

Quiz #6 - LEED Green Associate GA02 – Pgs. 257-258 GA09 – Pgs. 31-50 GBLCC Section 4: Green Building Core Concepts and Application Strategies: Sustainable Sites

- 1. Which of these is found in significant quantity in rainwater runoff from roads, parking lots, and other hardscapes?
  - A. Sediments from soil
  - B. Chemicals
  - C Petroleum
  - D. Fertilizer
  - E. Radon
- 2. Which LEED BD+C credit uses the BUG method?
  - A. SS Credit Site Development Protect and Restore Habitat
  - B. EQ Credit Low-Emitting Materials
  - C. EQ Credit Daylight
  - D SS Credit Light Pollution Reduction
- 3. LID is an abbreviation for which of these development methods used to minimize environmental impacts due to construction?
  - A. Low Impact Design
  - B. Light Industrial Design
  - C Low Impact Development
  - D. Low Intensity Development
- 4. The LEED rating systems Sustainable Sites (SS) credit category addresses which of these project site design and maintenance topics? [Choose three]
  - A Heat Island effect
  - B. Access to Quality Transit
  - C. Bicycle Facilities
  - Site Assessment
  - E Rainwater Management
- 5. What type of project site landscaping method requires little or no irrigation?
  - A. Native and Adaptive
  - B. Intensive
  - C. Extensive
  - D Xeriscaping
  - E. Integrated
- 6. What type of hardscape surface does not allow rainwater to infiltrate? [Choose two]
  - A. Open-grid paving used for a patio
  - B Asphalt concrete parking lot
  - C Stone walkway
  - D. Crushed stone with vegetation
  - E. Ground cover that uses nonnative vegetation

- 7. To prevent light pollution and earn SS Credit: Light Pollution Reduction what must be avoided? [Choose three]
  - (A) Up-lighting
  - B. Path lighting
  - C Glare
  - D Trespass
- 8. What is the best strategy for reducing heat island and managing rainwater runoff?
  - A. Cistern
  - B. Vegetated roof
  - C minimize site imperviousness
  - D. Wetlands
  - E. Mulch
- 9. To restore the solar reflectance of hardscape surfaces on a site what should building maintenance do?
  - A. Paint it white
  - B. Clean the surfaces with chemicals
  - C. Power wash the surface to decrease the SR value
  - D Power wash the surface to increase the SR value
- 10. What can rainwater collected on-site be used for? [Choose four]
  - A Landscape irrigation
  - B Custodial uses
  - C. Swimming pools
  - D. Laundry
  - E Toilet flushing
  - (F) Cooling towers
- 11. Which of these strategies can help improve a sites design for rainwater management? [Choose two]
  - A Vegetated roof
  - B. Impervious surfaces
  - C. Low sloped roofs with gutters
  - D Porous pavement
- 12. Which of these landscape features retain rainwater and slow the rate of runoff? [Choose three]
  - A. Vegetated roof
  - B. Porous pavement
  - C. Ponds
  - D Bioswales
  - Dry ponds
  - F Rain gardens
- 13. What is the definition of Heat Island Effect?
  - A. The ratio of the radiation emitted by a surface to the radiation emitted by a black body at the same temperature
  - B. An decrease in air temperature in a developed area compared with an undeveloped area
  - C. A measure of a material's ability to reject solar heat, as shown by a small temperature rise
  - D An increase in air temperature in a developed area compared with an undeveloped area

- 14. Which of these are used to calculate the solar reflectivity index of a material? [Choose two]
  - A Reflectivity
  - B. Heat gain
  - C. U-factor
  - D Emissivity
  - E. Solar heat gain coefficient (SHGC)
- 15. Which of these should project teams install for surfaces in order to reduce the heat island effect?
  - A. Materials with a low SRI or a high SR
  - B. Materials with a low SRI or low SR
  - C. Materials with a high SRI or a low SR
  - D Materials with a high SRI or a high SR
- 16. To achieve SS Credit: Heat Island Reduction what percentage of parking spaces must be under cover?
  - A. 25%
  - B. 50%
  - C 75%
  - D. 100%
- 17. For SS Prerequisite: Construction Activity Pollution Prevention to reduce pollution from construction activities what must the plan control? [Choose three]
  - Airborne dust
  - B. Site disturbance within 40 feet of the project boundary
  - C Soil erosion
  - D Waterway sedimentation
  - E. Trees in place at the time of construction
- 18. What must the control plan for SS Prerequisite: Construction Activity Pollution Prevention conform to?
  - A. 2012 U.S. Environmental Protection Agency (EPA) Construction General Permit (CGP)
  - B. 2012 U.S. Environmental Protection Agency (EPA) Construction General Permit (CGP) or local equivalent
  - C 2012 U.S. Environmental Protection Agency (EPA) Construction General Permit (CGP) or local equivalent, whichever is more stringent
  - D. Local code
- 19. SS Prerequisite: Environmental Site Assessment applies to which type of projects? [Choose two]
  - A Healthcare
  - B. Hospitality
  - C. Retail
  - D. Core and Shell
  - E Schools
- 20. If it is suspected that a project site is contaminated what is the next step the project team must take?
  - A. Hire remediation experts
  - B. Contact the EPA for a site visit
  - C. Inform the owner
  - D Conduct a Phase II Environmental Site Assessment
  - E. Remediate the site to meet local standards

- 21. At what time during the planning and design phase should project teams evaluate sustainable options to satisfy SS Credit: Site Assessment?
  - A. After the initial review by the owner
  - Before design
  - C. Schematic design
  - D. Construction documents
- 22. Which of these should be included in the site survey for SS Credit: Site Assessment? [Choose two]
  - A Proximity to major sources of pollution
  - B Monthly precipitation and temperature ranges
  - C. Building program and total occupancy
  - D. Local Land Trust Alliance
- 23. To achieve SS Credit: Site Development Protect or Restore Habitat what type of vegetation must be used to restore previously disturbed areas? [Choose two]
  - Adapted vegetation
  - B. Local wildflowers
  - C. Groundcover that permits infiltration of rainwater runoff
  - D Native vegetation
  - E. Turf grass for playing fields
- 24. Which of these site elements could help projects to achieve SS Credit: Open Space? [Choose two]
  - A Garden space with benches
  - B. Pathway lighting
  - C. Open-grid paving parking lot
  - D. Playing field with turf grass
  - E Trellis with vegetation
- 25. Which of these are concerns addressed by SS Credit: Rainwater Management? [Choose two]
  - A. Restore land to its natural state
  - B. Conservation of greenfield area on the site
  - C Reduce site runoff volume
  - D Mimic natural hydrology of the site
- 26. Which of these are nonroof measures for achieving SS Credit: Heat Island Reduction?
  - A. Replace paving areas with artificial turf
  - B Trellises with vegetation
  - C. Install vegetated planters on the roof
  - D. Bioswales
  - E. Open-grid pavement system (25% unbound)
- 27. What unit is used to measure a luminaire's uplight when using the calculation method for SS Credit: Light Pollution Reduction?
  - A. Footcandle
  - B. Candela
  - C Lumen
  - D. Watts

- 28. What is light trespass?
  - A. Waste light from building sites that produces glare, is directed upward to the sky, or is directed off the site.
  - B Obtrusive illumination that is unwanted because of quantitative, directional, or spectral attributes.
  - C. The useful span of operation of a source of artificial light, such as bulbs.
  - D. A measurement of light striking a surface
- 29. Which of these credits is used to educate tenants in implementing sustainable design and construction features in their tenant improvement build-outs?
  - A. SS Credit: Site Master Plan
  - B. SS Credit: Site Assessment
  - C. SS Credit: Joint Use of Facilities
  - **D** SS Credit: Tenant Design and Construction Guidelines
- 30. Where must places of respite be located?
  - A. Existing places on the hospital campus
  - B. Outdoors
  - Outdoors, or be located in interior conditioned spaces
  - D. Indoors
  - E. Within 200 yards of a functional building entrance
- 31. Exterior access used to achieve SS Credit: Direct Exterior Access and SS Credit: Places of Respite must be located how far from a smoking area?
  - A. The Hospital campus cannot permit smoking anywhere on the site
  - B. Areas must be 200 yards of a smoking area
  - C. Areas must be located more than 100 feet from a smoking area
  - D Areas must be within 25 feet of a smoking area
- 32. LEED BD+C Schools projects wanting to achieve SS Credit: Joint Use of Facilities can meet the requirements by sharing what types of building spaces in the school with the general public? [Choose two]
  - A. Media center
  - B Classrooms
  - C. Swimming pool
  - D Gymnasium
  - E. Health clinic