Questions

1. What is the term used to refer to one complete up and down motion of an electromagnetic wave?

   A. Frequency
   B. Cycle
   C. Hertz
   D. Wavelength

2. Which lightweight access point special purpose mode is used to delegate the AP to solely perform various background operations, such as location-based services and rogue device detection?

   A. FlexConnect Mode
   B. Sniffer Mode
   C. SE-Connect Mode
   D. Monitor Mode

3. Which type of wireless antenna would have a lower gain, creating a less focused path for broad coverage?

   A. Dipole Antenna
   B. Patch Antenna
   C. Yagi Antenna
   D. Dish Antenna

4. During which lightweight access point operation state does the device poll the wireless LAN controller (WLC) for information such as QoS rules, SSIDs, and security parameters?

   A. WLC Join State
   B. Image Download State
   C. Config Download State
   D. WLC Discovery State

5. A wireless client roams between access points connected to two separate wireless LAN controllers, which do not share a subnet. Which type of intercontroller roam has occurred?

   A. Layer 2
   B. Layer 3

C. CAPWAP
D. Intracontroller

Questions and Answers

1. What is the term used to refer to one complete up and down motion of an electromagnetic wave?

   A. Frequency
   B. Cycle
   C. Hertz
   D. Wavelength

Answer: B
Explanation: A cycle is defined as one complete up and down motion of an electromagnetic wave. This is used to determine the frequency of an electromagnetic wave by examining the number of cycles that happen over the period of one second, otherwise known as Hertz (Hz). For example, if an electromagnetic wave has four complete up and down motions over the period of one second, this means there are four cycles per second. We would determine that the frequency of this electromagnetic wave would be 4 Hz.

Video Reference: 3.4.1 Wireless Communication Theory

2. Which lightweight access point special purpose mode is used to delegate the AP to solely perform various background operations, such as location-based services and rogue device detection?

   A. FlexConnect Mode
   B. Sniffer Mode
   C. SE-Connect Mode
   D. Monitor Mode

Answer: D
Explanation: Monitor mode is a special purpose mode to which we can assign a Cisco lightweight access point. When operation in this mode, the access point does not provide any network access to users. The operation is dedicated to performing various background operations, such as intrusion detection service (IDS) monitoring, rogue access point detection, and location-based services, among other things.

Video Reference: 3.4.2 Access Point Modes

3. Which type of wireless antenna would have a lower gain, creating a less focused path for broad coverage?

   A. Dipole Antenna

B. Patch Antenna
C. Yagi Antenna
D. Dish Antenna

Answer: A
Explanation: A dipole antenna is a type of omnidirectional antenna that is commonly seen on consumer grade wireless devices. Omnidirectional antennas have lower gain and a less focused signal path, created for broad coverage. This is opposed to a directional antenna, which has high gain with a focused path in order to specifically direct the RF signal.

Video Reference: 3.4.3 Antenna Types

4. During which lightweight access point operation state does the device poll the wireless LAN controller (WLC) for information such as QoS rules, SSIDs, and security parameters?

A. WLC Join State
B. Image Download State
C. Config Download State
D. WLC Discovery State

Answer: C
Explanation: During the Config Download State, the access point will poll the WLC for configuration information. This includes QoS rules, SSIDs, and security parameters, among other things. Once all of the necessary configurations are known and applied, the lightweight access point moves into the Run State, where it is fully operational and providing clients with network access.

Video Reference: 3.4.4 Access Point Operation

5. A wireless client roams between access points connected to two separate wireless LAN controllers, which do not share a subnet. Which type of intercontroller roam has occurred?

A. Layer 2
B. Layer 3
C. CAPWAP
D. Intracontroller

Answer: B
Explanation: When a client roams between access points connected to two separate WLCs that do not share a subnet or network, this intercontroller roam is referred to as a Layer 3 roam. Cisco provides seamless Layer 3 roaming through use of an established CAPWAP tunnel

between the WLC, allowing the client to keep its original IP address even though it is associated with a different subnet or VLAN.

Video Reference: 3.4.5 Layer 2 vs. Layer 3 Roaming