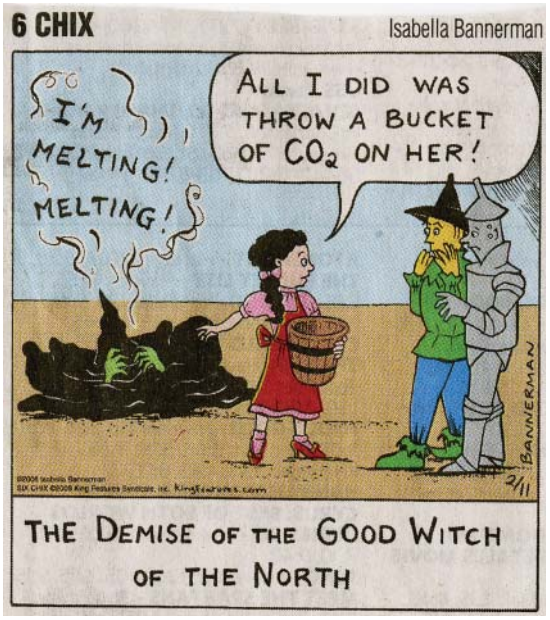
Arch 464
ECS
Midterm II
Spring 2008

30 Multiple Choice Questions



1. Which process can have a role in purifying water?
   - A. evaporation
   - B. percolation through the soil
   - C. contact with plants and animals
   - D. all of the above

2. Which process can have a role in polluting water?
   - A. rainfall
   - B. percolation through the soil
   - C. contact with plants and animals
   - D. all of the above

3. A water issue that is pertinent to the Western US is
   - A. deserts and frequent droughts
   - B. global warming
   - C. lack of major river basins
   - D. all of the above

4. Water use can be reduced by
   - A. using waterless urinals
   - B. recycling grey water for reuse
   - C. replacing lawns with xeriscape
   - D. all of the above

5. The notable water feature common to ancient Greek amphitheaters is
   - A. fountains
   - B. cisterns
   - C. scuppers
   - D. all of the above

6. Biological treatment of waste water can be accomplished by
   - A. a city-scale constructed wetlands
   - B. a campus-scale living machine
   - C. a building-scale living machine
   - D. all of the above

7. Village Homes in Davis, California, is notable in its stromwater management, using
   - A. bioswales for treating parking lot run-off
   - B. bioswales for managing stormwater
   - C. art object downspouts and cisterns to capture roof water
   - D. all of the above

8. You can grow large alpine shrubs on
   A. an intensive green roof
   B. an extensive green roof
   C. both of the above
   D. none of the above

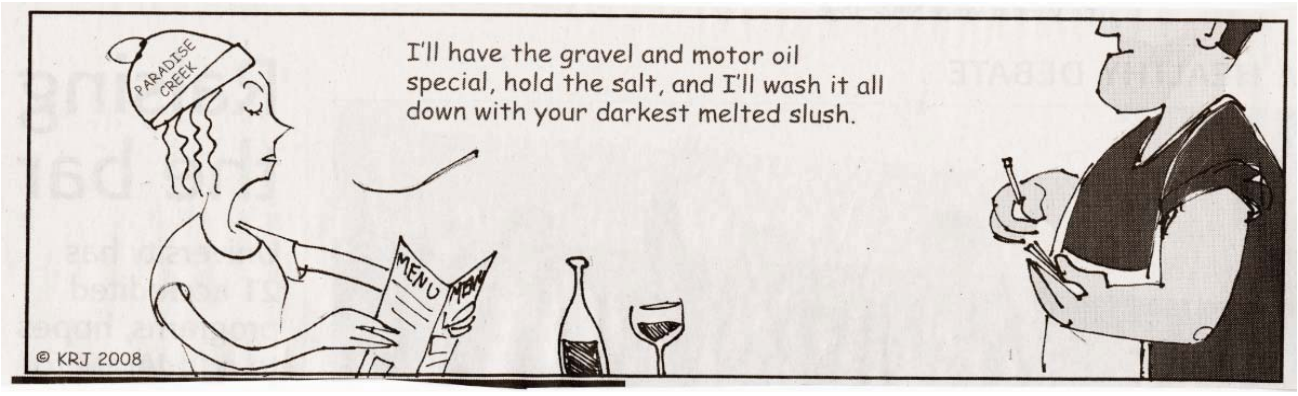
9. The reason that biological treatment of black water is possible is
   A. black water is toxin-free
   B. black water is nutrient-rich
   C. black water requires filtration of grit
   D. none of the above

10. A living machine is 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. all of the above

11. The toilet that creates no black water is
   A. a ULF toilet
   B. a waterless urinal
   C. a composting toilet
   D. B and C above

12. Composting toilets
   A. can't be used in public buildings
   B. create a serious odor problem
   C. produce humus that can be used as fertilizer
   D. all of the above

13. When designing a public restroom you must
   A. provide a 4-foot radius unobstructed space for maneuvering wheelchairs
   B. block all sight lines from outside the room to toilets
   C. make plumbing fittings easily accessible
   D. all of the above



14. Paradise Creek in Latah County is polluted by
    A. farmland run-off
    B. legal dumping in its headwaters
    C. Moscow Waste Water Treatment Plant effluent
    D. all of the above

15. The Sweet Avenue creek restoration project
    A. uses bioswales to catch and treat parking lot run-off
    B. includes a rebuilt, wider riparian zone to reduce flooding downstream
    C. features trees and grass plantings to control erosion and provide shading
    D. all of the above

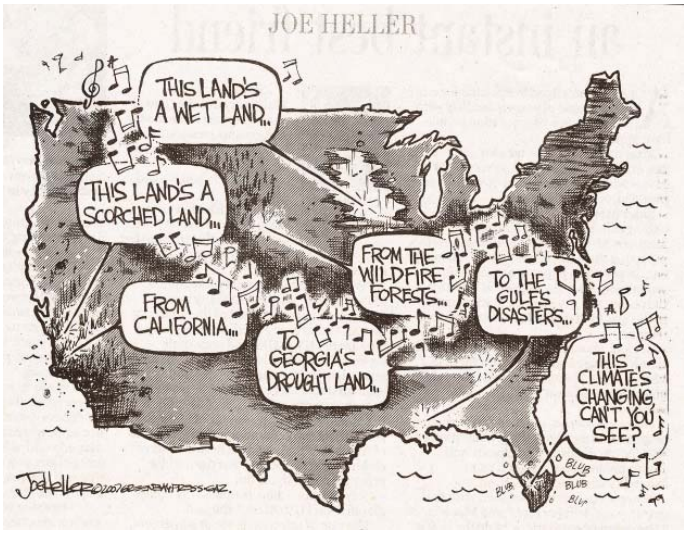
16. Typically, landfill wastes are about
    A. 10% recyclable and compostable
    B. 25% recyclable and compostable
    C. 50% recyclable and compostable
    D. 90% recyclable and compostable

17. Toxic brownfields can be restored by
    A. solar detoxification
    B. bioswales
    C. bioremediation
    D. none of the above

18. To reduce solid waste, building designers can
    A. specify construction site waste management
    B. design an easy to use recycling system
    C. design the building for disassembly and demountability
    D. all 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. A building that achieves a score of zero on the SBSE revision of Malcolm Wells' wilderness-based checklist for design and construction would be considered
    A. a bad building
    B. a code-compliant building
    C. a sustainable building
    D. a regenerative building



21. When rated using the SBSE/Wells checklist, both the Sun Valley house and London City Hall demonstrate a common problem, which is

A. ineffective passive design strategies
B. lack of building and site development integration
C. too much glazing
D. all of the above

22. Signees to the 2010 Imperative pledge to

A. teach design strategies to reduce carbon emissions in all studios
B. achieve complete ecological literacy in history/theory courses
C. be housed on a campus that is striving for carbon neutrality
D. all of the above

23. Design assistance for high-performance low-energy building design is available for free or a nominal fee to practitioners in

A. the Pacific Northwest
B. Northern California
C. Southern California
D. all of the above

24. The first law efficiency of the United States' use of energy is

A. more than 90%
B. about 80%
C. about 50%
D. less than 40%

25. Life Cycle Costing takes into account

A. time preference for money
B. the whole lifetime of the building
C. tax credits and inflation
D. all of the above

26. The biggest payback of a well-designed green building is

A. energy savings
B. increased worker productivity
C. increased market value
D. lower first costs

27. The first-cost disadvantage of a LEED Gold building is

A. more than 10%
B. paid back in energy savings in more than 3 decades
C. less than 5%
D. equal to the advantage of increased productivity

28. Green architecture in European commercial buildings has been happening
    A. because of the Kyoto Accord
    B. for more than a decade
    C. with the advocacy of political parties
    D. all of the above

29. Exemplars of European green architecture use
    A. external shading devices
    B. natural ventilation
    C. solar-powered stack ventilation
    D. all of the above

30. The recent European project that aims at carbon neutrality is
    A. Scottish Parliament
    B. the British Museum
    C. BedZED
    D. all of the above