PassQueen
a.k.a dumpsqueen.com

Certified Wireless Design Professional

CWNP CWDP-303

Version Demo

Total Demo Questions: 8

Total Premium Questions: 86

Buy Premium PDF

https://passqueen.com

support@passqueen.com

Topic Break Down

Topic	No. of Questions
Topic 1, WLAN Design	25
Topic 2, RF Design	39
Topic 3, Network Design	8
Topic 4, Security Design	10
Topic 5, Application Design	4
Total	86

QUESTION NO: 1

What is the most suitable antenna option to be used when designing a WLAN infrastructure with APs mounted on a ceiling with a height of more than 20 feet and having all of the client stations used from the floor?

A. Patch

B. Dish

C. Grid

D. Low-gain dipole

ANSWER: A

Explanation:

Patch is the most suitable choice because a patch antenna is directional and can be installed facing downward to concentrate RF energy toward the client area on the floor. With an access point more than 20 feet above its users, this downward-focused pattern helps place usable signal where clients actually operate, rather than distributing much of the transmit energy horizontally across the ceiling plane or into areas outside the intended cell. A patch antenna's directional gain also improves the link budget for the longer vertical path between the AP and floor-level stations. This design approach supports more predictable cell boundaries and can reduce unnecessary overlap with neighboring APs when the antenna orientation, transmit power, channel plan, and mounting locations are designed together. The antenna should be selected using its vendor-provided azimuth and elevation radiation patterns, then validated through predictive design and an on-site survey, because ceiling construction, mounting hardware, and client density affect the final coverage result. CWNP's antenna guidance discusses how directional antennas focus energy in a selected direction: CWNP antenna types and properties. Cisco also explains antenna radiation patterns and directional coverage considerations: Cisco antenna basics.

QUESTION NO: 2

A business traveler from North America is in Europe. The hotel only provides coverage in 2.4 GHz. The traveler connects to the hotel's SSID and notices an AP in the hotel room. However, the laptop reports a very low RSSI when connected. The traveler does not have the same problem when connecting in the lobby. What would be the most likely cause of the low RSSI in the hotel room?

A. The AP in the room is using ZigBee instead of Wi-Fi.

B. The AP in the room is transmitting on channel 13 and the traveler associated to a non-channel 13 AP located elsewhere.

C. The switchport that the AP is connected to is only capable of transmitting at 10 Mbps.

D. The AP in the room is using Bluetooth instead of Wi-Fi.

ANSWER: B

Explanation:

The AP in the room is transmitting on channel 13 and the traveler associated to a non-channel 13 AP located elsewhere. is the most likely cause. In much of Europe, 2.4 GHz Wi-Fi deployments may use channels 1 through 13. By contrast, client devices configured for the North American regulatory domain commonly support only channels 1 through 11 in 2.4 GHz. If the room AP operates on channel 13, the traveler's laptop cannot discover it as an eligible AP radio or associate to it, even though the hotel SSID is available elsewhere in the building.

The laptop can still connect to the same SSID through an AP using a supported channel, such as an AP located farther away on another floor or at the end of a corridor. That association explains the reported low RSSI despite the physical presence of an AP in the room: the nearby AP is not usable by that client because of the channel/regulatory-domain mismatch. The lobby likely has an AP operating on a channel the laptop supports, allowing the traveler to associate locally and receive a stronger signal. WLAN designs should account for client regulatory support when assigning channels in international venues. See Cisco's discussion of country-specific regulatory domains at Cisco Access Point Regulatory Domains and the Wi-Fi Alliance overview of Wi-Fi operation at Wi-Fi Alliance: Discover Wi-Fi.

QUESTION NO: 3

Your new customer is concerned about maintaining privacy for their proprietary information when you conduct information gathering for their WLAN design. Which document can you use to directly address their concern?

A. NDA

B. SoW

C. BoM

D. Hold Harmless

ANSWER: A

Explanation:

An NDA is the appropriate document because it directly establishes confidentiality obligations for proprietary information disclosed during WLAN design discovery and information gathering. A designer may need access to sensitive materials such as floor plans, network diagrams, application inventories, security policies, RF survey data, business workflows, and device details. A properly executed NDA identifies the confidential information, limits the permitted purpose for its use to the engagement, specifies how it must be protected, and can define restrictions on disclosure to third parties and the handling or return of materials at the project's conclusion. This gives the customer a contractual mechanism to protect information shared before and during design work, including information exchanged before a more detailed project agreement is finalized. Confidentiality agreements are commonly used when parties need to share nonpublic business or technical information while evaluating or performing a business relationship. The U.S. Department of Justice describes non-disclosure agreements as contracts that establish a confidential relationship and protect sensitive information, while the U.S. Small Business Administration discusses protecting intellectual property and confidential business information through appropriate agreements. See U.S. Department of Justice merger-process guidance and U.S. Small Business Administration business guidance.

QUESTION NO: 4

What advantage provided by 802.11n and 802.11ac is not usable in 1X1:1 low-end client devices?

A. Channel bonding

B. MCS data rates

C. Maximal Ratio Combining

D. Mandatory data rates

ANSWER: C

Explanation:

Maximal Ratio Combining is the feature unavailable to a 1x1:1 client because it depends on having multiple independent receive paths. With maximal ratio combining, the receiver obtains copies of the same RF signal through two or more antennas and receive chains, estimates each copy's signal quality, then coherently weights and combines them. This improves effective receive signal quality, helping mitigate multipath fading and improving reliability at a given location.

The first number in a 1x1:1 device describes its single transmit spatial stream capability, while the receive-side capability is likewise limited to one radio chain and one received signal path. Since there are no separate receive-chain signal copies to compare and combine, maximal ratio combining cannot be performed. This is a hardware capability limitation, not merely a configuration choice. Higher-capability 802.11n and 802.11ac client hardware with multiple receive chains can use receive diversity techniques such as maximal ratio combining even when transmitting only one spatial stream. CWNP design work should therefore account for the reduced receive-diversity capability of low-end single-chain clients when assessing coverage, reliability, and roaming behavior. See the IEEE 802.11 working group overview at IEEE 802.11 Working Group and Cisco's explanation of receive diversity and maximal ratio combining at Cisco 802.11n technology overview.

QUESTION NO: 5

A company wants to connect its headquarters to its remote office that is 13 kilometers away using a wireless bridge. What requirement must not be forgotten by their Wireless Engineer when considering the Fresnel Zone?

A. Earth bulge

B. Antenna gain

C. FSPL

D. Receive sensitivity

ANSWER: A

Explanation:

Earth bulge is a required consideration for a 13-kilometer wireless bridge because the physical Earth is curved rather than flat. When evaluating line of sight and Fresnel-zone clearance over a link of this length, the engineer must account for the apparent rise of the terrain between the two endpoints. This calculation is commonly performed using an effective-Earth-radius model, often called the k-factor, which incorporates normal atmospheric refraction into path planning. The result affects required antenna mounting heights and whether trees, terrain, structures, or other obstructions encroach on the Fresnel zone near the midpoint of the path.

Proper Fresnel-zone design requires more than confirming that the endpoint antennas can visually see each other. The path must provide sufficient clearance over the Earth-bulge-adjusted terrain profile so that diffraction and obstruction losses do not degrade the bridge's received signal. For a long outdoor point-to-point link, including Earth bulge in the path profile ensures that tower or mast heights are selected from a realistic propagation geometry and helps preserve the intended availability and throughput. ITU-R guidance on propagation and diffraction modeling addresses the influence of Earth curvature and effective Earth radius in terrestrial radio paths: ITU-R Recommendation P.526. Additional fixed-service propagation guidance is available from ITU-R Recommendation P.530.

QUESTION NO: 6

A museum wants to offer Wi-Fi to its visitors. One of their requirements is to have the APs blend into the design of the museum. What should you do to meet this requirement?

A. Lock the AP inside of a metal box

B. Place the APs in between walls and I-beams

C. Use an 802.11b AP, so it looks old enough to be in a museum

D. Use a plastic cover that could blend in with the environment

ANSWER: D

Explanation:

Use a plastic cover that could blend in with the environment is correct because a properly selected nonmetallic, RF-transparent enclosure or cosmetic cover can conceal an access point while preserving its intended radio-frequency coverage characteristics. This is a common design approach in spaces where aesthetics, historic preservation, or architectural requirements restrict the visibility of technology, including museums, hotels, and retail locations. The cover should be made from materials that introduce minimal RF attenuation, should not obstruct the AP's antenna pattern, and must allow for appropriate mounting, ventilation, service access, and compliance with local fire and building requirements. The wireless designer should account for the cover during predictive design and validate the final installation with an on-site survey, since even nominally RF-friendly materials and nearby building features can affect signal propagation. Cisco's guidance on access-point deployment emphasizes consideration of physical installation and antenna placement: Cisco Catalyst 9120AX Hardware Installation Guide. CWNP identifies CWDP as a design-focused certification covering requirements gathering and WLAN design decisions: CWNP CWDP Certification.

QUESTION NO: 7

A hospital WLAN design includes multicast paging traffic that must reach wireless clinical devices. Which configuration consideration is most important when selecting the multicast transmit rate?

A. The selected rate must be decodable by intended clients throughout the coverage area

B. The selected rate must match the AP Ethernet uplink speed

C. The selected rate must be higher than every unicast data rate

D. The selected rate must use an 80 MHz channel

ANSWER: A

Explanation:

The selected rate must be decodable by intended clients throughout the coverage area is correct because multicast and broadcast frames are generally transmitted without acknowledgments or retransmissions at the MAC layer. If the multicast rate is too high for clients at the edge of the intended coverage area, those clients may not decode the frames. If it is set unnecessarily low, the frames consume excessive airtime.

The designer should select a multicast rate that balances coverage reliability and airtime consumption, based on the required coverage threshold, client capabilities, and application requirements. Validation should include the actual clinical devices at expected edge locations. Cisco describes multicast behavior and rate considerations in its multicast over wireless LAN guidance.

QUESTION NO: 8

A customer requires a WLAN design that can continue operation if the primary wireless LAN controller fails. Which controller design objective addresses this requirement?

A. Controller redundancy

B. Band steering

C. RF spectrum analysis

D. Static IP addressing for clients

ANSWER: A

Explanation:

Controller redundancy is correct because it provides an alternate controller or high-availability peer capable of taking over AP control functions when the primary controller becomes unavailable. The exact implementation varies by vendor and architecture, but the design must account for controller capacity during a failure, AP failover behavior, licensing, management reachability, and the expected interruption to client service.

Providing redundant controllers is not the same as merely deploying multiple controllers for load distribution. A resilient design ensures that the remaining controller infrastructure has sufficient capacity and compatible configuration to support the APs that fail over. Cisco documents controller high-availability concepts in its wireless controller high-availability guidance.