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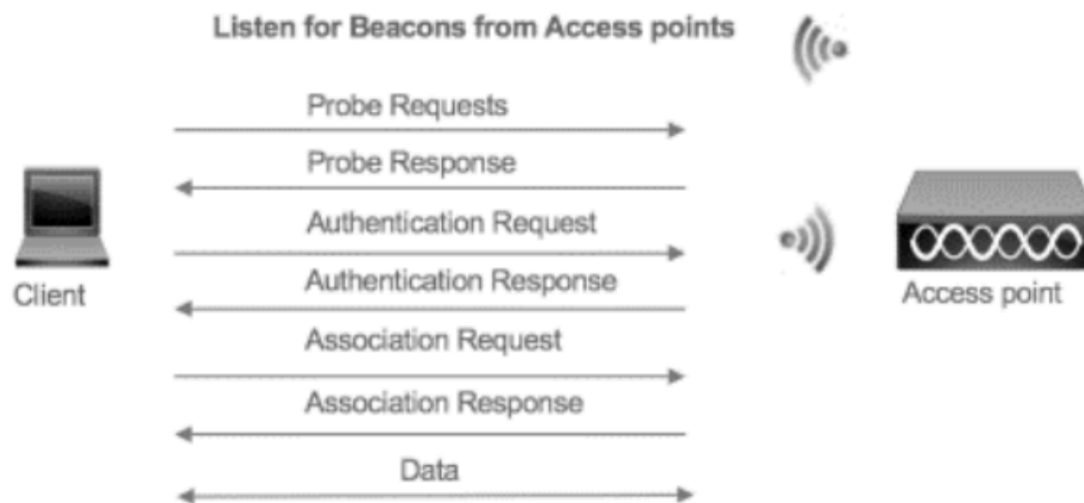
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**WiFi Training Program 2025
Module 4**

Question 5:

Brief about the client association process in detail

Solution:



Client Association:

1. Scanning (Discovery Phase)

- The STA first scans to discover nearby networks.
 - Passive Scanning: STA listens for Beacon frames from APs.
 - Active Scanning: STA sends a Probe Request, and APs respond with Probe Response frames.

2. Probe Request

- Sent by the STA to actively search for APs.
- Can include SSID (specific or broadcast) and supported capabilities.

3. Probe Response

- Sent by APs in reply to probe requests.
- Contains network details such as SSID, capabilities, supported rates, and security features.

4. Authentication

- The STA sends an Authentication Request frame to the selected AP.
- The AP replies with an Authentication Response frame.
- This establishes initial trust (often "Open System" or "Shared Key").

5. Association

- After successful authentication, the STA sends an Association Request frame to join the AP.
- The AP responds with an Association Response frame.
- If accepted, the STA is now associated with the AP and can start data communication.

6. Data Transfer happens after successful association.