CEM 162 Spring 2013 QUIZ #2 "Take Home"

True/False

Indicate whether the sentence or statement is true or false.

___ 1. The LEED for Homes rating system is targeted to be used for higher end projects that are built by the top 25% of green building contractors.

___ 2. The City of Santa Cruz’ Green Building Program for residential projects is closely modeled after the USGBC “LEED for Homes” rating system.

___ 3. Contractors are required to provide systems training and Operation & Maintenance manuals at the completion of the project in order to comply with the new CALGreen building codes.

___ 4. One of the new requirements of CALGreen is that all new construction projects need to exceed Title 24 energy code requirements by a minimum of 15%.

___ 5. For a remodel project, the new CALGreen requirements for plumbing fixtures is that they are 20% more efficient than “baseline” fixtures for water usage.

___ 6. According to Building America, a whole-house systems approach can reduce the energy consumption of new houses by as much as 40% with little or no effect on the cost of construction.

___ 7. It is considered good practice to change to utilizing advanced framing techniques in the middle of the construction process because it is such a cost-effective solution.and that it is being considered at the optimal time in the project schedule.

___ 8. Utilizing engineered lumber products such as OSB and laminated wood products is not considered to be an acceptable green building practice because the glue and products used in the lamination process violates the principles of sustainable construction.

___ 9. The “prescriptive” method of complying with CALGreen, Title-24 and other green building codes typically requires the use of detailed energy modeling that is used to document compliance.

___ 10. Exhaust fans used to comply with CALGreen ventilation requirements need to be EnergyStar certified and be controlled by humidity sensors.

___ 11. CALGreen requires that pressure treated and fire-retardent woods used in construction is required to be below 19% moisture level content.

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

___ 12. What minimum percentage reduction in water usage is mandated by CALGreen?
   a. 20%
   b. 24%
   c. 25%
   d. 30%

___ 13. Which of the following methods are utilized to comply with the storm water drainage and retention requirements of CALGreen?
   a. ground water recharge
   b. retention areas
   c. bioswales
   d. all of the above
14. The California Energy Commission (CEC) predicts that how many new homes will be built in California by the year 2020.
   a. 1.4 million  c. 2.6 million
   b. 1.8 million  d. 5.2 million

15. According to BuildItGreen, what percentage of greenhouse gas emissions are contributed to the built environment.
   a. 30%  c. 40%
   b. 35%  d. 50%

16. Which of the following “Building Basics” contributes to the construction of Passive Solar Homes
   a. Orient homes to optimize solar access  d. Improve thermal mass
   b. Reduce solar gain  e. all of the above
   c. Improve cross ventilation

17. CALGreen requires what level of minimum waste diversion for all construction projects
   a. 25%  c. 60%
   b. 50%  d. 75%

18. In the CALGreen residential code, the VOC limit for indoor flooring adhesives is below 75 grams per liter for all of the following products except:
   a. indoor carpets  c. ceramic tile
   b. wood flooring  d. rubber flooring

19. CALGreen became effective as a mandatory Title-24 code measure when
   b. June 2011  d. it still is not mandatory it is a voluntary measure

20. CALGreen “Tier 1 and 2” measures apply to which of these construction projects
   a. all projects- they are minimum code requirements  c. no projects- they are not ready to be implemented
   b. some projects- at the discretion of local building officials  d. all LEED projects

21. For Build-It-Green’s “GreenPointRated” system, name the 2 points that are required for all projects.
22. Name the 3 “Overarching Principles of Green Building” in BuildItGreen’s rating program.
23. According to BuildItGreen, what are the four (4) “Fundamental Objectives of Green Building”?
24. List 5 aspects of whole-house systems approach that highly integrates the design and construction process.
25. The type of furnace or heating system appliance to use for optimum energy efficiency incorporates the use of a ____________ combustion chamber.
26. According to BuildItGreen, what are the 5 things you should consider before you remodel a home?
27. CALGreen requires “Commissioning” to be performed on non-residential projects. List the 7 mandatory parts of this Commissioning process.