Huawei

H19-401_V2.0

HCSP-Presales-Campus Network Planning and Design V2.0

Questions & Answers (Demo)

Version: 4.0

Question: 1

A typical campus network consists of the terminal layer, access layer, aggregation layer, core layer, egress zone, and O&M zone.

A. True

B. False

Answer: B

Explanation:

In the latest Huawei Xinghe Intelligent Campus (V2.0) architecture, the network is officially categorized into a four-layer architecture: Terminal Layer, Network Layer (which includes Access, Aggregation, and Core), Management Layer (iMaster NCE), and Application Layer. While the components mentioned (Egress, O&M) are physical zones, the "Typical Architecture" definition in HCSP documentation distinguishes between the layers of the infrastructure and the functional zones. Furthermore, in many modern SDN-based designs (like the Xinghe solution), the aggregation layer is often optional or collapsed, and the "O&M zone" is formally referred to as the Management and Analytics Layer.

Question: 2

Which of the following vendors offers the Wi-Fi Shield feature?

A. Aruba

B. Extreme Networks

C. Cisco

D. Huawei

Answer: D

Explanation:

Wi-Fi Shield is a signature security technology exclusive to Huawei AirEngine series APs (specifically

Wi-Fi 6 Advanced and Wi-Fi 7 models). It leverages advanced beamforming and the addition of interference signals to create a "secure zone" around an authorized user. By sending precise interference to non-target directions, it ensures that even if a malicious user intercepts the signal, they receive only disordered noise that cannot be demodulated. This is a key differentiator in Huawei's Xinghe Intelligent Campus security framework.

Question: 3

What benefits does Huawei's IT and OT converged production network solution deliver to customers?

A. Intelligent wireless connections

B. Intelligent O&M

C. Flexible manufacturing

D. Digital and intelligent production

Answer: A, D

Explanation:

Huawei's Campus Production Network Solution (specifically for Industrial/Manufacturing scenarios) focuses on the convergence of Information Technology (IT) and Operational Technology (OT). The primary benefits highlighted in the HCSP V2.0 guides are:

Intelligent wireless connections (A): Using Wi-Fi 6/7 with deterministic latency to replace cables on the factory floor, enabling mobile production.

Digital and intelligent production (D): The ultimate goal of the convergence is to enable real-time data collection from sensors (OT) to the cloud (IT), facilitating the transformation to Smart Manufacturing.

Note: While Intelligent O&M is a feature of the platform, A and D are the specific strategic benefits defining the "IT/OT Convergence" value proposition.

Question: 4

MIMO technology enables multiple antennas to send and receive spatial streams (multiple signals) simultaneously and to differentiate the signals sent to or received from different spatial orientations. By leveraging technologies such as SM and SD, MIMO boosts the system capacity, coverage scope, and SNR without occupying extra bandwidth.

A. True

B. False

Answer: A

Explanation:

MIMO (Multiple-Input Multiple-Output) is a core pillar of modern WLAN planning. It utilizes two main techniques:

Spatial Multiplexing (SM): Increases system capacity by transmitting different data streams over different antennas simultaneously.

Spatial Diversity (SD): Improves coverage scope and SNR (Signal-to-Noise Ratio) by transmitting the same data stream over multiple paths to ensure reliability through redundancy (e.g., using MRC or STBC).

The statement is True because these benefits are achieved using the same frequency channel (no extra bandwidth) by exploiting the spatial dimension of the radio environment.

Question: 5

An AP cannot work independently. Instead, it must be configured by a WAC or iMaster NCE-Campus.

A. True

B. False

Answer: B

Explanation:

In Huawei's WLAN solution, APs can operate in different modes. While Fit APs require a Wireless Access Controller (WAC) and Cloud APs are managed by iMaster NCE-Campus, Huawei also supports Fat APs. A Fat AP (standalone mode) can perform authentication, encryption, and data forwarding independently without a centralized controller. Therefore, the statement that an AP cannot work independently is false. In the Xinghe Intelligent Campus solution, most deployments use Cloud or Fit modes for centralized management, but the hardware capability for standalone operation remains.