

LEED-NC V 2.1 EXAM PRACTICE EXAM

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NOTE:

Dr. Bryan is currently developing a mock exam for the LEED-NC V2.2 Exam. If possible, when taking the 2.2 exam, please try to remember one question from the exam and email him at harvey.bryan@asu.edu. This information will help him develop a new exam.

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SCHOOL OF ARCHITECTURE ARIZONA STATE UNIVERSITY TEMPE, AZ
ATE 598 Environmental Rating Systems for Building Prof. Harvey Bryan • ARCH 301
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END-TERM EXAM

NAME _____

You will have two hours to complete this exam. Pace yourself according to points in each section. Each question is worth 1 point. Relax and do your best.

SECTION I – Knowledge of LEED Credit Intents and Requirements (27 questions)

1. The water efficient landscaping calculation as presented in the LEED Reference Guide for WE Credits 1.1 & 1.2, Water Efficient Landscaping, includes which of the following three items? (Choose three)
 - A. _____ Imperviousness Coefficient
 - B. _____ Species Factor
 - C. _____ Runoff Coefficient
 - D. _____ Microclimate Factor
 - E. _____ Density Factor
 - F. _____ Saturation Factor

2. Establishing a baseline case is necessary to demonstrate compliance with the requirements of which three credits? (Choose three)
 - A. _____ WE Credit 2, Innovative Wastewater Technologies
 - B. _____ EQ Credit 6.1, Controllability of Systems
 - C. _____ EA Credit 2, Optimize Energy Performance
 - D. _____ WE Credit 3.1, Water Use Reduction
 - E. _____ EA Prerequisite 2, Minimum Energy Performance

3. Which three of the following are prerequisites for LEED Certification? (Choose three)
 - A. _____ Erosion & Sedimentation Control
 - B. _____ LEED Accredited Professional
 - C. _____ CFC Reduction in HVAC&R Equipment
 - D. _____ Minimum IAQ Performance
 - E. _____ Ventilation Effectiveness

4. ASHRAE Standards are used to demonstrate compliance with the requirements of which three credits? (Choose three)
- A. _____ EQ Credit 2, Ventilation Effectiveness
 - B. _____ EQ Credit 3.1, Construction IAQ Management Plan
 - C. _____ EQ Credit 8.1, Daylight and Views
 - D. _____ EQ Credit 4.1, Low-Emitting Materials
 - E. _____ EQ Credit 1, Carbon Dioxide Monitoring
5. The purpose of the density radius calculation used in SS Credit 2, Development Density, is to: (Choose one)
- A. _____ define the construction footprint.
 - B. _____ define the distance to the nearest bus or rail stop.
 - C. _____ determine the properties to be included in the development density calculation.
 - D. _____ determine the distance that includes at least 60,000 sq.ft. of building area.
6. Which LEED concern requires a separation between design/construction management team and the entity reviewing the requirements? (Choose one)
- A. _____ EA Credit 1, Optimize Energy Performance
 - B. _____ EA Credit 5, Measurement & Verification
 - C. _____ EQ Credit 3.1 – 3.2, Construction IAQ Management Plan
 - D. _____ MR Credit 7, Certified Wood
 - E. _____ EA Prerequisite 1, Fundamental Building System Commissioning
7. Which three of the following are required to be measured under EA Credit 5, Measurement & Verification? (Choose three)
- A. _____ Lighting System
 - B. _____ Boiler Efficiency
 - C. _____ Daily Building Occupancy
 - D. _____ Chiller Efficiency
 - E. _____ Outdoor Drybulb Temperature
8. Which three of the following are required to be separated (at a minimum) for MR Prerequisite 1, Storage & Collection of Recyclables? (Choose three)
- A. _____ Paper
 - B. _____ Aluminum
 - C. _____ Metal
 - D. _____ Glass
 - E. _____ Ferrous Metal
 - F. _____ PVC

9. EQ Credits 8.1 & 8.2, Daylight and Views require a minimum Daylight Factor of _____ over _____ of occupied space and direct line of sight to vision glazing from _____ of occupied space.
- A. _____ 1%, 50%, 90%
 B. _____ 2%, 75%, 90%
 C. _____ 2%, 90%, 90%
 D. _____ 1%, 75%, 90%
 E. _____ 2%, 50%, 90%
10. Which three of the following are considered acceptable under MR Credit 6, Rapidly Renewable Materials? (Choose three)
- A. _____ Homasote
 B. _____ Cardboard
 C. _____ Wool Carpet
 D. _____ Bamboo Flooring
 E. _____ Cotton batt insulation
 F. _____ Certified wood
11. Which three of the following are all required to be achieved under SS Credit 1, Site Selection? (Choose three)
- A. _____ Do not develop on land within 100 feet of a wetland
 B. _____ Do not develop on prime farmland
 C. _____ Do not develop on land lower than 5 feet below the 100-year flood plane
 D. _____ Do develop on a brownfield site
 E. _____ Do not develop on land lower than 5 feet above the 100-year flood plane
 F. _____ Do not develop on land defined as a virgin forest
12. What two Credits require “line of sight” calculations to be performed? (Choose two)
- A. _____ SS Credit 2, Urban Redevelopment
 B. _____ SS Credit 8, Light Pollution Reduction
 C. _____ EQ Credit 6.1, Controllability of Systems
 D. _____ EQ Credit 8.1, Daylight & Views
 E. _____ EQ Credit 8.2, Daylight & Views

13. Which two of the following strategies would be appropriate to qualify for the ID Credit 1, Innovation in Design? (Choose two)
- A. _____ Sales representative informs you that their product qualifies for the ID Credit
 - B. _____ Include those strategies that greatly exceed the requirements of an Existing LEED Credit
 - C. _____ You heard that another project received an ID Credit for using this Strategy
 - D. _____ A strategy not addressed by any existing LEED Credit and has a Significant environmental and occupant benefit
 - E. _____ Any strategy that can prove environmental benefits by means of a Life cycle analysis
14. Which three of the following are required tasks under EA Credit 3, Additional Commissioning? (Choose three)
- A. _____ have an extended warranty in place for all major equipment
 - B. _____ develop a recommissioning manual
 - C. _____ conduct a review prior to Construction Documents
 - D. _____ have a five-year contract in place with an commissioning authority
 - E. _____ review contractor submittals relative to systems being commissioned
15. EQ Credit 6.1, Controllability of System, requires one operable window and one lighting control zone per _____ SF of occupied perimeter zone (15' wide): (Choose one)
- A. _____ 100
 - B. _____ 150
 - C. _____ 200
 - D. _____ 250
 - E. _____ 300
16. Which of the following are required under EQ Credit 5, Indoor Chemical & Pollutant source Control? (Choose three)
- A. _____ Employ a permanent entryway system to capture dirt, particulars, etc
 - B. _____ Where chemical use occurs, provide deck-to-deck partitions and negative pressure exhaust system
 - C. _____ Establish a green housekeeping program for the building
 - D. _____ Have a policy in place that no hazard chemicals are to be used in the building
 - E. _____ Provide separate drains plumbed appropriately where water and chemical concentrate mixing occurs

17. EQ Credits 4.1 – 4.4, Low-Emitting Materials address three of the following items? (Choose three)
- A. _____ VOC from wall and roof insulation
 - B. _____ Lead from paint and coatings
 - C. _____ VOC from adhesives and sealants
 - D. _____ Radon from concrete
 - E. _____ VOC from paints and coatings
 - F. _____ VOC from carpets and cushions
18. MR Credit 5.1 & 5.2, Regional Materials, requires a minimum of _____ of building material to be manufactured and _____ to be extracted, harvested, or recovered within a radius of _____ miles of a project. (Choose one)
- A. _____ 20%, 50%, 500
 - B. _____ 20%, 75%, 500
 - C. _____ 25%, 50%, 500
 - D. _____ 20%, 50%, 750
 - E. _____ 25%, 50%, 750
19. Which of the following requires a chain-of-custody document? (Choose one)
- A. _____ MR Credit 1.1, Building Reuse
 - B. _____ MR Credit 4.1, Recycled Content
 - C. _____ MR Credit 7, Certified Wood
 - D. _____ EQ Credit 5, Indoor Chemical & Pollutant Source Control
 - E. _____ MR Credit 3.1, Resource Reuse
20. Which two credits might require the design of an area with impermeable deck-to-deck partitions that has a separate outdoor exhaust system that operates at a negative pressure of at least 7 Pa compared to surrounding spaces? (Choose two)
- A. _____ EQ Credit 1, Carbon Dioxide (CO₂) Monitoring
 - B. _____ EQ Prerequisite 2, Environmental Tobacco Smoke Control
 - C. _____ EQ Prerequisite 1, Minimum IAQ Performance
 - D. _____ EQ Credit 4.1 – 4.4, Low-Emitting Materials
 - E. _____ EQ Credit 5, Indoor Chemical & Pollutant Source Control

21. Which three of the following credits requires performance calculations? (Choose three)
- A. _____ EA Credit 1, Optimize Energy Performance
 - B. _____ WA Credits 3.1 – 3.2, Water Use Reduction
 - C. _____ MR Credits 4.1 – 4.2, Recycled Content
 - D. _____ EQ Credits 4.1- 4.4, Low-Emitting Materials
 - E. _____ EQ Credits 6.1 – 6.2, Controllability of Systems
 - F. _____ EA Credit 4, Ozone Protection
22. Which three of the following credits requires third party certification of products? (Choose three)
- A. _____ MR Credit 7, Certified Wood
 - B. _____ WE Credits 3.1 – 3.2, Water Use Reduction
 - C. _____ EA Credit 6, Green Power
 - D. _____ EQ Credit 1, Carbon Dioxide (CO₂) Monitoring
 - E. _____ EA Credits 2.1 – 2.3, Renewable Energy
 - F. _____ EQ Credits 4.1- 4.4, Low-Emitting Materials
23. Reviewing 100-years flood plane maps: (Choose one)
- A. _____ SS Credit 5, Reduced Site Disturbance
 - B. _____ SS Credit 6, Stormwater Management
 - C. _____ SS Credit 1, Site Selection
 - D. _____ WE Credits 3.1 – 3.2, Water Use Reduction
 - E. _____ SS Prerequisite 1, Erosion & Sedimentation Control
24. Which three of the following can be used to achieve EA Credit 6, Green Power? (Choose three)
- A. _____ Hydropower
 - B. _____ Windpower
 - C. _____ Solar Energy
 - D. _____ Nuclear Power
 - E. _____ Biomass
 - F. _____ Distributed Power
25. Which three of the following carry the most points? (Choose three)
- A. _____ ID Innovation in Design
 - B. _____ MR Building Reuse
 - C. _____ EQ Controllability of System
 - D. _____ MR Recycled Content
 - E. _____ EQ Low-Emitting Materials
 - F. _____ SS Alternative Transportation

26. Having a MERV 13 filtration media would help achieve points in what credit areas? (Choose two)
- A. _____ EQ Credit 3.1, Construction IAQ Management Plan
 - B. _____ EQ Prerequisite 1, Minimum IAQ Performance
 - C. _____ EQ Prerequisite 2, Environmental Tobacco Smoke Control
 - D. _____ EA Credit 4, Ozone Protection
 - E. _____ EQ Credit 3.2, Construction IAQ Management Plan
27. There are two levels of requirements (a Prerequisite and a Credit) in what area? (Choose one)
- A. _____ WE Water Use Reduction
 - B. _____ MR Storage & Collection of Recyclables
 - C. _____ EQ Controllability of System
 - D. _____ EA CFC Reduction in HVAC&R Equipment
 - E. _____ EA Building Commissioning

SECTION II – Coordinate Project and Team (17 questions)

1. A Fortune 500 company is planning to build a new office building. The last office building they built had some indoor air quality problems and the president wants to avoid such problems this time around.

What three Credits would be most helpful in achieving this concern? (Choose three)

- A. _____ EQ Credit 2, Ventilation Effectiveness
 - B. _____ EA Credit 5, Measurement & Verification
 - C. _____ EQ Credit 6.1, Controllability of Systems
 - D. _____ EA Credit 8.1, Daylight & Views
 - E. _____ EA Prerequisite 3, CFC Reduction in HVAC&R Equipment
 - F. _____ EQ Credits 4.1 – 4.4, Low-Emitting Material
2. In high perimeter office buildings, which three of the following credits work best? (Choose three)
- A. _____ EQ Credit 8.1, Daylight & Views
 - B. _____ EQ Credit 7.1, Thermal Comfort
 - C. _____ EQ Credit 2, Ventilation Effectiveness
 - D. _____ EQ Credit 6.1, Controllability of Systems
 - E. _____ EQ Credit 6.2, Controllability of Systems
 - F. _____ ID Credit 1, Innovation in Design

3. EQ Credit 7.1, Thermal Comfort, references which ASHRAE Standard? (Choose one)

A. _____ ASHRAE 62-1999
 B. _____ ASHRAE 129-1997
 C. _____ ASHRAE 90.1-1999
 D. _____ ASHRAE 55-1992

4. A large Stadium project is being planned for a west coast city. The primary structure could be either steel or concrete.

Which three of the following credits could help in making this material selection? (Choose three)

A. _____ MR Credit 1, Building Reuse
 B. _____ MR Credit 2, Construction Waste Management
 C. _____ MR Credit 3, Resource Reuse
 D. _____ MR Credit 5, Local/Regional Materials
 E. _____ MR Credit 6, Rapidly Renewable Materials
 F. _____ ID Credit 1, Innovation in Design

5. A large brick warehouse is being renovated for adaptive reuse. It has been determined that new windows and a non-structural roof would be needed. Not much of the interior walls will be able to be reused, however a local company will be donating a reclaimed wood floor.

Based on the above information, which three of the following credits might be applicable to this project? (Choose three)

A. _____ SS Credit 3, Brownfield Redevelopment
 B. _____ MR Credit 7, Certified Wood
 C. _____ MR Credit 1.1, Building Reuse
 D. _____ MR Credit 1.2, Building Reuse
 E. _____ MR Credit 1.3, Building Reuse
 F. _____ MR Credit 3.1, Resource Reuse

6. You are designing a large project in a dense downtown. You perform the SS Credit 2, Development Density radius calculation for this project and the radius calculation and circle you draw on your site plan does not fall beyond your property lines.

What does this mean? (Choose one)

- A. _____ project automatically receives SS Credit 2
 - B. _____ project is above 100,000 SF per acre
 - C. _____ adjacent property is above 60,000 SF per acre
 - D. _____ project will increase adjacent development density
 - E. _____ you will only have to perform the development density calculation for your property
7. The Energy Policy Act of 1992 is used as a benchmark for what two credits? (Choose two)
- A. _____ EA Credit 1, Optimize Energy Performance
 - B. _____ EA Credit 2, Renewable Energy
 - C. _____ WE Credit 2, Innovative Wastewater Technology
 - D. _____ SS Credit 6, Stormwater Management
 - E. _____ WE Credit 3.1, Water Use Reduction
8. The U.S. National Park Service wants you to design a small visitors center in a very remote part of the Grand Canyon National Park.
- Based on the above information, which three credits might be very applicable for this project? (Choose three)
- A. _____ MR Credit 5.1 – 5.2, Local/Regional Materials
 - B. _____ MR Credit 7, Certified Wood
 - C. _____ EA Credit 2.1 – 2.2, Renewable Energy
 - D. _____ EQ Credit 1, Carbon Dioxide (CO₂) Monitoring
 - E. _____ EA Credit 5, Measurement & Verification
 - F. _____ WE Credit 2, Innovative Wastewater Technologies
9. As a LEED Accredited Professional your firm has asked you to direct a LEED project. What would be the best management tool to accomplish this task? (Choose one)
- A. _____ distribute the LEED Reference Package to all team members
 - B. _____ distribute the LEED Letter Template to key team members
 - C. _____ hold monthly LEED project meetings with the entire team
 - D. _____ have weekly conference calls with the entire team
 - E. _____ ask all team members to become USGBC members
10. You are starting a LEED project for a suburban Houston office building. You begin with some early massing models and orientation studies and you know shading and daylighting are going to be major concerns. Undertaking what early credit investigation would help you to generate data that could be used for such comparisons? (Choose one)

- A. _____ EQ Credit 8, Daylight & Views
 B. _____ EQ Credit 7, Thermal Comfort
 C. _____ SS Credit 1, Site Selection
 D. _____ EA Credit 1, Optimize Energy Performance
 E. _____ SS Credit 2, Development Density
11. To get MR Credit 7, Certified Wood, it would require wood products to be certified by what organization? (Choose one)
- A. _____ Forest Stewardship Council (FSC)
 B. _____ Forest Industries Council (FIC)
 C. _____ Center for Resource Solutions (CRS)
 D. _____ Environmental Protection Agency (EPA)
 E. _____ Wood Products Council (WPC)
12. To get EA Credit 6, Green Power, it would require a two-year contract from a power producer that is certified by what organization? (Choose one)
- A. _____ Environmental Protection Agency (EPA)
 B. _____ National Renewable Energy Laboratory (NREL)
 C. _____ Bonneville Power Authority (BPA)
 D. _____ Green Peace
 E. _____ Center for Resource Solutions (CRS)
13. A speculative office park developer is very concerned about the cost of using LEED. You inform this developer that you are very knowledgeable about LEED and can generate credit options as a function of cost. What would be your three least costly LEED credits? (Choose three)
- A. _____ ID Credit 2, LEED Accredited Professional
 B. _____ EA Credit 3, Additional Commissioning
 C. _____ WE Credit 2, Innovative Wastewater Technologies
 D. _____ EA Credit 2.1, Renewable Energy
 E. _____ WE Credit 3.1, Water Use Reduction
 F. _____ EQ Credit 4.2, Low Emitting Materials
14. The justification for EA Prerequisite 3, CFC Reduction in HVAC&R Equipment is governed by what international agreement? (Choose one)
- A. _____ Kyoto Treaty
 B. _____ Montreal Treaty
 C. _____ Rio Treaty
 D. _____ Helsinki Treaty
 E. _____ Hanover Principles

15. A school district is interested in using LEED for a new school but is very concerned about not having it open by the Fall and will drop LEED if construction is delayed in anyway. What three credits might you avoid using on this project? (Choose three)
- A. _____ EQ Credit 3.2, Construction IAQ Management Plan
 B. _____ SS Credit 5.2, Reduced Site Disturbance
 C. _____ EA Credit 3, Additional Commissioning
 D. _____ EA Credit 6, Green Power
 E. _____ EQ Credit 4.1, Low-Emitting Materials
 F. _____ WE Credit 3.1, Water Use Reduction
16. The International Performance Measurement and Verification Protocol (IPMVP) includes four Options (A, B, C and D). However LEED does not believe one Option satisfies the requirements of EA Credit 5, Measurement & Verification. The remaining options (____, ____, & ____) do satisfy the LEED requirement.
- A. _____ A, B, & D
 B. _____ B, C, & D
 C. _____ A, C, & D
 D. _____ A, B, & C
17. For a large floor plate office building, which of the following credits work best? (Choose three)
- A. _____ EQ Credit 8.1, Daylight & Views
 B. _____ EQ Credit 6.1, Controllability of Systems
 C. _____ EQ Credit 6.2, Controllability of Systems
 D. _____ EQ Credit 1, Carbon Dioxide (CO₂) Monitoring
 E. _____ EQ Credit 7.2, Thermal Comfort
 F. _____ ID Credit 1, Innovation in Design

SECTION III – Implement LEED Process (15 Questions)

1. Where is the first place one should look to answer a question concerning LEED? (Choose one)
- A. _____ The LEED Reference Guide
 B. _____ The LEED 800 Help-Line
 C. _____ The Credit Interpretation Rulings
 D. _____ A LEED Accredited Professional

2. What are the first two tasks that the project design team needs to do in organizing for a LEED Project? (Choose two)
- A. _____ Register the project with USGBC
 - B. _____ Generate a narrative describing the project
 - C. _____ Organize building plans and specifications for submittal
 - D. _____ Start documenting the process
 - E. _____ See that key team members are LEED Accredited
3. Three of the following can become USGBC Members? (Choose three)
- A. _____ Environmental concerned individuals
 - B. _____ State, Local, and Federal Agencies
 - C. _____ Universities
 - D. _____ Professional Societies
 - E. _____ Trade Associations
4. A LEED project team will need to submit payments to USGBC at what two times? (Choose two)
- A. _____ start of registration
 - B. _____ completion of the building
 - C. _____ when seeking your first credit interpretation
 - D. _____ start of the certification process
 - E. _____ when you request the LEED plaque
5. Registration of a building project for LEED allows the design team to obtain: (Choose one)
- A. _____ A LEED Welcome Packet
 - B. _____ The LEED Reference Guide
 - C. _____ Unlimited Free Credit Interpretation Rulings
 - D. _____ Access to the LEED 800 Help-Line
 - E. _____ Access to the registered project only web-site
6. During the LEED certification process the USGBC also charges for the three following services: (Choose three)
- A. _____ for each credit that is appealed
 - B. _____ after two credit interpretations
 - C. _____ for the LEED plaque
 - D. _____ use of previously posted credit interpretations
 - E. _____ use of the LEED Letter Template

7. Since USGBC is constantly updating LEED, it is important that you _____.
(Choose one)
- A. _____ periodically visit the LEED web-site
 - B. _____ join the USGBC in order to receive the LEED electronic newsletter
 - C. _____ periodically attend LEED Workshops
 - D. _____ attend the USGBC Annual Green Building Conference
 - E. _____ join a local chapter of the USGBC
8. Three of the following are acceptable LEED documentation for green products?
(Choose three)
- A. _____ product cut-sheets
 - B. _____ MSDS
 - C. _____ specifications
 - D. _____ a producer's membership in the USGBC
 - E. _____ a USGBC logo on product literature
9. In submitting a credit interpretation it would be to the advantage of the project team to also _____. (Choose one)
- A. _____ propose potential solutions to the problem in their request
 - B. _____ show the expertise of your project team
 - C. _____ show that your solution is very innovative
 - D. _____ support the solution with detailed calculations
 - E. _____ inform the reviewer that other projects have also done this
10. The LEED Letter Templates are designed to do what? (Choose three)
- A. _____ is a dynamic tracking and documentation tool
 - B. _____ allows a design team to electronically submit a LEED project to USGBC
 - C. _____ documents if a credit has been adequately fulfilled
 - D. _____ becomes part of the Credit Interpretation Ruling
 - E. _____ some credit Templates include embedded spreadsheet calculations
11. Why is it usually a good idea to achieve a couple of credits beyond your target certification level threshold? (Choose one)
- A. _____ not all LEED credits are valued the same
 - B. _____ in case a credit is rejected by the USGBC Technical Reviewers
 - C. _____ it can save on project cost by dropping the more expensive credits at the last moment
 - D. _____ it can be used on your next project
 - E. _____ it can be used in case a Prerequisite item is rejected

12. Communication with you LEED Certification Manager should primarily be done via _____. (Choose one)
- A. _____ e-mail
 - B. _____ telephone
 - C. _____ U.S.Mail or express mail services
 - D. _____ member's only portion on the USGBC Web-Site
 - E. _____ a combination of all the above
13. The Certification Level threshold for Certified, Silver, Gold and Platinun are:
- A. _____ 24, 32, 38, 69
 - B. _____ 26, 33, 39, 52
 - C. _____ 25, 35, 45, 55
 - D. _____ 22, 30, 38, 52
14. After receiving your LEED Certification the USGBC will: (Choose one)
- A. _____ send a representative to the building dedication
 - B. _____ publish the project's achievements via news releases, web-sites, etc.
 - C. _____ help market the project
 - D. _____ organize open house tours of the building
 - E. _____ help find funding for a post-occupancy study of the building
15. While LEED Letter Templates are the bulk of what needs to be submitted to the USGBC for LEED project certification. What still needs to be generated and may also be requested in support of any individual credit? (Choose one)
- A. _____ project description and transmittal letters from the owner
 - B. _____ building plans and specifications
 - C. _____ the original request for proposal (RFP) and scope of work (SOW)
 - D. _____ notebooks organized and documenting each LEED credit
 - E. _____ all change orders

SECTION IV – Verify, Participate In, and Perform Technical Analyses Required for LEED Credits (14 questions)

1. A project team is pursuing a strategy to meet the requirements of SS Credit 3, Brownfield Redevelopment.

Which two items would the civil or environmental engineer consider generating to meet this credit? (Choose two)

- A. _____ Provide documentation of site contamination
- B. _____ Perform geo-technical tests as well as lab reports on all contamination found
- C. _____ Document application to the EPA Brownfield Clear-Fund
- D. _____ Provide letters from appropriate regulatory agency confirming that the site is classified as a brownfield

2. The project team is designing an office building to achieve 30% Water Use Reduction.

What information is needed to calculate the benchmark that will be used to gage WE Credit 3.2, Water Use Reduction? (Choose three)

- A. _____ Daily uses
 - B. _____ Annual rainwater
 - C. _____ Flow rate of fixtures
 - D. _____ Graywater use rates
 - E. _____ Occupancy
 - F. _____ Plant needs
3. In which area would a project receive credit if it used a photoelectric daylight sensor to control the energy from the electric lights? (Choose one)
- A. _____ EQ Credit 8.1, Daylight & Views
 - B. _____ EA Credit 1, Optimize Energy Performance
 - C. _____ EA Credit 5, Measurement & Verification
 - D. _____ SS Credit 8, Light Pollution Reduction
 - E. _____ EA Credit 6, Green Power

4. The project team is pursuing several points under EA Credit 1, Optimize Energy Performance.

Which two might the LEED Accredited Profession undertake? (Choose two)

- A. _____ determine the building's baseline energy use from the EPA's Energy Star -- Energy Target web-site
- B. _____ determine the building's baseline envelope properties from Appendix B in ASHRAE 90.1-1999
- C. _____ will need to perform at least two energy simulations (baseline and proposed) on the building
- D. _____ perform a Life Cycle Analysis on the result from the Energy Cost Budget Method

5. What Credit area would concern itself with maintaining relative humidity levels between 30% - 60%? (Choose one)

A. _____ EQ Credit 7.1, Thermal Control
 B. _____ EQ Credit 6.1, Controllability of Systems
 C. _____ EA Credit 5, Measurement & Verification
 D. _____ EQ Credit 2, Ventilation Effectiveness
 E. _____ EQ Credit 5, Indoor Chemical & Pollution Source Control

6. The project team is pursuing several points under EQ Credit 4, Low-Emitting Materials.

Which two tasks might the LEED Accredited Professional undertake? (Choose two)

A. _____ inventory all paints, adhesives and sealants that are to be used on the project
 B. _____ if using paints specify oil-based paint whenever possible
 C. _____ develop a project outline specification and include criteria for requiring low-VOC products
 D. _____ if using paint specify non-flat paint whenever possible

7. Donating material to organizations like Habitat for Humanity may help achieve point(s) in what credit area? (Choose one)

A. _____ MR Credit 3.1, Resource Reuse
 B. _____ MR Credit 1.1, Building Reuse
 C. _____ MR Credit 2.1, Construction Waste Management
 D. _____ MR Credit 4.1, Recycled Content
 E. _____ MR Credit 5.1, Local/Regional Materials

8. The project team is design a school of children who have severe asthma and you are very concerned about air quality.

What information needs to be assembled to prepare to undertaking this credit? (Choose three)

A. _____ EPA Reference Standard 1168 – VOC Limits
 B. _____ Green Seal Standard GS-11 – Interior Paints
 C. _____ MSDS for all Certified Wood
 D. _____ Carpet and Rug Institute’s Green Label Testing Program – VOC Limits
 E. _____ Regulation 8, Rule 51, Bay Area Air Quality Management District – Sealant VOC Limits
 F. _____ Vinyl Institute’s Green Product Guidelines

9. Eliminating Halons in a building would help achieve a point in what credit area? (Choose one)
- A. _____ EQ Credit 4, Low-Emitting Materials
 - B. _____ EQ Credit 5, Indoor Chemical & Pollution Source Control
 - C. _____ EQ Credit 3, Construction IAQ Management Plan
 - D. _____ EA Credit 4, Ozone Depletion
 - E. _____ EQ Credit 2, Ventilation Effectiveness
10. Point(s) might be achieved in what Credit area for using organic material as a fuel in a boiler? (Choose one)
- A. _____ EA Credit 2, Renewable Energy
 - B. _____ MR Credit 4, Recycling Content
 - C. _____ MR Credit 3, Resource Reuse
 - D. _____ MR Credit 6, Rapidly Renewable Materials
 - E. _____ EA Credit 6, Green Power
11. A Mechanical Engineer might be responsible for what three LEED Credits? (Choose three)
- A. _____ EQ Credit 2, Ventilation Effectiveness
 - B. _____ WA Credit 2, Innovative Wastewater Technologies
 - C. _____ EQ Credit 8, Daylight & Views
 - D. _____ EQ Credit 7, Thermal Comfort
 - E. _____ EA Credit 6, Green Power
 - F. _____ EQ Credit 4, Low-Emitting Materials
12. Having low or zero ODP would help achieve a point in what category? (Choose One)
- A. _____ Construction IAQ Management Plan
 - B. _____ Minimum IAQ Performance
 - C. _____ Environmental Tobacco Smoke (ETS) Control
 - D. _____ Ozone Depletion
13. What Credit requires the lengthiest technical analysis but can result in the most environmental benefits? (Choose one)
- A. _____ EQ Credit 4, Low-Emitting Materials
 - B. _____ EA Credit 2, Renewable Energy
 - C. _____ EQ Credit 6, Controllability of Systems
 - D. _____ ID Credit 1, Innovation in Design
 - E. _____ EA Credit 1, Optimize Energy Performance

14. Beyond receiving one point, the primary role of the LEED Accredited Professional on any LEED project should be what? (Choose one)
- A. _____ document each LEED Credit
 - B. _____ manage the LEED registration process
 - C. _____ help coordinate and integrate the decision making process of the design team
 - D. _____ work as the advocate to USGBC for the project
 - E. _____ resolve disputes between the various consultants

Answers to ATE 598 LEED Examination

	Section 1	Section 2	Section 3	Section 4
1	BDE	ACF	A	AD
2	ACD	ACD	AD	ACE
3	ACD	D	BCD	B
4	ABE	BCD	AD	BC
5	C	CDF	A	A
6	E	E	ABC	AC
7	ABD	CE	A	C
8	ACD	ACF	ABC	BDE
9	B	B	A	D
10	CDE	D	ACE	A
11	ABE	A	B	ABD
12	BE	E	C	D
13	BD	AEF	B	E
14	BCE	B	B	C
15	C	ABC	D	
16	ABE	B		
17	CEF	CDE		
18	A			
19	C			
20	BE			
21	ABC			
22	ACF			
23	C			
24	BCE			
25	AEF			
26	AE			
27	E			
28				
29				
30				
31				