

Started on	Thursday, 9 October 2025, 1:01 PM
State	Finished
Completed on	Thursday, 9 October 2025, 1:03 PM
Time taken	1 min 57 secs
Marks	5.00/5.00
Grade	100.00 out of 100.00

Question 1

Complete

Mark 1.00 out of 1.00

What is the main purpose of using VLANs in a data center network?

- ☒ a. To separate broadcast domains logically on the same switch
- ☐ b. To improve routing performance at Layer 3
- ☐ c. To encrypt traffic between devices
- ☐ d. To increase physical cable count

Question 2

Complete

Mark 1.00 out of 1.00

In a VLAN configuration, what is the function of a trunk port?

- ☐ a. It provides routing between VLANs.
- ☐ b. It connects end devices like PCs or NAS directly.
- ☐ c. It blocks untagged frames automatically.
- ☒ d. It carries traffic for multiple VLANs between switches or to servers.

Question 3

Complete

Mark 1.00 out of 1.00

Which IEEE standard defines VLAN tagging?

- ☐ a. 802.1D
- ☐ b. 802.11
- ☒ c. 802.1Q
- ☐ d. 802.3

Question 4

Complete

Mark 1.00 out of 1.00

When a device in VLAN 10 wants to communicate with a device in VLAN 20, what is required?

- ☐ a. A VLAN tag removal process
- ☒ b. A router or Layer-3 switch (inter-VLAN routing)
- ☐ c. A trunk cable
- ☐ d. A Layer-2 switch

Question 5

Complete

Mark 1.00 out of 1.00

What happens if two switches connected via a trunk link are configured with mismatched VLAN IDs?

- ☐ a. VLAN tagging is ignored and all frames are untagged.
- ☐ b. The switches create a single combined VLAN.
- ☐ c. They automatically synchronize VLAN IDs.
- ☒ d. Traffic may be dropped or delivered to the wrong VLAN.