation layers of the campus network. It allows multiple physical switches to be connected via stack cables and managed as a single logical device with a unified management IP and configuration file. This eliminates the need for complex protocols like STP (Spanning Tree Protocol) to prevent loops, as the links between the stack and the upstream devices are treated as a single inter-device Eth-Trunk.

QUESTION 5
Free mobility grants users consistent network access rights and enforces corresponding policies, regardless of the users' locations and IP addresses.

A. True
B. False

Answer: A
Explanation:
Free Mobility is a core component of the Huawei Xinghe Intelligent Campus solution. Traditionally, network policies (ACLs) were tied to IP addresses, which change as users move. Free Mobility decouples policies from IP addresses by using Security Groups (also known as "Group-based Policy"). When a user authenticates via iMaster NCE-Campus, they are assigned to a specific group. The network then enforces permissions based on the "Source Group" and "Destination Group," ensuring that a teacher, for example, has the same access rights whether they are in the office, a classroom, or the library.

QUESTION 6
Which of the following statements are true about the wireless traffic forwarding modes on a fabric wireless network?

A. Tunnel forwarding facilitates centralized management and control of wireless traffic.
B. Direct forwarding is more efficient.
C. Tunnel forwarding has the disadvantage of traffic detour, which increases the forwarding performance pressure on the WAC.
D. Direct forwarding is not suitable for scenarios that have high requirements on roaming

performance. This is because roaming performance deteriorates slightly when a STA roams across edges.

Answer: ABCD
Explanation:
Huawei supports two main forwarding modes in its wireless architecture:

Tunnel Forwarding (A, C): All data traffic is encapsulated in CAPWAP and sent to the WAC. This simplifies security policy enforcement but causes "traffic detour" and places a heavy processing load on the WAC.

Direct Forwarding (B, D): APs switch traffic locally. This is highly efficient and reduces core congestion. However, because traffic is released at the edge, maintaining session continuity (roaming) across different Layer 3 boundaries can be more complex, potentially leading to slight performance dips during inter-edge handovers compared to centralized tunneling.

QUESTION 7
On a campus fabric network, which of the following methods can be used if VNs need to communicate with each other?

A. Interconnection through edge nodes
B. Interconnection through transparent nodes
C. Interconnection through the border node where two VPN instances (VRF) import routes from each other
D. Interconnection through the external network (such as a firewall) of the border node

Answer: CD
Explanation:
By default, Virtual Networks (VNs) are isolated from one another as they exist in separate VRFs. To enable inter-VN communication:

Internal Route Leaking (C): Routes are imported/exported between VRFs on the Border Node.

External Traffic Steering (D): Traffic is sent out of the Fabric through the Border Node to an external Firewall or Gateway, which then routes the traffic back into the second VN. This is the preferred method when security inspection between VNs (e.g., Guest VN to Office VN) is required.

QUESTION 8
On a large campus network, inter-WAC roaming must be avoided where possible to ensure the roaming experience.

A. True
B. False

Answer: A
Explanation:
Inter-WAC roaming involves moving a user's session information between two different physical or logical controllers. This process is inherently slower and more prone to packet loss or authentication delays than Intra-WAC roaming (where the user moves between APs managed by the same WAC). In the Xinghe Intelligent Campus design, Huawei recommends using Native WACs on core switches or stacking WACs to create a single large mobility domain, thereby minimizing the need for inter-WAC handovers.

QUESTION 9
On a fabric network of a large or midsize campus network, there are 20 edge devices. Which of the following OSPF route orchestration modes should be used in this case?

A. Triple-OSPF-area orchestration
B. Single-OSPF-area orchestration
C. Dual-OSPF-area orchestration
D. Multi-OSPF-area orchestration

Answer: C
Explanation:
For mid-to-large campus fabrics (typically those with more than 10-15 edge devices), Huawei recommends Dual-OSPF-area orchestration (C) for the underlay network. In this design, Area 0 is usually established between the Core (Border) and Aggregation nodes, while Area 1 (or other non-zero areas) is used between the Aggregation and Edge nodes. This hierarchy limits the scope of Link State Advertisements (LSAs), preventing a single link flap at the edge from causing a full SPF recalculation across the entire network backbone, thus enhancing stability.

QUESTION 10
Which of the following are typical mappings between SSIDs and VLANs during SSID planning?

A. SSID:VLAN=1:1
B. SSID:VLAN=N:N
C. SSID:VLAN=1:N
D. SSID:VLAN=N:1

Answer: ACD
Explanation:
Huawei's WLAN planning supports three standard mapping models:

1:1 (A): One SSID maps to one VLAN (simplest for small environments).

1:N (C): One SSID maps to multiple VLANs (using a VLAN Pool). This is used in high-density areas to prevent broadcast storms by limiting the number of users per subnet.

N:1 (D): Multiple SSIDs (e.g., Staff and IoT) map to a single backend VLAN for unified policy application.

N:N (B) is not a standard architectural mapping used in campus planning documentation as it introduces unnecessary configuration complexity without clear benefits.

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