VirtuLearn

TRUSTED, ACCURATE AND RELIABLE!

The most comprehensive IT certification preparation materials in the industry!

https://www.virtulearner.com
support@virtulearner.com

Huawei

H19-301_V3.0

HCSA Presales IP Network

Certification V3.0

QUESTION: 1
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(s): A, B, C, D

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.

Reference:
HCSA-Presales-IP Network V3.0 Training Material, Chapter 2: IP Routing Fundamentals.

Huawei Networking Technology and Device (HNTD) Documentation.

QUESTION: 2
Unlike managing a device through a console port, managing a device through Telnet does not require connecting to the device with a cable. The only requirement is that the Telnet client has a reachable address and can communicate with the Telnet service port of the device.
Which kind of address should the client have?

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

Answer(s): D

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

Address Requirement:For Telnet communication to occur, the client must have an IP address. This is because Telnet relies on the TCP/IP protocol suite, and communication is established using IP addresses.

Why Not Other Options?

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

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

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

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

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

Huawei Enterprise Networking Product Documentation.

QUESTION: 3
Depending on the geographical coverage, networks can be classified into local area networks (LANs), wide area networks (WANs), and metropolitan area networks (MANs) between LANs and WANs.

A. TRUE
B. FALSE

Answer(s): A

Explanation:
Network Classification Based on Geographical Coverage:

Networks are categorized based on their geographical scope into three primary types:

Local Area Network (LAN):Covers a small geographic area, such as a single building or campus.

Metropolitan Area Network (MAN):Covers a larger area than a LAN, typically spanning a city or metropolitan region. It serves as an intermediate between LANs and WANs.