30 Multiple Choice Questions



- 1. Typically the purest water in the evapotranspiration cycle can be found in
 - A. the water table
 - B. surface water
 - C. the clouds
 - D. all of the above
- 2. Use of pesticides and herbicides in agriculture poses the risk of
 - A. cross-media pollution
 - B. erosion
 - C. monoculture
 - D. all of the above
- 3. Which of the following toilets meets code requirements?
 - A. waterless urinals
 - B. dual-flush toilets
 - C. low-flush toilets
 - D. all of the above
- 4. For the highest quality stormwater catchment, construct the roof with
 - A. cedar shakes
 - B. architectural composite shingles
 - C. standing seam steel roofing
 - D. any of the above
- 5. The notable water feature common to ancient Greek amphitheaters is
 - A. fountains
 - B. cisterns
 - C. community toilets
 - D. all of the above

- 6. Second generation living machines feature
 - A. "tidal" action for treatment of waste water
 - B. a greenhouse to protect plants from winter weather
 - C. the use of aquatic animals
 - D. all of the above
- 7. Effective stormwater management can be accomplished using
 - A. bioswales for treating parking lot run-off
 - B. green roofs
 - C. stormwater catchment systems
 - D. all of the above
- 8. An extensive green roof will
 - A. eliminate storm water run-off
 - B. reduce flood potential
 - C. worsen the heat island effect
 - D. all of the above
- 9. The reason that biological treatment of black water is possible is
 - A. black water is toxin-free
 - B. black water is nutrient-rich
 - C. black water requires filtration of grit
 - D. none of the above
- 10. The oldest living machine was installed to treat waste water at
 - A. BedZED in Beddington, UK
 - B. Paws Inc. in Muncie, IN
 - C. IslandWood School on Bainbridge Island, WA
 - D. the MERTS campus of Clatsop Community College in Astoria, OR
- 11. You can reduce, but not eliminate black water generated on site by using
 - A. an incinerating toilet
 - B. a waterless urinal
 - C. a composting toilet
 - D. all of the above
- 12. Planning for composting toilets must consider
 - A. maintaining an operating temperature of 50°F or more
 - B. routing for ventilation ducts
 - C. signage with use instructions
 - D. all of the above
- 13. Reflective glass-walled public toilets
 - A. offer maximum privacy while offering a panoramic view
 - B. are a public nuisance
 - C. pop-up for nighttime use
 - D. all of the above

- 14. Paradise Creek's water quality is best
 - A. in the forested uplands
 - B. in the agricultural lands
 - C. in the urban areas
 - D. downstream from the Moscow Waste Water Treatment plant
- 15. Paradise Creek restoration projects should include
 - A. elimination of channelization
 - B. wider riparian zones to reduce flooding downstream
 - C. tree and grass plantings to control erosion and provide shading
 - D. all of the above
- 16. The average US Municipal Solid Waste utility recycling rate is
 - A. over 50%
 - B. 40% to 50%
 - C. 30% to 40%
 - D. 20% to 30%



- 17. A recent UI Sustainability Center study found that solid waste dumpsters on campus
 - A. contain about 68% recyclable materials
 - B. contain about 38% recyclable materials
 - C. contain about 30% recyclable materials
 - D. contain no recyclable materials
- 18. Construction site waste management goals for landfill diversion of over 90%
 - A. are unattainable
 - B. are among the criteria for meeting the Living Building Challenge
 - C. are required for LEED certification
 - D. none of the above
- 19. To mitigate global warming buildings must be designed to
 - A. be sustainable
 - B. greatly reduce carbon emissions
 - C. be self-sufficient
 - D. all of the above

20. What score would a sustainable building achieve on the SBSE revision of Malcolm Wells' wilderness-based checklist for
design and construction?
A. a negative score
B. about zero
C. a positive score
D. a perfect score
21. The best green buildings
A. exceed building code compliance
B. are LEED Platinum
C. meet the Living Building Challenge
D. are restorative (perfect Wells score)
22. Architecture 2030 goal to reduce carbon emissions from new buildings to zero by 2030 has been endorsed by
A. the AIA
B. the US Conference of Mayors
C. the State of California
D. all of the above
23. Sir Norman Foster's London City Hall (aka GLA Building) has a Display Energy Certificate rating of
A. A
B. C
C. E
D. <i>G</i>
24. The first law efficiency of the United States' total energy use is
A. more than 90%
B. about 80%
C. about 50%
D. less than 40%
25. Life Cycle Costing helps
A. account for enhanced worker productivity
B. account for first costs and operational costs of the building
C. account for tax credits and fuel cost inflation
D. all of the above
26. Embodied energy is the total Btus in
A. materials manufacture
B. fuel extraction
C. materials and fuel delivery
D. all of the above

- 27. The greatest financial benefit of a green building is
 - A. energy savings
 - B. water savings
 - C. operations and maintenance savings
 - D. worker productivity improvement
- 28. European regulations now require that public buildings
 - A. comply to the Kyoto Accord
 - B. post an energy performance certificate
 - C. generate 10% of their own energy on site
 - D. all of the above
- 29. European green architecture is encouraged by
 - A. the green party
 - B. European Union regulations
 - C. signing on to the Kyoto Accord
 - D. all of the above
- 30. The wave form ceilings in the Inland Revenue Buildings
 - A. allow for exposed thermal mass
 - B. are used for nighttime ventilation
 - C. allow for integration of electric light and daylight
 - D. all of the above



Get ready for Quiz #3!