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Wi-Fi Training Program 2025

Module 6

Question 1:

What are the pillars of Wi-Fi security?

Solution:

The **pillars of Wi-Fi security** generally refer to the fundamental concepts that ensure a wireless network is **safe, private, and trusted**. These pillars are:

1. Authentication

- Verifies that users or devices are who they claim to be.
- Ensures only authorized devices can join the Wi-Fi network.
- Example methods: WPA2-Enterprise (using RADIUS servers), WPA3-SAE (Simultaneous Authentication of Equals).

2. Integrity

- Ensures that the data sent over Wi-Fi is not tampered with during transmission.
- Detects and blocks modified or injected packets.
- Techniques like MIC (Message Integrity Check) are used.

3. Confidentiality

- Keeps the data private between the sender and receiver.
- Strong encryption methods maintain confidentiality even if the data is intercepted.