

Arch 464
ECS
Midterm II
Spring 2007

30 Multiple Choice Questions

1. If global warming melts the icecaps and glaciers, the amount of potable water available for our use will

- A. be about 3.3% of the earth's total water
- B. be about 2.3% of the earth's total water
- C. stay at about the same percentage
- D. decrease to about 0.1% of the earth's total water

2. Cross-media pollution of water tables has the most profound effect on

- A. agriculture
- B. health
- C. industry
- D. all of the above

3. In the Western US global warming will have the most serious impact on which long-standing water problem?

- A. draught frequency
- B. dam building
- C. subsistence
- D. all of the above

4. An example of a self-contained watershed is

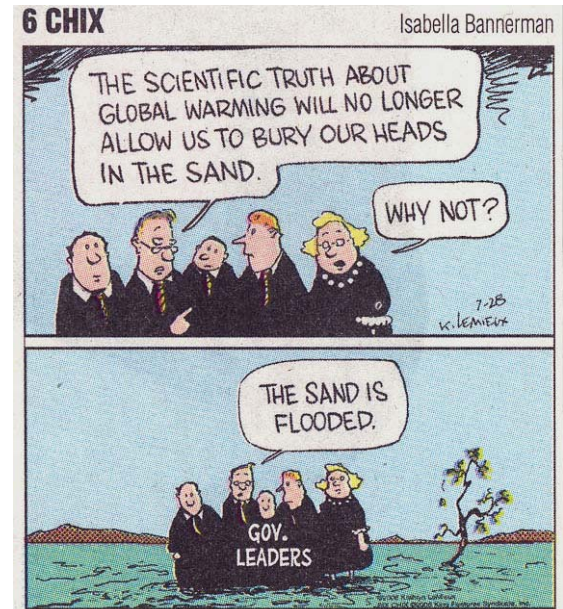
- A. Crater Lake
- B. Hetch Hetchy Reservoir
- C. Lucky Peak Reservoir
- D. all of the above

5. An example of a building that uses a cistern as a design element is

- A. the amphitheaters at Delos, Delphi, and Epidauros
- B. the Lady Bird Johnson Wildflower Center in Austin
- C. Corbu's Notre Dame du Haut at Ronchamps
- D. all of the above

6. A constructed wetland cannot be used to treat black water

- A. in individual homes
- B. for an urban block
- C. for a small town or neighborhood
- D. none of the above



7. An extensive green roof can reduce the volume of stormwater flowing into streams off
- A. sloped roofs
 - B. residential roofs
 - C. large roofs such as manufacturing plants and convention centers
 - D. all of the above
8. Stormwater must be retained on site
- A. in the entire U.S.
 - B. in Portland, OR
 - C. in Moscow, ID
 - D. none of the above
9. The UI's Sweet Avenue site is an example of creek restoration to
- A. provide wildlife habitat
 - B. mitigate flooding
 - C. control stormwater run-off and mitigate run-off pollution
 - D. all of the above
10. The section of our local Paradise Creek that doesn't contribute to its pollution is
- A. the forested uplands
 - B. the agricultural lands
 - C. the urban areas
 - D. none of the above
11. Black water may contain
- A. human wastes
 - B. harsh and toxic chemicals
 - C. soaps and cleansers
 - D. all of the above
12. Living machines can be used for
- A. off-site treatment of black water
 - B. on-site treatment of black water
 - C. on-site treatment of gray water
 - D. all of the above
13. Water conservation can be achieved by
- A. recycling grey water
 - B. collecting rainwater in cisterns
 - C. using low-flow fixtures
 - D. all of the above
14. Since 1994 the standard toilet for new construction in the U.S. does not save as much water as
- A. a dual-flush toilet
 - B. a composting toilet
 - C. an ultra low-flush toilet
 - D. all of the above

15. The minimal size of a toilet room in a public building is defined by

- A. sight lines
- B. ADA requirements
- C. toilet stall modules
- D. ergometrics

16. A vigorous municipal recycling program will

- A. decrease local employment
- B. divert waste from landfills
- C. increase production of methane gas
- D. all of the above

17. An example of a project whose goal is to become waste neutral through recycling and composting is

- A. NYC's Audobon House
- B. the Eden Project in Cornwall
- C. the City of Seattle
- D. all of the above

18. What is sustainability?

- A. maintaining a strong economy
- B. retaining cultural and social artifacts and customs
- C. ensuring that the environment continues to provide sustenance to future generations
- D. all of the above

19. The SBSE checklist is superior to the LEED checklist because it

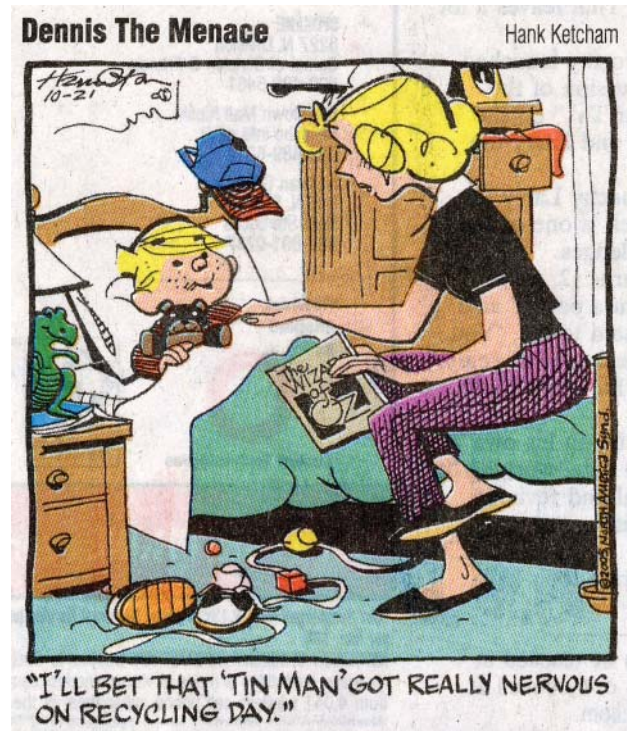
- A. recognizes regenerative design
- B. penalizes unsustainable design solutions
- C. visually separates site and building issues
- D. all of the above

20. London City Hall (the GLA Building) is

- A. an example of regenerative design
- B. totally sustainable
- C. more sustainable than the typical London office building
- D. a total failure that uses more energy per capita than the designers intended

21. In Europe

- A. the tallest building is green
- B. star architects practice green design
- C. regulations mandate green practices
- D. all of the above



22. Solar-enhanced stack ventilation towers are not prominent architectural features in
- A. Portcullis House in London
 - B. Inland Revenue in Nottingham
 - C. the Environmental Building at BRE
 - D. all of the above feature them
23. Becoming a LEED accredited professional assures that you
- A. can design sustainable buildings
 - B. understand the LEED systems
 - C. can give good advice to clients
 - D. all of the above
24. Energy centers throughout the western U.S. provide
- A. free or nominally priced consulting services in sustainable design
 - B. training in energy-efficient strategies and systems
 - C. daylighting model testing facilities
 - D. all of the above
25. The best site energy generation strategy is to
- A. provide 10% of energy use on site
 - B. exploit only the most readily available energy source
 - C. use a combination of complementary energy sources
 - D. always use the electrical grid as storage for overproduction of on-site energy
26. Mike Reynolds' earthships exemplify site-generated energy strategies in use because they
- A. collect rainwater and reuse grey water
 - B. produce electricity from wind and sun
 - C. are built of recycled materials
 - D. all of the above
27. The most carbon neutral combustion fuel is
- A. bio-mass
 - B. coal
 - C. natural gas
 - D. nuclear fission
28. Coal power electrical generation plants contribute to
- A. global warming
 - B. air pollution
 - C. acid rain
 - D. all of the above

29. Which alternative energy source can completely fill the fossil fuel gap that will occur after world peak oil production occurs (next year)?

- A. solar energy
- B. wind energy
- C. geothermal energy
- D. all of the above and other resources including conservation

30. According to the Audobon Society the most birds are killed by

- A. wind generators
- B. trucks and automobiles
- C. buildings
- D. communication towers

