

## **PRACTICE EXAM 24: LEED GREEN ASSOCIATE SIMULATION (100 QUESTIONS)**

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*This practice exam contains 100 multiple-choice questions modeled on the LEED Green Associate (v5) exam administered by GBCI. The official exam has a 2-hour time limit and requires a score of 170 out of 200 to pass. Select the single best answer for each question. Answers and full explanations follow the exam.*

**1.** A resort's new guest wing wants to reduce peak cooling load before selecting HVAC capacity. Which strategy delivers the BEST combined cost and carbon outcome?

- A. Oversizing the HVAC system to handle any possible load
- B. Reducing load through envelope and orientation first
- C. Adding supplemental resistance heating
- D. Ignoring load calculations until construction is complete

**2.** An all-inclusive resort's buffet restaurant wants to select a refrigerant for its walk-in freezer minimizing Fundamental Refrigerant Management compliance risk. Which choice is generally best?

- A. The least expensive refrigerant regardless of GWP
- B. A refrigerant banned under international agreements
- C. Whichever refrigerant the previous system used
- D. A refrigerant with zero ODP and low GWP

**3.** An eco-lodge's main hall wants to retain 65% of its existing structural timber rather than full demolition. Which credit does this decision most directly support?

- A. Building and Materials Reuse
- B. Rainwater Management
- C. Light Pollution Reduction

D. Access to Transit

4. A glamping site's shared bathhouse wants regularly occupied spaces to combine thermal comfort, daylighting, quality views, and acoustic performance. Which credit evaluates all four together?

- A. Rainwater Management
- B. Reduce Parking
- C. Occupant Experience
- D. Biodiverse Habitat

5. A treehouse resort's canopy walkway support building wants to protect a documented population of a locally significant bird species on site. Which credit rewards this protection?

- A. Rainwater Management
- B. Heat Island Reduction
- C. Light Pollution Reduction
- D. Biodiverse Habitat

6. A houseboat rental office's dock house wants to reuse rinse water from boat washing for a subsequent cycle. Which credit category evaluates this alternative water source strategy?

- A. Sustainable Sites
- B. Water Efficiency
- C. Materials and Resources
- D. Indoor Environmental Quality

7. A vacation rental office's check-in lobby wants to verify its refrigerant selection minimizes both ozone depletion and climate impact. Which prerequisite governs this?

- A. Fundamental Refrigerant Management
- B. Minimum Indoor Air Quality Performance

- C. Minimized Site Disturbance
- D. Minimum Energy Efficiency

**8.** A timeshare resort's activity center wants to identify its top embodied carbon hotspot materials before pursuing any reduction. Which prerequisite governs this first step?

- A. Fundamental Commissioning
- B. Minimized Site Disturbance
- C. Quantify and Assess Embodied Carbon
- D. Water Metering and Reporting

**9.** A casino hotel's gaming floor wants to reduce its cooling tower's blowdown volume. Which strategy directly achieves this?

- A. Decreasing cycles of concentration
- B. Increasing cycles of concentration
- C. Switching to a closed refrigerant loop exclusively
- D. Ignoring the makeup water source entirely

**10.** A convention hotel's ballroom wants to reduce embodied carbon using a pathway accessible to a team without dedicated life-cycle assessment staff. Which pathway is generally BEST?

- A. Whole-Building Life-Cycle Assessment exclusively
- B. Skipping embodied carbon documentation entirely
- C. Relying solely on manufacturer marketing claims
- D. EPD Analysis (Option 2)

**11.** An airport hotel's shuttle desk wants to document a site within a half-mile walk of a transit stop with frequent all-day service. Which pathway does this support?

- A. Access to Transit

- B. Surrounding Density exclusively
- C. Reduce Parking exclusively
- D. Diverse Uses

**12.** A business hotel's meeting rooms want to reduce contaminants from off-gassing conference furniture. Which credit category evaluates this material selection?

- A. Sustainable Sites
- B. Location and Transportation
- C. Materials and Resources
- D. Water Efficiency

**13.** A budget motel's front office wants to select an alternative water source requiring minimal treatment for equipment rinse water. Which source is generally BEST?

- A. Raw water from a nearby stream
- B. Untreated groundwater from an on-site well
- C. Condensate from cooling equipment
- D. Discharge from an open-loop geothermal system

**14.** A roadside motel's laundry facility wants to eliminate on-site fossil fuel combustion in favor of heat pump systems for water heating. What does this represent?

- A. Grid-interactive operation
- B. Full electrification
- C. A refrigerant management strategy exclusively
- D. Enhanced Commissioning

**15.** A bed and breakfast's guest parlor wants direct sightlines to a garden courtyard from its seating area. Which Occupant Experience component does this satisfy?

- A. Quality views
- B. Acoustic performance
- C. Thermal comfort
- D. Humidity control exclusively

**16.** An inn's dining room wants exceptional acoustic isolation from an adjacent kitchen. Which Occupant Experience component is most directly relevant?

- A. Thermal comfort
- B. Quality views
- C. Humidity control exclusively
- D. Acoustic performance

**17.** A hostel's common kitchen wants to select a pathway for Reduce Embodied Carbon given strong in-house life-cycle assessment expertise. Which pathway is generally BEST?

- A. Skipping the credit entirely to save time
- B. Whole-Building Life-Cycle Assessment (Option 1)
- C. Relying solely on manufacturer marketing claims
- D. Referenced Standard Compliance exclusively

**18.** A youth hostel's dormitory bunk room wants to eliminate permanent irrigation entirely using native drought-tolerant landscaping. Which pathway does this support?

- A. Reduced Irrigation via the WaterSense Water Budget Tool
- B. Cooling Tower Water Use
- C. Water Metering and Reporting
- D. No Irrigation Required

**19.** A retreat center's meditation hall wants to combine garden views, natural wood finishes, and a small water feature. Which credit rewards this combination?

- A. Connecting with Nature
- B. Rainwater Management
- C. Heat Island Reduction
- D. Light Pollution Reduction

**20.** A wellness retreat's spa wing wants to verify air quality remains below defined VOC thresholds continuously given essential oil diffuser use. Which credit addresses this specifically?

- A. Enhanced Building Accessibility
- B. Rainwater Management
- C. Indoor Air Quality Performance
- D. Reduce Parking

**21.** A silent retreat's cabin cluster wants its exterior lighting to avoid disrupting a nearby dark-sky preserve. Which credit addresses this concern most directly?

- A. Heat Island Reduction
- B. Light Pollution Reduction
- C. Rainwater Management
- D. Biodiverse Habitat

**22.** A corporate retreat center's boardroom wants to combine strong daylighting with minimal echo and reverberation. Which credit balances both goals?

- A. Light Pollution Reduction
- B. Rainwater Management
- C. Biodiverse Habitat
- D. Occupant Experience

**23.** A team-building facility's ropes course support building wants to reduce peak cooling load before selecting new HVAC equipment. Which strategy delivers the BEST combined cost and carbon outcome?

- A. Oversizing the HVAC system to handle any possible load
- B. Adding supplemental resistance heating
- C. Reducing load through envelope and orientation first
- D. Ignoring load calculations until construction is complete

**24.** An executive retreat's private cabins want to select a refrigerant qualifying automatically under Enhanced Refrigerant Management Option 1. What must be true of this refrigerant?

- A. It must have zero ODP and GWP below the defined low threshold
- B. It must have moderate GWP and standard ODP
- C. It must require extensive leak detection
- D. It must be banned under international agreements

**25.** A golf resort's clubhouse wants to reduce its cooling tower's environmental footprint. Which combined strategy is generally strongest?

- A. Increasing cycles of concentration and using alternative makeup water
- B. Increasing potable water makeup volume without adjustment
- C. Ignoring cooling tower water use entirely
- D. Reducing cycles of concentration to the lowest number

**26.** A beach resort's cabana wing wants to select a site with authority-mandated remediation requirements from a prior industrial use. Which pathway does this support?

- A. Access to Transit
- B. Surrounding Density
- C. Diverse Uses
- D. Brownfield remediation under Equitable Development

**27.** A lakeside resort's boat house wants to reduce blowdown volume from its process cooling system. Which strategy directly achieves this?

- A. Decreasing cycles of concentration
- B. Increasing cycles of concentration
- C. Switching to potable makeup water exclusively
- D. Disconnecting the cooling system entirely

**28.** A mountain resort's ski-in lodge wants to identify which specific materials contribute most to its total embodied carbon. Which prerequisite governs this?

- A. Fundamental Commissioning
- B. Minimized Site Disturbance
- C. Quantify and Assess Embodied Carbon
- D. Water Metering and Reporting

**29.** A desert resort's oasis pool wing wants to select a landscape requiring some permanent irrigation while demonstrating meaningfully improved efficiency. Which pathway applies?

- A. Reduced Irrigation via the WaterSense Water Budget Tool
- B. No Irrigation Required
- C. Cooling Tower Water Use
- D. Water Metering and Reporting

**30.** A safari lodge's viewing deck wants to reduce nighttime light disruption to nearby wildlife. Which combination of credits is most directly relevant?

- A. Water Metering and Reduce Parking
- B. Light Pollution Reduction and Biodiverse Habitat
- C. Reduce Peak Thermal Loads and Ventilation Performance
- D. Enhanced Building Accessibility and Diverse Uses

**31.** A jungle lodge's canopy dining pavilion wants secure bicycle storage alongside showers for commuting staff. Which credit rewards this combination?

- A. Reduce Parking
- B. Diverse Uses
- C. Surrounding Density
- D. Active Travel Facilities

**32.** A rainforest lodge's research annex wants to select the best pathway for identifying its embodied carbon hotspot materials. Which is generally strongest?

- A. Guessing based on general industry assumptions with no calculation
- B. Relying solely on a single manufacturer's claims
- C. Systematically calculating GWP for structure, enclosure, and hardscape materials
- D. Skipping hotspot identification entirely

**33.** A national park lodge's visitor wing wants to verify installed energy systems match design intent before guests occupy the facility. Which prerequisite governs this?

- A. Minimized Site Disturbance
- B. Fundamental Refrigerant Management
- C. Fundamental Commissioning
- D. Water Metering and Reporting

**34.** A historic inn's renovated parlor wants to reduce reliance on fossil-fuel-generated electricity as effectively as possible. Which combination of strategies is generally strongest?

- A. Combining on-site generation, off-site PPA, and REC purchases together
- B. Relying exclusively on carbon offsets with no direct strategy
- C. Ignoring electricity source considerations entirely
- D. Pursuing only one strategy and avoiding all others

**35.** A castle hotel's great hall wants to select recycled-content flooring over virgin material alternatives. What is the primary embodied carbon benefit?

- A. It automatically qualifies the project for LEED Platinum
- B. It eliminates the need for any EPD documentation
- C. It satisfies the Fundamental Refrigerant Management prerequisite
- D. Reprocessing existing material typically requires less energy than mining

**36.** A chateau hotel's wine cellar wants to select a refrigerant minimizing Fundamental Refrigerant Management compliance risk for its temperature-controlled storage. Which choice is generally best?

- A. The least expensive refrigerant regardless of GWP
- B. A refrigerant with zero ODP and low GWP
- C. A refrigerant banned under international agreements
- D. Whichever refrigerant the previous system used

**37.** A plantation inn's veranda wing wants to demonstrate genuine barrier-free access with ramps, seating, and public-facing entry. Which credit does this design satisfy?

- A. Rainwater Management
- B. Heat Island Reduction
- C. Accessible Outdoor Space
- D. Light Pollution Reduction

**38.** A resort's spa wing baseline peak cooling load is 220 tons. Envelope improvements reduce this to 176 tons. What percentage reduction is this?

- A. 20%
- B. 15%
- C. 25%
- D. 10%

**39.** An all-inclusive resort's baseline indoor water use is 6,000 gallons per day; after upgrades, use drops to 4,500 gallons per day. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 30%
- D. 25%

**40.** An eco-lodge's baseline annual energy use is 480,000 kWh. A rooftop array generates 96,000 kWh annually. What percentage of energy use does this offset?

- A. 20%
- B. 15%
- C. 25%
- D. 10%

**41.** A glamping site wants to choose the BEST approach for its exterior lighting balancing safety and Light Pollution Reduction. Which strategy is generally strongest?

- A. Maximizing total lighting output regardless of direction
- B. Calibrating shielded fixtures to genuine functional need
- C. Eliminating all exterior lighting regardless of safety
- D. Leaving lighting decisions entirely to chance

**42.** A treehouse resort's baseline peak cooling load is 55 tons. Envelope improvements reduce this to 44 tons. What percentage reduction is this?

- A. 15%
- B. 10%
- C. 20%
- D. 25%

**43.** A houseboat rental office's baseline annual energy use is 200,000 kWh. On-site solar generates 30,000 kWh annually. What percentage of energy use does this offset?

- A. 20%
- B. 15%
- C. 10%
- D. 25%

**44.** A vacation rental office's baseline indoor water use is 1,600 gallons per day; after upgrades, use drops to 1,200 gallons per day. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 30%
- D. 25%

**45.** A timeshare resort's baseline peak cooling load is 150 tons. Envelope improvements reduce this to 120 tons. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 25%
- D. 10%

**46.** A casino hotel's baseline annual energy use is 1,200,000 kWh. A combination of on-site and off-site renewable strategies offsets 420,000 kWh. What percentage does this represent?

- A. 30%
- B. 25%
- C. 35%
- D. 40%

**47.** A convention hotel's baseline indoor water use is 8,000 gallons per day; after upgrades, use drops to 6,000 gallons per day. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 30%
- D. 25%

**48.** An airport hotel's baseline peak cooling load is 340 tons. Envelope improvements reduce this to 272 tons. What percentage reduction is this?

- A. 20%
- B. 15%
- C. 25%
- D. 10%

**49.** A business hotel's baseline annual energy use is 900,000 kWh. A combination of on-site and off-site renewable strategies offsets 315,000 kWh. What percentage does this represent?

- A. 30%
- B. 25%
- C. 40%
- D. 35%

**50.** A budget motel's baseline indoor water use is 2,000 gallons per day; after upgrades, use drops to 1,500 gallons per day. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 25%
- D. 30%

**51.** A roadside motel's baseline peak cooling load is 65 tons. Envelope improvements reduce this to 52 tons. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 25%
- D. 10%

**52.** A bed and breakfast's baseline annual energy use is 90,000 kWh. On-site solar generates 13,500 kWh annually. What percentage of energy use does this offset?

- A. 15%
- B. 20%
- C. 10%
- D. 25%

**53.** An inn's baseline indoor water use is 1,200 gallons per day; after upgrades, use drops to 900 gallons per day. What percentage reduction is this?

- A. 25%
- B. 20%
- C. 30%
- D. 15%

**54.** A hostel's baseline peak cooling load is 40 tons. Envelope improvements reduce this to 32 tons. What percentage reduction is this?

- A. 15%
- B. 10%
- C. 25%
- D. 20%

**55.** A youth hostel's baseline annual energy use is 160,000 kWh. A combination of on-site and off-site renewable strategies offsets 56,000 kWh. What percentage does this represent?

- A. 30%
- B. 35%
- C. 25%
- D. 40%

**56.** A retreat center's baseline indoor water use is 3,600 gallons per day; after upgrades, use drops to 2,700 gallons per day. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 25%
- D. 30%

**57.** A wellness retreat's baseline peak cooling load is 95 tons. Envelope improvements reduce this to 76 tons. What percentage reduction is this?

- A. 20%
- B. 15%
- C. 25%
- D. 10%

**58.** A silent retreat's baseline annual energy use is 130,000 kWh. On-site solar generates 19,500 kWh annually. What percentage of energy use does this offset?

- A. 20%
- B. 10%
- C. 25%
- D. 15%

**59.** A corporate retreat center's baseline indoor water use is 2,800 gallons per day; after upgrades, use drops to 2,100 gallons per day. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 25%
- D. 30%

**60.** A team-building facility's baseline peak cooling load is 70 tons. Envelope improvements reduce this to 56 tons. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 25%
- D. 10%

**61.** An executive retreat's baseline annual energy use is 350,000 kWh. A combination of on-site and off-site renewable strategies offsets 122,500 kWh. What percentage does this represent?

- A. 30%
- B. 35%
- C. 25%
- D. 40%

**62.** A golf resort's baseline indoor water use is 5,600 gallons per day; after upgrades, use drops to 4,200 gallons per day. What percentage reduction is this?

- A. 25%
- B. 20%
- C. 30%
- D. 15%

**63.** A beach resort's baseline peak cooling load is 280 tons. Envelope improvements reduce this to 224 tons. What percentage reduction is this?

- A. 15%
- B. 10%
- C. 25%
- D. 20%

**64.** A lakeside resort's baseline annual energy use is 620,000 kWh. On-site solar generates 93,000 kWh annually. What percentage of energy use does this offset?

- A. 20%
- B. 10%
- C. 15%
- D. 25%

**65.** A mountain resort's baseline indoor water use is 4,400 gallons per day; after upgrades, use drops to 3,300 gallons per day. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 30%
- D. 25%

**66.** A desert resort's baseline peak cooling load is 310 tons. Envelope improvements reduce this to 248 tons. What percentage reduction is this?

- A. 15%
- B. 10%
- C. 20%
- D. 25%

**67.** A safari lodge's baseline annual energy use is 210,000 kWh. A combination of on-site and off-site renewable strategies offsets 73,500 kWh. What percentage does this represent?

- A. 35%
- B. 30%
- C. 25%
- D. 40%

**68.** A jungle lodge's baseline indoor water use is 1,800 gallons per day; after upgrades, use drops to 1,350 gallons per day. What percentage reduction is this?

- A. 20%
- B. 25%
- C. 30%
- D. 15%

**69.** A rainforest lodge's baseline peak cooling load is 85 tons. Envelope improvements reduce this to 68 tons. What percentage reduction is this?

- A. 20%
- B. 15%
- C. 25%
- D. 10%

**70.** A national park lodge's baseline annual energy use is 275,000 kWh. On-site solar generates 41,250 kWh annually. What percentage of energy use does this offset?

- A. 20%
- B. 10%
- C. 15%
- D. 25%

**71.** A historic inn's baseline indoor water use is 900 gallons per day; after upgrades, use drops to 675 gallons per day. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 30%
- D. 25%

**72.** A castle hotel wants to choose the BEST pathway for its Reduce Embodied Carbon strategy given both material reuse potential and new material procurement needs. Which is generally strongest?

- A. Pursuing only reuse and ignoring new material selection entirely
- B. Pursuing both reuse and low-carbon new material strategies together
- C. Pursuing only new material selection and ignoring reuse potential
- D. Avoiding both strategies to minimize documentation effort

**73.** A chateau hotel's baseline peak cooling load is 400 tons. Envelope improvements reduce this to 320 tons. What percentage reduction is this?

- A. 15%
- B. 20%
- C. 25%
- D. 10%

**74.** A plantation inn wants to choose the BEST approach for reducing reliance on fossil-fuel electricity given both roof space and market access. Which strategy is generally strongest?

- A. Combining on-site and off-site renewable strategies together
- B. Avoiding both on-site and off-site strategies to minimize documentation effort
- C. Pursuing only on-site generation regardless of capacity limits
- D. Pursuing only off-site procurement even where on-site is feasible

**75.** A resort's spa treatment rooms want to select the best approach for its Fundamental Refrigerant Management compliance path. Which factor should genuinely drive this decision?

- A. Whichever path a competing nearby resort happened to use
- B. A coin flip between the two available compliance paths
- C. The resort's actual mechanical system requirements
- D. Whichever path requires the least paperwork regardless of system needs

**76.** An all-inclusive resort wants to time its renewable energy PPA to match its actual measured load profile rather than a design-phase estimate. What must happen first?

- A. The PPA must be signed before any load data exists
- B. Multiple redundant PPAs must be signed simultaneously
- C. The resort must avoid any PPA regardless of circumstances
- D. Benchmarking data must establish the actual load profile first

**77.** An eco-lodge wants to reduce its cooling tower's environmental footprint as effectively as possible. Which combined strategy is generally strongest?

- A. Reducing cycles of concentration to the lowest possible number
- B. Increasing potable water makeup volume without adjustment
- C. Ignoring cooling tower water use entirely
- D. Increasing cycles of concentration and using alternative makeup water sources

**78.** A glamping site's welcome pavilion wants to reduce peak cooling load as cost-effectively as possible. Which strategy is generally the BEST first step?

- A. Installing a larger chiller to compensate for the existing envelope
- B. Improving envelope insulation and glazing performance during early design
- C. Waiting until construction is complete to evaluate load reduction options
- D. Adding supplemental electric resistance heating

**79.** A treehouse resort wants to select the best pathway for Reduce Embodied Carbon given a team without dedicated life-cycle assessment expertise. Which pathway is generally BEST?

- A. EPD Analysis (Option 2)
- B. Whole-Building Life-Cycle Assessment exclusively
- C. Skipping embodied carbon documentation entirely
- D. Relying solely on manufacturer marketing claims

**80.** A houseboat rental office wants to choose the BEST approach for identifying its embodied carbon hotspot materials. Which is generally strongest?

- A. Guessing based on general industry assumptions with no calculation
- B. Relying solely on a single manufacturer's claims
- C. Systematically calculating GWP for structure, enclosure, and hardscape materials
- D. Skipping hotspot identification entirely

**81.** A vacation rental office wants to select the best approach for reducing reliance on fossil-fuel electricity while managing budget constraints. Which strategy sequence is generally strongest?

- A. Waiting for full capital availability before pursuing any strategy
- B. Combining modest on-site generation with off-site procurement
- C. Pursuing only the most expensive strategy regardless of fit
- D. Ignoring renewable strategies entirely due to budget constraints

**82.** A timeshare resort's front desk wants to select the best approach for its exterior lighting balancing safety and Light Pollution Reduction. Which strategy is generally strongest?

- A. Calibrating shielded fixtures to genuine functional need
- B. Maximizing total lighting output regardless of direction
- C. Eliminating all exterior lighting regardless of safety
- D. Leaving lighting decisions entirely to chance

**83.** A casino hotel's high-limit room wants to verify formaldehyde and VOC levels remain below defined thresholds on an ongoing basis. Which credit addresses this?

- A. Enhanced Building Accessibility
- B. Rainwater Management
- C. Reduce Parking
- D. Indoor Air Quality Performance

**84.** A convention hotel wants to choose the BEST approach for pursuing both material reuse and low-carbon new material procurement together. Which is generally strongest?

- A. Pursuing only reuse and ignoring new material selection entirely
- B. Pursuing only new material selection and ignoring reuse potential
- C. Pursuing both reuse and low-carbon new material strategies together
- D. Avoiding both strategies to minimize documentation effort

**85.** An airport hotel's shuttle bay wants to reduce blowdown volume from its process cooling system. Which strategy directly achieves this?

- A. Decreasing cycles of concentration
- B. Increasing cycles of concentration
- C. Switching to potable makeup water exclusively
- D. Disconnecting the cooling system entirely

**86.** A business hotel's fitness center wants direct sightlines to a landscaped courtyard from its treadmill row. Which Occupant Experience component does this satisfy?

- A. Quality views
- B. Acoustic performance
- C. Thermal comfort
- D. Humidity control exclusively

**87.** A budget motel wants to select an alternative water source requiring minimal treatment for its cooling equipment. Which principle should guide this source selection?

- A. Prioritize whichever source is physically closest
- B. Prioritize the source with the largest volume
- C. Prioritize sources requiring the least treatment
- D. Prioritize sources requiring the most treatment

**88.** A roadside motel wants to identify its top embodied carbon hotspot materials before pursuing any reduction. Which prerequisite governs this first step?

- A. Fundamental Commissioning
- B. Minimized Site Disturbance
- C. Water Metering and Reporting
- D. Quantify and Assess Embodied Carbon

**89.** A bed and breakfast wants to reduce nighttime light disruption to a nearby residential neighborhood. Which combination of credits is most directly relevant?

- A. Water Metering and Reduce Parking
- B. Light Pollution Reduction and Biodiverse Habitat
- C. Reduce Peak Thermal Loads and Ventilation Performance
- D. Enhanced Building Accessibility and Diverse Uses

**90.** An inn's garden suite wants to demonstrate genuine barrier-free access with ramps and seating open to all guests. Which credit evaluates this?

- A. Rainwater Management
- B. Heat Island Reduction
- C. Light Pollution Reduction
- D. Accessible Outdoor Space

**91.** A hostel wants to select a pathway for Reduce Embodied Carbon given strong in-house life-cycle assessment expertise. Which pathway is generally BEST?

- A. Whole-Building Life-Cycle Assessment (Option 1)
- B. Relying solely on manufacturer marketing claims
- C. Skipping the credit entirely to save time
- D. Referenced Standard Compliance exclusively

**92.** A youth hostel wants to verify installed energy systems match design intent before staff occupy the facility. Which prerequisite governs this?

- A. Minimized Site Disturbance
- B. Fundamental Refrigerant Management
- C. Fundamental Commissioning
- D. Water Metering and Reporting

**93.** A retreat center's meditation garden wants shading provided by tree canopy rather than structural coverings. Which credit rewards this specific strategy?

- A. Rainwater Management
- B. Light Pollution Reduction
- C. Biodiverse Habitat
- D. Heat Island Reduction

**94.** A wellness retreat wants to select a site where daily amenities are reachable on foot, independent of transit frequency. Which pathway applies?

- A. Walkable Location
- B. Access to Transit
- C. Surrounding Density
- D. Reduce Parking

**95.** A silent retreat wants to reduce its total parking supply while ensuring transit remains realistic for staff. Which combination reflects this strategy?

- A. Maximizing parking supply regardless of transit access
- B. Reduce Parking paired with genuine Access to Transit qualification
- C. Ignoring parking demand analysis entirely
- D. Offering unlimited free parking to attract staff

**96.** A corporate retreat center's dining pavilion wants to identify which specific materials contribute most to its total embodied carbon. Which prerequisite governs this?

- A. Fundamental Commissioning
- B. Minimized Site Disturbance
- C. Quantify and Assess Embodied Carbon
- D. Water Metering and Reporting

**97.** A team-building facility wants to reduce reliance on fossil-fuel-generated electricity as effectively as possible. Which combination of strategies is generally strongest?

- A. Ignoring electricity source considerations entirely
- B. Relying exclusively on carbon offsets with no direct strategy
- C. Pursuing only one strategy and avoiding all others
- D. Combining on-site generation, off-site PPA, and REC purchases together

**98.** An executive retreat's conference cabin wants to select recycled-content countertops over virgin stone alternatives. What is the primary embodied carbon benefit?

- A. It automatically qualifies the project for LEED Platinum
- B. Reprocessing existing material typically requires less energy than mining
- C. It eliminates the need for any EPD documentation
- D. It satisfies the Fundamental Refrigerant Management prerequisite

**99.** A golf resort's pro shop wants to reduce contaminants from off-gassing display shelving. Which credit category evaluates this material selection?

- A. Sustainable Sites
- B. Location and Transportation
- C. Materials and Resources
- D. Water Efficiency

**100.** Across this exam's hospitality and lodging scenarios, which shared underlying principle connects envelope-first load reduction, refrigerant threshold qualification, and renewable energy sequencing?

- A. Deliberate, upstream decisions consistently outperform reactive, late-stage fixes
- B. Each concept functions in complete isolation from the others
- C. Only large luxury resorts can meaningfully apply any of these concepts
- D. None of these concepts share any genuine underlying connection

## Practice Exam 24: Answer Key and Explanations

**1. B** — Reducing load through envelope and orientation before equipment selection delivers the best combined cost and carbon outcome, since smaller resulting HVAC equipment costs less to purchase, install, and operate for the building's entire service life. Oversizing equipment or adding resistance heating both increase cost rather than reducing it. This distinction is frequently tested across multiple LEED domains.

**2. D** — A refrigerant with zero ozone depletion potential and low global warming potential is generally the best choice, since it minimizes both environmental risk and Fundamental Refrigerant Management compliance burden by potentially qualifying automatically under Enhanced Refrigerant Management's Option 1, avoiding the more detailed calculation entirely for this kitchen equipment. This connects directly to the broader credit category's underlying intent.

**3. A** — Retaining 65% of existing structural timber rather than full demolition directly supports Building and Materials Reuse, one of two primary reuse pathways alongside procuring salvaged materials, avoiding the embodied carbon a fully new replacement structure would otherwise require. Rainwater Management, Light Pollution Reduction, and Access to Transit address unrelated concerns.

**4. C** — Combining thermal comfort, daylighting, quality views, and acoustic performance under one evaluation is precisely what the consolidated Occupant Experience credit does under LEED v5, replacing what LEED v4.1 evaluated as four separate, independently point-earning credits. Rainwater

Management, Reduce Parking, and Biodiverse Habitat address entirely unrelated concerns instead. This shared logic runs consistently across several related pathways.

**5. D** — Protecting a documented population of a locally significant bird species directly rewards Biodiverse Habitat, which evaluates protecting, restoring, or creating high-value habitat features on a project site. Rainwater Management, Heat Island Reduction, and Light Pollution Reduction address entirely unrelated Sustainable Sites concerns instead of habitat protection specifically. This is a frequently tested structural detail worth remembering precisely.

**6. B** — Reusing rinse water for a subsequent cycle falls under Water Efficiency, specifically the alternative water source and process-water reuse strategies this category rewards. Sustainable Sites, Materials and Resources, and Indoor Environmental Quality address entirely different credit categories unrelated to alternative water source selection specifically. No comparable evidence exists through any of the alternative options.

**7. A** — Fundamental Refrigerant Management is the mandatory prerequisite addressing both ozone depletion potential and global warming potential together, since refrigerants can pose both environmental threats simultaneously. Minimum Indoor Air Quality Performance, Minimized Site Disturbance, and Minimum Energy Efficiency address entirely unrelated prerequisite concerns from different categories. Recognizing this connection strengthens overall exam preparation significantly.

**8. C** — Identifying top embodied carbon hotspot materials before pursuing any reduction is precisely the intentionally baseline-only role of Quantify and Assess Embodied Carbon, requiring GWP calculations before the separate, optional Reduce Embodied Carbon credit is pursued. Fundamental Commissioning and Minimized Site Disturbance address entirely unrelated prerequisites. This principle applies consistently regardless of property size or setting.

**9. B** — Increasing cycles of concentration allows water to recirculate through the cooling tower more times before being discharged as blowdown, directly decreasing the total blowdown volume required for a given amount of makeup water. Decreasing cycles or switching refrigerant loops does not address this specific water-related mechanical concern. This holds true across every hospitality and lodging type tested here.

**10. D** — EPD Analysis, Option 2 under Reduce Embodied Carbon, is generally the best pathway for a team without dedicated life-cycle assessment staff, offering a more accessible, prescriptive alternative rewarding procurement of specific verified low-carbon products rather than requiring a full Whole-Building Life-Cycle Assessment their capacity genuinely cannot support. This distinction is frequently tested across multiple LEED domains.

**11. A** — A site within a half-mile walk of a transit stop with frequent all-day service most directly supports Access to Transit, whose point thresholds are calibrated to actual service frequency and reasonable walking distance together. Surrounding Density, Reduce Parking, and Diverse Uses address distinct, unrelated pathway concerns instead. This connects directly to the broader credit category's underlying intent.

**12. C** — Reducing contaminants from off-gassing conference furniture falls under Low-Emitting Materials, which LEED v5 relocated from Indoor Environmental Quality into Materials and Resources. This structural placement is a frequently tested detail distinguishing current v5 knowledge from earlier rating system versions where this credit previously resided instead. This shared logic runs consistently across several related pathways.

**13. C** — Condensate from cooling equipment generally requires the least treatment before reuse among the listed options, aligning with LEED's explicit direction to prioritize alternative sources requiring minimal processing first. Raw stream water, untreated groundwater, and geothermal discharge are all explicitly ineligible sources under LEED's water efficiency framework. This is a frequently tested structural detail worth remembering precisely.

**14. B** — Eliminating on-site fossil fuel combustion in favor of heat pump systems for water heating represents full electrification, one of LEED v5's four core Energy and Atmosphere strategies. This differs from grid-interactive operation, which concerns timing coordination with the utility grid rather than fuel source, and from unrelated verification activities. No comparable evidence exists through any of the alternative options.

**15. A** — Direct sightlines to a garden courtyard specifically address quality views, one of the four components consolidated into Occupant Experience under LEED v5, rewarding visual connection to the outdoors independent of thermal comfort or humidity control, which address entirely different aspects of this same consolidated credit. Recognizing this connection strengthens overall exam preparation significantly.

**16. D** — Exceptional acoustic isolation from an adjacent kitchen is most directly relevant to acoustic performance, one of the four components consolidated into Occupant Experience under LEED v5, evaluated independently from thermal comfort, quality views, and humidity control within this same broader consolidated credit category structure. This principle applies consistently regardless of property size or setting.

**17. B** — Whole-Building Life-Cycle Assessment is generally the best pathway for a team with strong in-house life-cycle assessment expertise, since it captures credit for the most comprehensive range of reduction strategies across a material's full life cycle. Skipping the credit or relying on marketing claims squanders the team's genuine capability. This holds true across every hospitality and lodging type tested here.

**18. D** — Eliminating permanent irrigation entirely using native drought-tolerant landscaping specifically satisfies No Irrigation Required, the more ambitious Outdoor Water Use Reduction pathway achieved through climate-appropriate species selection. Reduced Irrigation, Cooling Tower Water Use, and Water Metering address distinct, unrelated pathway concerns instead. This distinction is frequently tested across multiple LEED domains.

**19. A** — Combining garden views, natural wood finishes, and a water feature specifically rewards Connecting with Nature, which evaluates biophilic design strategies incorporating direct nature contact, indirect natural references, and spatial configuration together. Rainwater Management, Heat Island

Reduction, and Light Pollution Reduction address entirely unrelated Sustainable Sites concerns. This connects directly to the broader credit category's underlying intent.

**20. C** — Verifying air quality remains below defined VOC thresholds continuously given essential oil diffuser use specifically addresses Indoor Air Quality Performance, which rewards ongoing monitoring and measurable improvement of indoor air conditions. Enhanced Building Accessibility, Rainwater Management, and Reduce Parking address entirely unrelated credit concerns. This shared logic runs consistently across several related pathways.

**21. B** — Avoiding disruption to a nearby dark-sky preserve directly addresses Light Pollution Reduction, which evaluates exterior lighting design limiting trespass beyond a site's boundary and minimizing uplight escaping into the night sky. Heat Island Reduction, Rainwater Management, and Biodiverse Habitat address entirely unrelated site-related concerns instead. This is a frequently tested structural detail worth remembering precisely.

**22. D** — Combining strong daylighting with minimal echo and reverberation balances daylighting and acoustic performance together, two distinct components evaluated under the consolidated Occupant Experience credit. Light Pollution Reduction, Rainwater Management, and Biodiverse Habitat address entirely unrelated concerns from different Sustainable Sites credit categories within the broader rating system. No comparable evidence exists through any of the alternative options.

**23. C** — Reducing load through envelope and orientation before equipment selection delivers the best combined cost and carbon outcome, since smaller resulting HVAC equipment costs less to purchase, install, and operate for the building's entire service life. Oversizing equipment or adding resistance heating both increase cost rather than reducing it here. Recognizing this connection strengthens overall exam preparation significantly.

**24. A** — A refrigerant qualifying automatically under Enhanced Refrigerant Management's Option 1 with no further calculation must have zero ozone depletion potential and global warming potential below the defined low threshold. Refrigerants with moderate GWP, extensive leak detection requirements, or international bans do not satisfy this specific automatic qualification standard. This principle applies consistently regardless of property size or setting.

**25. A** — Increasing cycles of concentration alongside using alternative makeup water sources is generally the strongest combined strategy for reducing a cooling tower's environmental footprint, since higher cycles reduce blowdown volume while alternative sources further displace potable water demand, combining two complementary mechanisms rather than either strategy alone. This holds true across every hospitality and lodging type tested here.

**26. D** — Selecting a site with authority-mandated remediation requirements from a prior industrial use directly supports the brownfield remediation pathway under Equitable Development, turning the LEED project into the mechanism addressing genuine environmental contamination. Access to Transit, Surrounding Density, and Diverse Uses address entirely unrelated pathway concerns instead. This distinction is frequently tested across multiple LEED domains.

**27. B** — Increasing cycles of concentration allows water to recirculate through the cooling system more times before being discharged as blowdown, directly decreasing the total blowdown volume required for a given amount of makeup water. This is the primary mechanism behind this credit's meaningful, demonstrated water savings for the boat house. This connects directly to the broader credit category's underlying intent.

**28. C** — Identifying which specific materials contribute most to total embodied carbon is precisely the intentionally baseline-only role of Quantify and Assess Embodied Carbon, requiring GWP calculations before the separate, optional Reduce Embodied Carbon credit is pursued. Fundamental Commissioning and Minimized Site Disturbance address entirely unrelated prerequisites instead. This shared logic runs consistently across several related pathways.

**29. A** — Requiring some permanent irrigation while demonstrating meaningfully improved efficiency specifically satisfies Reduced Irrigation via the WaterSense Water Budget Tool, distinct from No Irrigation Required, which eliminates permanent irrigation demand entirely rather than merely improving its documented ongoing efficiency through smart, weather-responsive controls. This is a frequently tested structural detail worth remembering precisely.

**30. B** — Reducing nighttime light disruption to nearby wildlife is most directly addressed by combining Light Pollution Reduction, limiting trespass and uplight, with Biodiverse Habitat, protecting sensitive wildlife-supporting conditions. Neither combination involving water metering, accessibility, or thermal load credits addresses this specific nocturnal wildlife concern here. No comparable evidence exists through any of the alternative options.

**31. D** — Secure bicycle storage combined with showers for commuting staff specifically supports Active Travel Facilities, which treats cycling infrastructure as a complete supportive system rather than storage alone. Reduce Parking, Diverse Uses, and Surrounding Density address distinct, unrelated Location and Transportation pathway concerns within this same broader credit category. Recognizing this connection strengthens overall exam preparation significantly.

**32. C** — Systematically calculating GWP for structure, enclosure, and hardscape materials is generally the strongest approach for identifying hotspot materials, since this quantified inventory provides the actual data needed to determine which specific materials genuinely contribute most to total embodied carbon before any reduction strategy is pursued at all. This principle applies consistently regardless of property size or setting.

**33. C** — Verifying installed energy systems match design intent before guests occupy the facility is precisely governed by Fundamental Commissioning, the mandatory prerequisite requiring OPR and BOD review alongside verification of energy-related system installation. Minimized Site Disturbance, Fundamental Refrigerant Management, and Water Metering address unrelated concerns. This holds true across every hospitality and lodging type tested here.

**34. A** — Combining on-site generation, an off-site PPA, and REC purchases together is generally the strongest strategy for reducing reliance on fossil-fuel-generated electricity, since these layered, complementary approaches let a facility address a larger share of its total footprint than any single

strategy pursued in isolation could achieve. This distinction is frequently tested across multiple LEED domains.

**35. D** — Recycled-content flooring typically requires reprocessing existing material, which generally demands less energy than mining and manufacturing virgin material from raw resources, producing a meaningful embodied carbon reduction relative to virgin material. This is distinct from automatic Platinum qualification or eliminating EPD documentation requirements, neither of which this achieves. This connects directly to the broader credit category's underlying intent.

**36. B** — A refrigerant with zero ozone depletion potential and low global warming potential is generally the best choice, since it minimizes both environmental risk and compliance burden by potentially qualifying automatically under Enhanced Refrigerant Management's Option 1, avoiding the more detailed calculation required for higher-GWP alternatives entirely for this cellar. This shared logic runs consistently across several related pathways.

**37. C** — Genuine barrier-free access with ramps, seating, and public-facing entry satisfies Accessible Outdoor Space's updated LEED v5 requirements, going meaningfully beyond the simpler square-footage thresholds LEED v4 previously used. Rainwater Management, Heat Island Reduction, and Light Pollution Reduction address entirely unrelated Sustainable Sites concerns instead. This is a frequently tested structural detail worth remembering precisely.

**38. A** — A reduction from 220 tons to 176 tons is a 44-ton decrease, and 44 divided by 220 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak Thermal Loads credit eligibility while reducing the resort's ongoing mechanical operating costs significantly over its entire service life.

**39. D** — A reduction from 6,000 to 4,500 gallons per day is a 1,500-gallon decrease, and 1,500 divided by 6,000 equals 0.25, or 25%. This percentage reflects the consistent percentage-below-baseline metric LEED uses across Water Efficiency regardless of the specific facility type being evaluated in this particular scenario. No comparable evidence exists through any of the alternative options.

**40. A** — Dividing 96,000 kWh of solar generation by 480,000 kWh of total annual energy use equals 0.20, or 20% of total energy use offset by the rooftop array. Renewable Energy credit points scale directly to this percentage, rewarding this meaningful offset with proportionally more points under the credit's structure. Recognizing this connection strengthens overall exam preparation significantly.

**41. B** — Calibrating shielded fixtures to genuine functional need is generally the strongest approach balancing safety and Light Pollution Reduction, since this strategy limits trespass and uplight while still meeting real occupant safety requirements. Maximizing output or eliminating lighting entirely both fail to properly balance these two legitimately competing considerations. This principle applies consistently regardless of property size or setting.

**42. C** — A reduction from 55 tons to 44 tons is an 11-ton decrease, and 11 divided by 55 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak

Thermal Loads credit eligibility while reducing the resort's ongoing mechanical operating costs significantly over its entire service life.

**43. B** — Dividing 30,000 kWh of solar generation by 200,000 kWh of total annual energy use equals 0.15, or 15% of total energy use offset by the on-site array. Renewable Energy credit points scale directly to this percentage, rewarding this meaningful offset with proportionally more points under the credit's structure. This holds true across every hospitality and lodging type tested here.

**44. D** — A reduction from 1,600 to 1,200 gallons per day is a 400-gallon decrease, and 400 divided by 1,600 equals 0.25, or 25%. This percentage reflects the consistent percentage-below-baseline metric LEED uses across Water Efficiency regardless of the specific facility type being evaluated in this particular scenario. This distinction is frequently tested across multiple LEED domains.

**45. B** — A reduction from 150 tons to 120 tons is a 30-ton decrease, and 30 divided by 150 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak Thermal Loads credit eligibility while reducing the resort's ongoing mechanical operating costs significantly over its entire service life.

**46. C** — Dividing 420,000 kWh of combined offset by 1,200,000 kWh of total annual energy use equals 0.35, or 35% of total energy use offset. Renewable Energy credit points scale directly to this percentage, rewarding this combined on-site and off-site renewable strategy with proportionally more points under the credit's structure. This connects directly to the broader credit category's underlying intent.

**47. D** — A reduction from 8,000 to 6,000 gallons per day is a 2,000-gallon decrease, and 2,000 divided by 8,000 equals 0.25, or 25%. This percentage reflects the consistent percentage-below-baseline metric LEED uses across Water Efficiency regardless of the specific facility type being evaluated in this particular scenario. This shared logic runs consistently across several related pathways.

**48. A** — A reduction from 340 tons to 272 tons is a 68-ton decrease, and 68 divided by 340 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak Thermal Loads credit eligibility while reducing the hotel's ongoing mechanical operating costs significantly over its entire service life.

**49. D** — Dividing 315,000 kWh of combined offset by 900,000 kWh of total annual energy use equals 0.35, or 35% of total energy use offset. Renewable Energy credit points scale directly to this percentage, rewarding this combined on-site and off-site renewable strategy with proportionally more points under the credit's structure. This is a frequently tested structural detail worth remembering precisely.

**50. C** — A reduction from 2,000 to 1,500 gallons per day is a 500-gallon decrease, and 500 divided by 2,000 equals 0.25, or 25%. This percentage reflects the consistent percentage-below-baseline metric LEED uses across Water Efficiency regardless of the specific facility type being evaluated in this particular scenario. No comparable evidence exists through any of the alternative options.

**51. B** — A reduction from 65 tons to 52 tons is a 13-ton decrease, and 13 divided by 65 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak

Thermal Loads credit eligibility while reducing the motel's ongoing mechanical operating costs significantly over its entire service life.

**52. A** — Dividing 13,500 kWh of solar generation by 90,000 kWh of total annual energy use equals 0.15, or 15% of total energy use offset by the on-site array. Renewable Energy credit points scale directly to this percentage, rewarding this meaningful offset with proportionally more points under the credit's structure. Recognizing this connection strengthens overall exam preparation significantly.

**53. A** — A reduction from 1,200 to 900 gallons per day is a 300-gallon decrease, and 300 divided by 1,200 equals 0.25, or 25%. This percentage reflects the consistent percentage-below-baseline metric LEED uses across Water Efficiency regardless of the specific facility type being evaluated in this particular scenario. This principle applies consistently regardless of property size or setting.

**54. D** — A reduction from 40 tons to 32 tons is an 8-ton decrease, and 8 divided by 40 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak Thermal Loads credit eligibility while reducing the hostel's ongoing mechanical operating costs significantly over its entire service life.

**55. B** — Dividing 56,000 kWh of combined offset by 160,000 kWh of total annual energy use equals 0.35, or 35% of total energy use offset. Renewable Energy credit points scale directly to this percentage, rewarding this combined on-site and off-site renewable strategy with proportionally more points under the credit's structure. This holds true across every hospitality and lodging type tested here.

**56. C** — A reduction from 3,600 to 2,700 gallons per day is a 900-gallon decrease, and 900 divided by 3,600 equals 0.25, or 25%. This percentage reflects the consistent percentage-below-baseline metric LEED uses across Water Efficiency regardless of the specific facility type being evaluated in this particular scenario. This distinction is frequently tested across multiple LEED domains.

**57. A** — A reduction from 95 tons to 76 tons is a 19-ton decrease, and 19 divided by 95 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak Thermal Loads credit eligibility while reducing the retreat's ongoing mechanical operating costs significantly over its entire service life.

**58. D** — Dividing 19,500 kWh of solar generation by 130,000 kWh of total annual energy use equals 0.15, or 15% of total energy use offset by the on-site array. Renewable Energy credit points scale directly to this percentage, rewarding this meaningful offset with proportionally more points under the credit's structure. This connects directly to the broader credit category's underlying intent.

**59. C** — A reduction from 2,800 to 2,100 gallons per day is a 700-gallon decrease, and 700 divided by 2,800 equals 0.25, or 25%. This percentage reflects the consistent percentage-below-baseline metric LEED uses across Water Efficiency regardless of the specific facility type being evaluated in this particular scenario. This shared logic runs consistently across several related pathways.

**60. B** — A reduction from 70 tons to 56 tons is a 14-ton decrease, and 14 divided by 70 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak

Thermal Loads credit eligibility while reducing the facility's ongoing mechanical operating costs significantly over its entire service life.

**61. B** — Dividing 122,500 kWh of combined offset by 350,000 kWh of total annual energy use equals 0.35, or 35% of total energy use offset. Renewable Energy credit points scale directly to this percentage, rewarding this combined on-site and off-site renewable strategy with proportionally more points under the credit's structure. This is a frequently tested structural detail worth remembering precisely.

**62. A** — A reduction from 5,600 to 4,200 gallons per day is a 1,400-gallon decrease, and 1,400 divided by 5,600 equals 0.25, or 25%. This percentage reflects the consistent percentage-below-baseline metric LEED uses across Water Efficiency regardless of the specific facility type being evaluated in this particular scenario. No comparable evidence exists through any of the alternative options.

**63. D** — A reduction from 280 tons to 224 tons is a 56-ton decrease, and 56 divided by 280 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak Thermal Loads credit eligibility while reducing the resort's ongoing mechanical operating costs significantly over its entire service life.

**64. C** — Dividing 93,000 kWh of solar generation by 620,000 kWh of total annual energy use equals 0.15, or 15% of total energy use offset by the on-site array. Renewable Energy credit points scale directly to this percentage, rewarding this meaningful offset with proportionally more points under the credit's structure. Recognizing this connection strengthens overall exam preparation significantly.

**65. D** — A reduction from 4,400 to 3,300 gallons per day is a 1,100-gallon decrease, and 1,100 divided by 4,400 equals 0.25, or 25%. This percentage reflects the consistent percentage-below-baseline metric LEED uses across Water Efficiency regardless of the specific facility type being evaluated in this particular scenario. This principle applies consistently regardless of property size or setting.

**66. C** — A reduction from 310 tons to 248 tons is a 62-ton decrease, and 62 divided by 310 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak Thermal Loads credit eligibility while reducing the resort's ongoing mechanical operating costs significantly over its entire service life.

**67. A** — Dividing 73,500 kWh of combined offset by 210,000 kWh of total annual energy use equals 0.35, or 35% of total energy use offset. Renewable Energy credit points scale directly to this percentage, rewarding this combined on-site and off-site renewable strategy with proportionally more points under the credit's structure. This holds true across every hospitality and lodging type tested here.

**68. B** — A reduction from 1,800 to 1,350 gallons per day is a 450-gallon decrease, and 450 divided by 1,800 equals 0.25, or 25%. This percentage reflects the consistent percentage-below-baseline metric LEED uses across Water Efficiency regardless of the specific facility type being evaluated in this particular scenario. This distinction is frequently tested across multiple LEED domains.

**69. A** — A reduction from 85 tons to 68 tons is a 17-ton decrease, and 17 divided by 85 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak

Thermal Loads credit eligibility while reducing the lodge's ongoing mechanical operating costs significantly over its entire service life.

**70. C** — Dividing 41,250 kWh of solar generation by 275,000 kWh of total annual energy use equals 0.15, or 15% of total energy use offset by the on-site array. Renewable Energy credit points scale directly to this percentage, rewarding this meaningful offset with proportionally more points under the credit's structure. This connects directly to the broader credit category's underlying intent.

**71. D** — A reduction from 900 to 675 gallons per day is a 225-gallon decrease, and 225 divided by 900 equals 0.25, or 25%. This percentage reflects the consistent percentage-below-baseline metric LEED uses across Water Efficiency regardless of the specific facility type being evaluated in this particular scenario. This shared logic runs consistently across several related pathways.

**72. B** — Pursuing both reuse and low-carbon new material strategies together is generally the strongest approach, since Materials and Resources offers multiple complementary reduction strategies rather than a single mutually exclusive pathway. Layering material selection improvements alongside structural retention can compound total embodied carbon reduction significantly for this hotel. This is a frequently tested structural detail worth remembering precisely.

**73. B** — A reduction from 400 tons to 320 tons is an 80-ton decrease, and 80 divided by 400 equals 0.20, or 20%. This meaningful load reduction through envelope improvements directly supports Reduce Peak Thermal Loads credit eligibility while reducing the hotel's ongoing mechanical operating costs significantly over its entire service life.

**74. A** — Combining on-site and off-site renewable strategies together is generally the strongest approach when a facility has both roof space and market access available, since these complementary pathways let the inn offset a larger total percentage of its footprint than either single strategy pursued alone could achieve for this property. No comparable evidence exists through any of the alternative options.

**75. C** — The resort's actual mechanical system requirements and available refrigerant options should genuinely drive this compliance path decision, ensuring the choice reflects real project conditions rather than arbitrary factors. Paperwork convenience, chance, or copying an unrelated resort's choice all ignore genuinely relevant technical considerations here entirely. Recognizing this connection strengthens overall exam preparation significantly.

**76. D** — Benchmarking data establishing the actual load profile must be gathered first before timing a renewable energy PPA to match genuine, measured building needs rather than a design-phase estimate. Signing before data exists or signing multiple uncoordinated agreements both risk mismatched or wastefully redundant capacity commitments for the resort. This principle applies consistently regardless of property size or setting.

**77. D** — Increasing cycles of concentration alongside using alternative makeup water sources is generally the strongest combined strategy for reducing a cooling tower's environmental footprint, since higher cycles reduce blowdown volume while alternative sources further displace potable water demand,

combining two complementary mechanisms rather than either strategy alone. This holds true across every hospitality and lodging type tested here.

**78. B** — Improving envelope insulation and glazing performance during early design is the most cost-effective first step, since it reduces load before mechanical equipment is even selected, cascading into smaller, less expensive equipment. Oversizing equipment or waiting until construction is complete both forfeit this early, high-leverage opportunity. This distinction is frequently tested across multiple LEED domains.

**79. A** — EPD Analysis, Option 2 under Reduce Embodied Carbon, is generally the best pathway for a team without dedicated life-cycle assessment staff, offering a more accessible, prescriptive alternative rewarding procurement of specific verified low-carbon products rather than requiring a full Whole-Building Life-Cycle Assessment their capacity genuinely cannot support. This connects directly to the broader credit category's underlying intent.

**80. C** — Systematically calculating GWP for structure, enclosure, and hardscape materials is generally the strongest approach for identifying hotspot materials, since this quantified inventory provides the actual data needed to determine which specific materials genuinely contribute most to total embodied carbon before any reduction strategy is pursued at all. This shared logic runs consistently across several related pathways.

**81. B** — Combining modest on-site generation with off-site procurement for the remainder is generally the strongest strategy sequence for a facility managing budget constraints, since this layered approach lets the office offset a meaningful percentage of energy use without requiring the full capital investment of exclusive on-site generation alone. This is a frequently tested structural detail worth remembering precisely.

**82. A** — Calibrating shielded fixtures to genuine functional need is generally the strongest approach balancing safety and Light Pollution Reduction, since this strategy limits trespass and uplight while still meeting real occupant safety requirements. Maximizing output or eliminating lighting entirely both fail to properly balance these two legitimately competing considerations. No comparable evidence exists through any of the alternative options.

**83. D** — Verifying formaldehyde and VOC levels remain below defined thresholds on an ongoing basis specifically addresses Indoor Air Quality Performance, which rewards continuous monitoring and measurable improvement of indoor air conditions. Enhanced Building Accessibility, Rainwater Management, and Reduce Parking address entirely unrelated credit concerns from different categories. Recognizing this connection strengthens overall exam preparation significantly.

**84. C** — Pursuing both reuse and low-carbon new material strategies together is generally the strongest approach, since Materials and Resources offers multiple complementary reduction strategies rather than a single mutually exclusive pathway. Layering material selection improvements alongside structural retention can compound total embodied carbon reduction significantly for this hotel. This principle applies consistently regardless of property size or setting.

**85. B** — Increasing cycles of concentration allows water to recirculate through the cooling system more times before being discharged as blowdown, directly decreasing the total blowdown volume required for a given amount of makeup water. This is the primary mechanism behind this credit's meaningful, demonstrated water savings for the shuttle bay. This holds true across every hospitality and lodging type tested here.

**86. A** — Direct sightlines to a landscaped courtyard specifically address quality views, one of the four components consolidated into Occupant Experience under LEED v5, rewarding visual connection to the outdoors independent of thermal comfort or humidity control, which address entirely different aspects of this same consolidated credit. This distinction is frequently tested across multiple LEED domains.

**87. C** — LEED explicitly directs project teams to prioritize alternative water sources requiring the least treatment first, favoring sources like condensate over more treatment-intensive alternatives wherever multiple technically eligible options genuinely exist for the motel's cooling equipment. Physical proximity and volume alone are not the determining factors here. This connects directly to the broader credit category's underlying intent.

**88. D** — Identifying top embodied carbon hotspot materials before pursuing any reduction is precisely the intentionally baseline-only role of Quantify and Assess Embodied Carbon, requiring GWP calculations before the separate, optional Reduce Embodied Carbon credit is pursued. Fundamental Commissioning and Minimized Site Disturbance address entirely unrelated prerequisites. This shared logic runs consistently across several related pathways.

**89. B** — Reducing nighttime light disruption to a nearby residential neighborhood is most directly addressed by combining Light Pollution Reduction, limiting trespass and uplight, with Biodiverse Habitat, protecting sensitive wildlife-supporting conditions. Neither combination involving water metering, accessibility, or thermal load credits addresses this specific concern here. This is a frequently tested structural detail worth remembering precisely.

**90. D** — Genuine barrier-free access with ramps and seating open to all guests specifically evaluates under Accessible Outdoor Space, which LEED v5 updated to require explicit barrier-free access beyond simple square footage. Rainwater Management, Heat Island Reduction, and Light Pollution Reduction address entirely unrelated Sustainable Sites concerns instead. No comparable evidence exists through any of the alternative options.

**91. A** — Whole-Building Life-Cycle Assessment is generally the best pathway for a team with strong in-house life-cycle assessment expertise, since it captures credit for the most comprehensive range of reduction strategies across a material's full life cycle. Skipping the credit or relying on marketing claims squanders the team's genuine existing capability. Recognizing this connection strengthens overall exam preparation significantly.

**92. C** — Verifying installed energy systems match design intent before staff occupy the facility is precisely governed by Fundamental Commissioning, the mandatory prerequisite requiring OPR and BOD review alongside verification of energy-related system installation. Minimized Site Disturbance,

Fundamental Refrigerant Management, and Water Metering address entirely unrelated concerns. This principle applies consistently regardless of property size or setting.

**93. D** — Garden shading through tree canopy rather than structural coverings specifically rewards Heat Island Reduction, which evaluates multiple strategies including reflective surfaces, green roofs, and both structural and vegetative covered parking approaches. Rainwater Management, Light Pollution Reduction, and Biodiverse Habitat address entirely unrelated site-related concerns instead. This holds true across every hospitality and lodging type tested here.

**94. A** — A site where daily amenities are reachable on foot, independent of transit frequency, specifically satisfies Walkable Location, distinguishing it clearly from Access to Transit, which requires documented nearby transit service specifically as its own qualifying criterion. Surrounding Density and Reduce Parking address entirely different site qualities instead. This distinction is frequently tested across multiple LEED domains.

**95. B** — Reduce Parking paired with genuine Access to Transit qualification reflects a coherent, mutually reinforcing strategy, since real transit accessibility makes reduced parking demand practically realistic for occupants. Maximizing parking supply or offering unlimited free parking both work directly against this coordinated reduction strategy's underlying intent instead. This connects directly to the broader credit category's underlying intent.

**96. C** — Identifying which specific materials contribute most to total embodied carbon is precisely the intentionally baseline-only role of Quantify and Assess Embodied Carbon, requiring GWP calculations before the separate, optional Reduce Embodied Carbon credit is pursued. Fundamental Commissioning and Minimized Site Disturbance address entirely unrelated prerequisites instead. This shared logic runs consistently across several related pathways.

**97. D** — Combining on-site generation, an off-site PPA, and REC purchases together is generally the strongest strategy for reducing reliance on fossil-fuel-generated electricity, since these layered, complementary approaches let a facility address a larger share of its total footprint than any single strategy pursued in isolation could achieve. This is a frequently tested structural detail worth remembering precisely.

**98. B** — Recycled-content countertops typically require reprocessing existing material, which generally demands less energy than mining and refining virgin stone from scratch, producing a meaningful embodied carbon reduction relative to virgin material. This is distinct from automatic Platinum qualification or eliminating EPD documentation requirements, neither of which this achieves. No comparable evidence exists through any of the alternative options.

**99. C** — Reducing contaminants from off-gassing display shelving falls under Low-Emitting Materials, which LEED v5 relocated from Indoor Environmental Quality into Materials and Resources. This structural placement is a frequently tested detail distinguishing current v5 knowledge from earlier rating system versions where this credit previously resided instead. Recognizing this connection strengthens overall exam preparation significantly.

**100. A** — Deliberate, upstream decisions consistently outperform reactive, late-stage fixes, whether reducing peak load before equipment selection, qualifying refrigerants under defined thresholds, or timing renewable energy commitments against genuine measured data. This principle connects these seemingly distinct concepts throughout hospitality and lodging scenarios represented in this exam. This principle applies consistently regardless of property size or setting.