

**200-355**

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**200-355**

**Implementing Cisco Wireless Network Fundamentals**

A

**QUESTION 1**

In the current RF environment, the noise floor is -95 dBm. A tablet needs an SNR of 25 dB to transmit at the required speed. What must the RSSI cell edge be to meet the required SNR?

- A. -120 dBm
- B. -90 dBm
- C. -70 dBm
- D. -60 dBm
- E. -50 dBm

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 2**

When deploying a Cisco Cloud Wireless Infrastructure, what two destination ports must be open? (Choose two.)

- A. TCP/5246
- B. UDP/5246
- C. TCP/5247
- D. UDP/5247
- E. TCP/7351
- F. UDP/7351
- G. TCP/7734
- H. UDP/7734

**Correct Answer:** FG

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 3**

A help desk engineer is attempting to perform a remote packet capture on the wireless network. Which access point mode is necessary to perform this

function?

- A. sniffer
- B. SE-Connect
- C. monitor
- D. rogue detector
- E. FlexConnect

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 4**

An engineer has been asked to upgrade the FUS on the Wireless LAN controller. How can they monitor the status of the upgrade?

- A. WLC GUI
- B. WLC CLI
- C. WLC Console
- D. WLC Management in Prime Infrastructure

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 5**

During a wireless site survey, the signal strength drops significantly when outside of the room containing the access point. The building is made of wood and drywall. This is an example of which wireless anomaly?

- A. absorption
- B. refraction
- C. fading
- D. multipath
- E. reflection

**Correct Answer:** A  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

#### **QUESTION 6**

A wireless engineer has been asked to plan a deployment covering the aisles of a warehouse with optimal coverage while bleeding RF across aisles. Which antenna type provides the necessary coverage?

- A. patch
- B. omnidirectional
- C. Yagi
- D. parabolic dish

**Correct Answer:** A  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

#### **QUESTION 7**

## WLC Management Interface Configuration

### Interface Address

|                         |                             |
|-------------------------|-----------------------------|
| VLAN Identifier         | 10                          |
| IP Address              | 172.30.1.30                 |
| Netmask                 | 255.255.255.0               |
| Gateway                 | 172.30.1.2                  |
| IPv6 Address            | ::                          |
| Prefix Length           | 128                         |
| IPv6 Gateway            | ::                          |
| Link Local IPv6 Address | fe80::d68c:b5ff:fec3:eef/64 |

### Physical Information

The interface is attached to a LAG.

Enable Dynamic AP Management

### DHCP Information

|                       |                          |
|-----------------------|--------------------------|
| Primary DHCP Server   | 172.30.1.20              |
| Secondary DHCP Server | 172.30.1.21              |
| DHCP Proxy Mode       | Global                   |
| Enable DHCP Option 82 | <input type="checkbox"/> |

### Switchport Configuration

Current configuration : 235 bytes

```
!
interface GigabitEthernet0/9
description 5508 Port 1
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 1,20,30,40
switchport mode trunk
priority-queue out
mls qos trust dscp
spanning-tree portfast trunk
end
```

Refer to the exhibit. The wireless engineer has deployed the Cisco 5508 Wireless Controller. The controller is responding on the service port; however, it will not respond on the management interface. Which configuration revision will fix the management interface?

- A. On the switch interface, configure switch(config-if)#switchport trunk allowed vlan add 10.
- B. On the WLC management interface, disable LAG on the management network.
- C. On the switch interface, configure switch(config-if)#switchport trunk allowed vlan 10.
- D. On the WLC management interface, change the VLAN ID to 20.
- E. On the switch interface, configure no spanning-tree portfast trunk.
- F. On WLC Controller > General, disable LAG and reboot.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 8**

A help desk ticket states that a wireless access point has not joined its controller and is flashing rapidly. How can the help desk administer the access point with the default settings?

- A. console
- B. SSH
- C. Telnet
- D. HTTP
- E. HTTPS

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 9**

After you configure the Cisco 5508 Wireless Controller v7.6, a customer requests an SSID that allows for client web authentication with email input. Which authentication method should be used?

- A. pass-through
- B. authentication
- C. splash page web redirect
- D. conditional web redirect

E. on MAC filter failure

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 10**

Which two principles must be considered when deploying a wireless network through a wooded area? (Choose two.)

- A. absorption
- B. reflection
- C. diffraction
- D. scattering
- E. refraction

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 11**

What is an interferer that an engineer may see in Cisco CleanAir?

- A. microwave ovens
- B. rogue APs
- C. malicious clients
- D. co-channel interference

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 12**

A network engineer notices that two mesh APs are having problems communicating. After reviewing the current radio configurations, it is noted that one AP is transmitting at 3 mW while the other is transmitting at 60 mW. How many decibels would the 3-mW AP need its power increased to match the 60-mW AP?

- A. 8
- B. 12
- C. 13
- D. 20
- E. 57

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 13**

A network engineer requires an antenna for a point-to-point bridge with at least 20 dBi of gain. Which antenna is appropriate for the task?

- A. Yagi
- B. patch
- C. parabolic dish
- D. dipole
- E. internal omnidirectional

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 14**

An engineer needs to find out the maximum EIRP allowed for their office in Asia. What regulatory body should be contacted?

- A. CRTC
- B. ETSI
- C. IEEE

D. NTT

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 15**

A wireless engineer has an access point using the 5.725-GHz channel in the United States. In which band is the AP operating?

- A. UNII-1
- B. UNII-2
- C. UNII-2 Extended
- D. UNII-3

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 16**

Which RRM feature allows an access point to avoid non-IEEE 802.11 interference?

- A. DCA
- B. TPC
- C. RF groups
- D. coverage hole detection

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 17**

Which IEEE 802.11n client feature can combine the signal from multiple antennas and radio chains to improve SNR?

- A. channel aggregation
- B. spatial multiplexing
- C. MAC layer efficiency
- D. TxBF
- E. MRC
- F. MCS

**Correct Answer:** E

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 18**

An engineer needs an AP with at least two spatial streams, four receivers, and three transmitters. Which device meets these requirements?

- A. 2x4:3
- B. 2x3:4
- C. 4x3:2
- D. 3x4:2

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 19**

When using a Split MAC architecture, how many CAPWAP data tunnels will be built to an AP with four SSIDs across two VLANs?

- A. 1
- B. 2
- C. 3
- D. 4

**Correct Answer:** A

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 20

A customer has ordered a Cisco 5760 Wireless Controller. What speed and quantity of ports are needed for full-speed operation?

- A. 6 x 1 Gb
- B. 6 x 10 Gb
- C. 2 x 10 Gb
- D. 2 x 1 Gb
- E. 8 x 1 Gb
- F. 8 x 10 Gb

Correct Answer: B

Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 21

| Interface Name             | VLAN Identifier | IP Address  | Interface Type |
|----------------------------|-----------------|-------------|----------------|
| <a href="#">ap-manager</a> | 4               | 192.168.4.2 | Dynamic        |
| <a href="#">clients</a>    | 2               | 192.168.2.2 | Dynamic        |
| <a href="#">guests</a>     | 3               | 192.168.3.2 | Dynamic        |
| <a href="#">management</a> | untagged        | 192.168.1.2 | Static         |
| <a href="#">mgmt</a>       | 1               | 192.168.0.2 | Dynamic        |
| <a href="#">virtual</a>    | N/A             | 1.1.1.1     | Static         |

Refer to the exhibit. A network administrator is attempting to connect to the GUI of a WLC with interfaces as shown. Which IP address should the

network administrator use?

- A. 192.168.0.2
- B. 192.168.1.2
- C. 192.168.2.2
- D. 192.168.3.2
- E. 192.168.4.2

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 22**

A network engineer is connected via wireless to a Cisco AireOS WLC and wants to download the configuration but is unable to do so. Which change will correct the issue?

- A. enable management via wireless
- B. connect via wired network
- C. enable Telnet
- D. enable WebAuth SecureWeb
- E. connect on 5-GHz SSID

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 23**

A customer wants to deploy Cisco Cloud Wireless architecture with 802.11ac capabilities. Which two access points would meet the customers requirements? (Choose two.)

- A. Cisco 3700 Access Points
- B. Cisco MR34 Access Points
- C. Cisco MR18 Access Points
- D. Cisco 3600 Access Points

- E. Cisco MR72 Access Points
- F. Cisco 1570 Access Points
- G. Cisco MR26 Access Points

**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 24**

An engineer is trying to convert the IP Address of the wireless controller to amend DHCP Option 43 configuration on the DHCP server. What mathematical format must the IP address of the Wireless controller be converted to in order to function correctly?

- A. Hexadecimal
- B. Binary
- C. Decimal
- D. ASCII

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 25**

**General** **Credentials** **Interfaces** **High Availability** **Inventory** **Advanced**

|                      | Name | Management IP Address |
|----------------------|------|-----------------------|
| Primary Controller   | WLC1 | 10.201.204.8          |
| Secondary Controller | WLC2 | 10.201.204.11         |
| Tertiary Controller  | WLC3 | 10.201.204.6          |

AP Failover Priority:

---

### High Availability

AP Heartbeat Timeout(1-30):

Local Mode AP Fast Heartbeat Timer State:

H-REAP Mode AP Fast Heartbeat Timer State:

AP Primary Discovery Timeout(30 to 3600):

Back-up Primary Controller IP Address:

Back-up Primary Controller name:

Back-up Secondary Controller IP Address:

Back-up Secondary Controller name:

---

### TCP MSS

Global TCP Adjust MSS:

---

### AP Retransmit Config Parameters

AP Retransmit Count:

AP Retransmit Interval:

Refer to the exhibit. WLC1 becomes unresponsive due to a power failure at a customer site. How does the access point that is shown in the WLC controller GUI behave now that WLC1 is disabled?

- A. associates to controller 10.201.204.6
- B. associates to controller 10.201.204.11
- C. associates to controller 10.201.204.8
- D. associates to controller 10.201.204.19

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 26**

A customer wants to deploy a mesh network with 2 root access points and 10 mesh access points. The root access points should be configured as which mode on the WLC?

- A. mesh
- B. FlexConnect
- C. bridge
- D. rouge detection
- E. sniffer

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 27**

A customer has completed the installation of an 802.11ac greenfield deployment at their corporate headquarters. They would like to leverage 802.11ac enhanced speeds on the trusted employee WLAN. In order to configure the employee WLAN, what Layer 2 security policies are valid?

- A. WPA2 (TKIP)
- B. WPA(AES)
- C. OPEN
- D. WEP

**Correct Answer:** C

**Section:** (none)

**Explanation****Explanation/Reference:****QUESTION 28**

A customer cannot access the GUI on the Cisco 5508 Wireless Controller from the management interface due to network failure. Which interface can the customer use to access the WLC GUI until the network issues are resolved?

- A. virtual
- B. dynamic
- C. console port
- D. service port

**Correct Answer:** D

**Section:** (none)

**Explanation****Explanation/Reference:****QUESTION 29**

```
(Cisco Controller) >show network summary
RF-Network Name..... Cisco
Web Mode..... Disable
Secure Web Mode..... Disable
Secure Web Mode Cipher-Option High..... Disable
Secure Web Mode Cipher-Option SSLv2..... Disable
Secure Web Mode RC4 Cipher Preference..... Disable
OCSP..... Disabled
OCSP responder URL.....
Secure Shell (ssh)..... Enable
Telnet..... Disable
Ethernet Multicast Forwarding..... Disable
Ethernet Broadcast Forwarding..... Disable
IPv4 AP Multicast/Broadcast Mode..... Multicast Address : 239.0.1.1
IGMP snooping..... Disabled
IGMP timeout..... 60 seconds
IGMP Query Interval..... 20 seconds
MLD snooping..... Disabled
MLD timeout..... 60 seconds
MLD query interval..... 20 seconds
User Idle Timeout..... 300 seconds
ARP Idle Timeout..... 300 seconds
```

Refer to the exhibit. A customer is using central web authentication with a Cisco 5508 Wireless Controller and Cisco Identity Services Engine. An error occurs when wireless clients are redirected to the hosted splash page. What is causing the client error?

- A. Secure Web Mode is disabled on the WLC.
- B. OCSP is disabled on the WLC.
- C. Management Via Dynamic Interface is disabled on the WLC.
- D. Ethernet Multicast Forwarding is enabled on the WLC.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### **QUESTION 30**

A customer is using the access point GUI to upgrade the software on an autonomous access point to convert it to a lightweight access point. Which two transfer protocols are valid for conducting this transfer from the WLC? (Choose two.)

- A. FTP
- B. RCP
- C. SFTP
- D. HTTP
- E. SCP
- F. TFTP

**Correct Answer:** DF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### **QUESTION 31**

An engineer wants to set up guest wireless that requires users to log in via a splash page prior to accessing the network. Which authentication method should be configured?

- A. LDAP
- B. RADIUS
- C. local authentication
- D. WebAuth
- E. PSK

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 32**

An engineer would like to setup secure authentication for a wireless network that will utilize single sign-on. Which two authentication methods can be used to accomplish this? (Choose two.)

- A. LDAP
- B. RADIUS
- C. Local authentication
- D. WEP
- E. PSK

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 33**

An engineer wants to have users who connect to a WLAN be redirected to a terms-of-service page with the company logo and a login. What should be configured on the WLAN to enable this capability?

- A. Layer 2 IEEE 802.1x
- B. Web Policy Slash Page Web Redirect
- C. Web Policy Authentication
- D. AAA Servers
- E. Web Policy Passthrough

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 34**

What suite of algorithms results in slower connection rates when using 802.11N technology?

- A. WPA2
- B. CCMP
- C. TKIP
- D. AES

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 35**

An engineer assists a user in configuring an Android device for authentication to an IEEE 802.1x EAP WLAN with PEAPv1. The Phase 2 authentication should be configured as which option?

- A. LEAP
- B. MSCHAPv2
- C. TLS
- D. TTLS

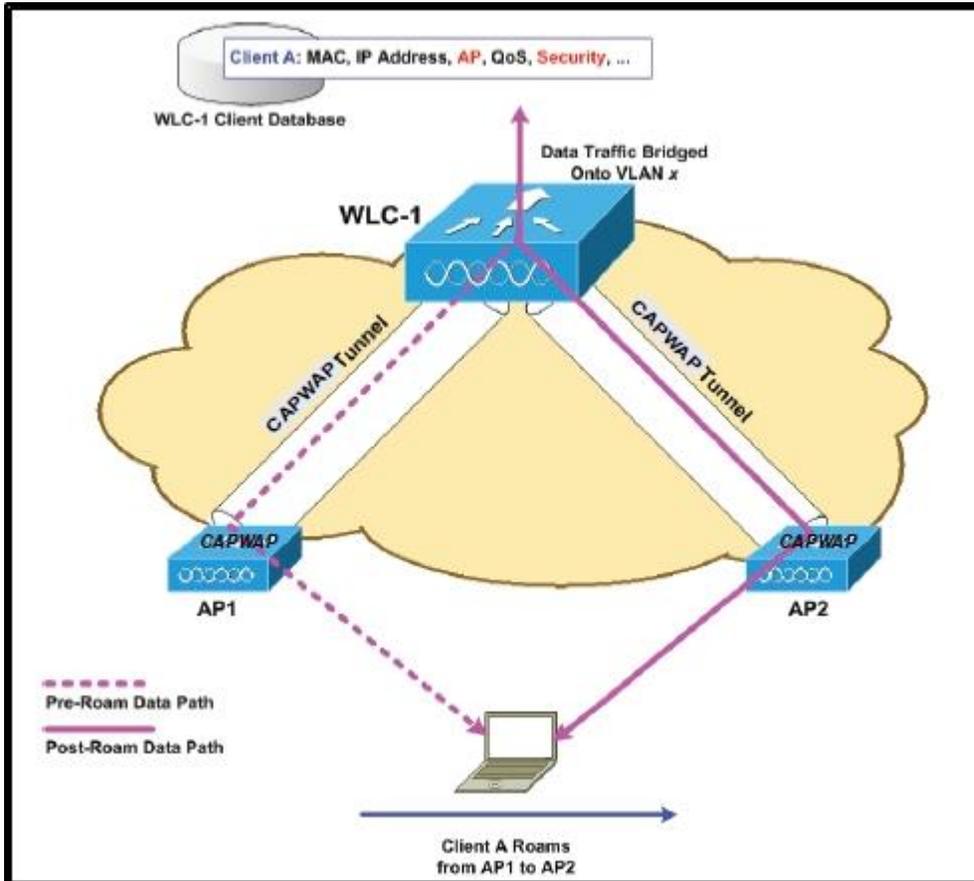
**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 36**



Refer to the exhibit. Which two wireless functions is the client experiencing? (Choose two.)

- A. Inter-controller Roaming
- B. Intra-controller Roaming
- C. Layer 2 Roaming
- D. Layer 3 Roaming
- E. Inter-subnet roaming
- F. Re-authentication

**Correct Answer:** BC

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 37**

What is the approximate time difference for a client to perform an intracontroller roam compared to an intercontroller roam?

- A. 1 ms
- B. 10 ms
- C. 20 ms
- D. 30 ms

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 38**

Which two attributes must be configured to match in order for WLCs to operate in the same mobility group? (Choose two.)

- A. mobility domain name
- B. virtual IP address
- C. service interface address
- D. hardware model
- E. software version

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 39**

Which operating mode is valid for controllers in a converged access architecture?

- A. switch peer groups
- B. mobility controller

- C. auto-anchor
- D. foreign anchor

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 40**

An engineer wants to deploy a 2504 controller as the anchor controller for a guest WLAN that resides on a 5508 controller in a different mobility group. What configuration change must be applied to support this deployment strategy?

- A. UDP 16666 and IP Protocol 97 must be enabled on the 2504 controller
- B. UDP 5246 and TCP Protocol 97 must be enabled on the router
- C. The 2504 controller must be added to the same mobility group as the 5508.
- D. DHCP Option 43 must be added to the neighboring switchport

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 41**

Which interface is used to connect the foreign and anchor controllers?

- A. management
- B. service
- C. virtual
- D. dynamic

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 42**

A customer has a corporate SSID that is configured to authenticate against an ACS server to validate client credentials on the corporate SSID. The customer has a firewall logically positioned on the network between the WLC and the ACS server in the network architecture. Which port must the firewall allow to ensure that authentication can occur?

- A. 43
- B. 1812
- C. 5146
- D. 8143

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 43**

```
interface GigabitEthernet2/1
  no ip address
  switchport
  switchport trunk encapsulation dot1q
  switchport trunk allowed vlan 1,5,15,20,25,30,35,40,45,50,55,100
  switchport trunk native vlan 44
  switchport mode trunk
end
```

Refer to the exhibit. An engineer is configuring a SSID to utilize the management interface on the WLC. The management interface is configured with an untagged VLAN in the wireless controller interface settings. The controller is connected to a neighboring switch via the interface shown in the diagram. Which VLAN will traffic coming from the newly created SSID use to traverse the wired network?

- A. 1
- B. 20
- C. 44

D. 50

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 44**

During an upgrade, the wireless infrastructure has seen a few access points join and then drop off the network. After further investigation, it appears the access points may have an IOS code version that is causing issues. Where in the controller is this information found?

- A. GUI > Wireless > Access Point > General
- B. CLI > show ap image all
- C. GUI > Monitor > Software Version
- D. CLI > show sysinfo

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 45**

An engineer is trying to determine from the controller CLI whether or not Telnet is enabled on the wireless controller. Which command can be entered to display this information?

- A. show network summary
- B. show aaa auth
- C. show radius summary
- D. show ldap statistics

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 46**

An engineer is trying to identify if radar has impacted the wireless network at a customer site. When using the controller GUI, which dashboard in the Monitor section presents this information?

- A. 802.11a/n - Air Quality Reports
- B. Clean Air - Worst Air Quality Report
- C. 802.11b/g/n - Interfering Devices
- D. Statistics - Mobility Statistics

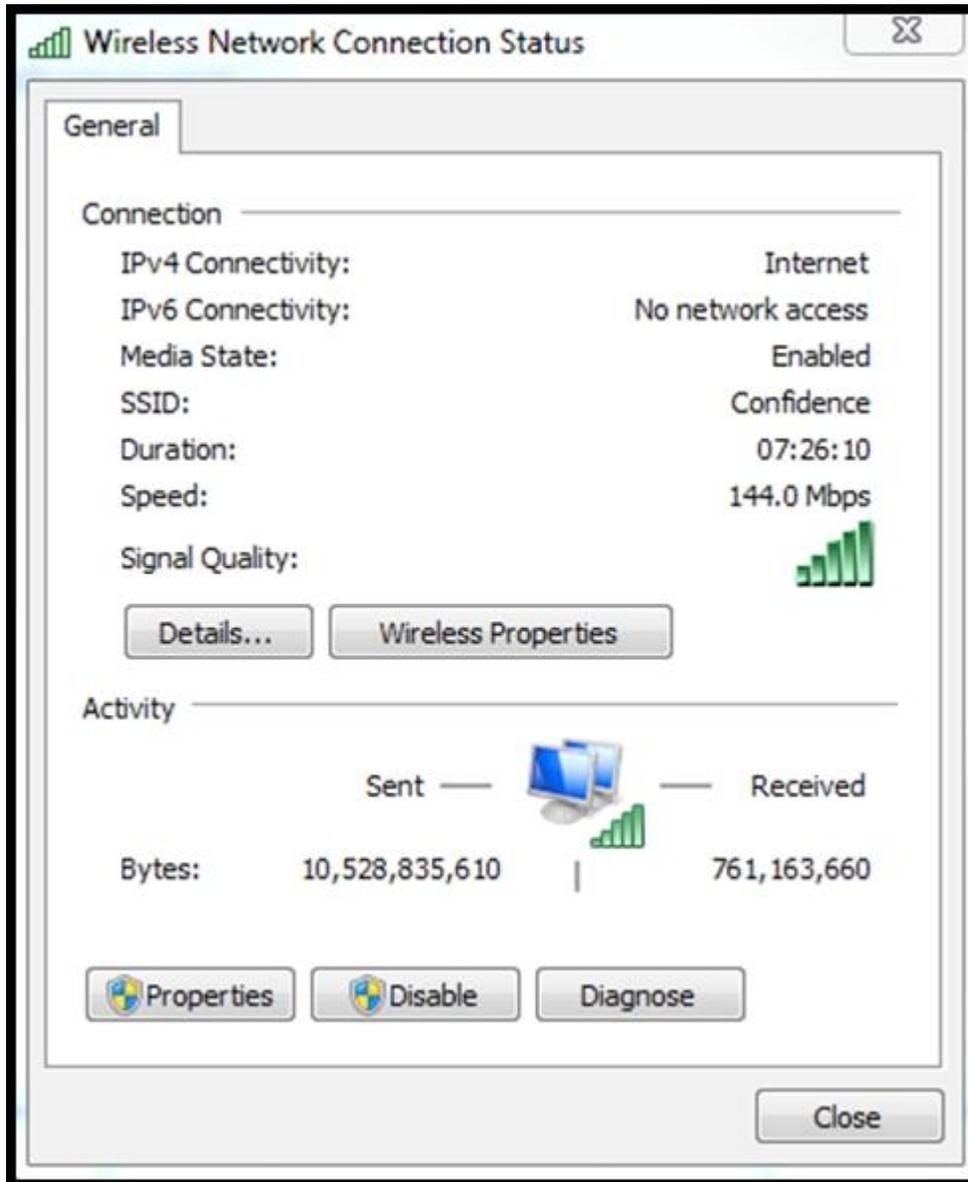
**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 47**



Refer to the exhibit. A customer is determining whether a Windows 7 laptop is operating on the correct IEEE 802.11 standard. Which standard is being used by the laptop in the exhibit?

- A. 802.11b
- B. 802.11g
- C. 802.11n
- D. 802.11p

**Correct Answer:** C  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

#### **QUESTION 48**

An engineer is using a predictive survey tool to estimate placement of APs in a carpeted office space. Most interior walls should be assigned which attenuation value?

- A. 2 dB
- B. 3 dB
- C. 4 dB
- D. 5 dB

**Correct Answer:** B  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

#### **QUESTION 49**

An engineer is conducting an active survey for indoor coverage in a warehouse. The warehouse has long aisles with racks that extend to the ceiling. Which antenna type has a radiation pattern that is suited to provide coverage in each aisle?

- A. Yagi
- B. patch
- C. omnidirectional
- D. dipole

**Correct Answer:** B  
**Section:** (none)  
**Explanation**

**Explanation/Reference:****QUESTION 50**

Following the deployment of a wireless network for data and voice services, an engineer is to validate the coverage. Which type of survey is required to ensure coverage?

- A. passive
- B. active
- C. fingerprinting
- D. calibrating

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 51**

During the deployment of a wireless network for data and location services, an engineer is to fine-tune the location services. What is this type of survey called?

- A. passive fingerprinting
- B. passive calibrating
- C. active fingerprinting
- D. active calibrating

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:****QUESTION 52**



Refer to the exhibit. In an effort to identify RF characteristics at a customer location, an RF engineer uses the Spectrum Analyzer tool that is shown. Which feature that is native to the Spectrum Analyzer is identified by the exhibit?

- A. Real-Time FFT

- B. Duty Cycle
- C. Max Hold
- D. Time Domain

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**