Arch 464
ECS
Midterm II
Spring 2017

30 Multiple Choice Questions

1. As a planet, we have plenty of potable water because
    A. most of the earth's surface is water
    B. the evapotranspiration cycle purifies all our water
    C. water pollution is rare
    D. none of the above

2. Pure water is most important to
    A. urban recreation
    B. life on earth
    C. agriculture
    D. transportation

3. Scarcity of water in the western U.S. led to the innovative development of
    A. cisterns
    B. low-flush toilets
    C. xeriscaping
    D. none of the above

4. A great water use and conservation plan would have the most impact for
    A. a restaurant
    B. a hospital
    C. multi-family housing
    D. retail stores

5. To make a great water use and conservation plan it is essential
    A. to understand all the potential water sources and uses
    B. to use low-flush toilets
    C. incorporate cisterns and catchment
    D. retain storm water on site

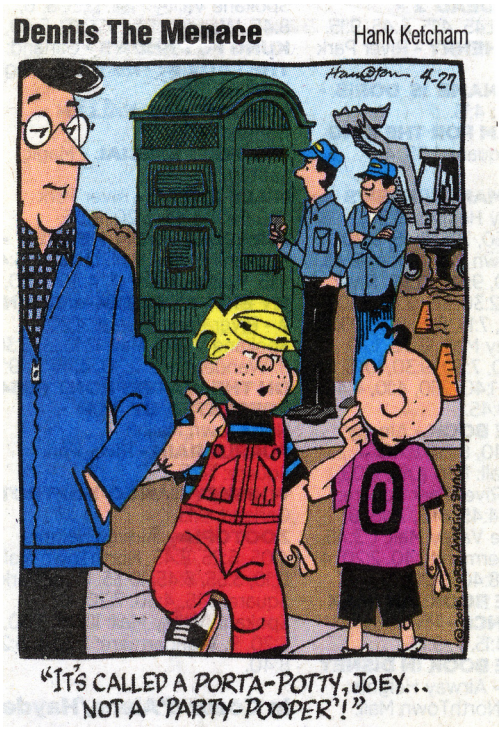
6. A viable source of potable water for a rural homesite is
    A. rainwater
    B. a well
    C. surface water (stream or lake)
    D. all of the above with proper filtering, treatment, and testing

7. Stormwater can be managed at the
    A. neighborhood scale
    B. site scale
    C. building scale
    D. all of the above

8. Village Homes in Davis, CA, and the Portland Water Pollution Control Laboratory are similar in that the both
    A. use scuppers to direct stormwater from roofs
    B. have on-site stormwater retention ponds
    C. use bioswales to retain and filter stormwater
    D. all of the above

9. Besides aiding in stormwater management and flood mitigation, green roofs
    A. absorb pollutants from rainwater
    B. mitigate the urban heat island effect
    C. provide wildlife habitat
    D. all of the above

10. An example of a building that currently treats black water on site is
    A. the San Francisco PUD building
    B. Biosphere 2
    C. the Center for Regenerative Studies
    D. none of the above



11. Gray water can be treated on site
    A. through biological means
    B. mechanical means
    C. both of the above
    D. none of the above

12. Biological treatment of black water is feasible at the
    A. community scale
    B. neighborhood scale
    C. building scale
    D. all of the above

13. Public toilets in Copenhagen are
    A. of a sleek modern design
    B. elaborate Victorian ensembles
    C. primitive enclosed trough urinals
    D. all of the above

14. Toilets whose performance beats the U.S. plumbing code requirements include
    A. waterless urinals
    B. dual-flush toilets
    C. high efficiency toilets
    D. all of the above

15. The most recent concern in public bathroom design is
    A. meeting ADA requirements
    B. providing all gender facilities
    C. solving public urination problems
    D. all of the above

16. Paradise Creek is currently a potential potable water source for Moscow because
    A. Moscow is near the headwaters of the creek
    B. woodlands upstream from Moscow have a purifying effect on the creek
    C. Moscow has strict regulations for managing stormwater on construction sites
    D. none of the above

17. The two phases of the Sweet Avenue/University of Idaho Paradise Creek restoration project have mitigated
    A. channelization
    B. downstream flooding
    C. creek bed erosion
    D. all of the above

18. Since restoration was completed in 1999, the segment of Paradise Creek between Sweet Avenue and Sixth Street
    A. has never flooded
    B. flooded only once
    C. flooded only a few times
    D. floods every year

19. To help improve the earth's overall ecological health, architects should design buildings that
    A. are LEED platinum
    B. are sustainable
    C. are regenerative
    D. meet passive house standards

20. London City Hall and Bystrom's Sun Valley house are similar in that they
    A. are examples of regenerative design
    B. are technically sophisticated
    C. achieved their nation's highest sustainability rating
    D. all of the above

21. SBSE's Regeneration-based checklist is superior to Wells' Wilderness-based checklist in that
    A. it helps visualize site and building performance differences
    B. it is more accurate
    C. it gives sustainability high marks
    D. all of the above

22. Studies indicate green buildings have an economic advantage over built-to-code buildings in that

A. provide lower energy bills
B. have greater market value
C. increase worker productivity
D. all of the above

23. The biggest influence the LEED rating system has had on the building industry is

A. assuring all new buildings are sustainable
B. expanding the marketplace availability of green building products
C. making expensive first-cost buildings more desirable
D. all of the above

24. The best way to assure that a building meets its energy-savings and performance goals is to

A. achieve LEED Platinum
B. do energy performance modeling before its design is finalized
C. conduct and respond to on-going post-occupancy evaluation
D. all of the above

25. Waste can be diverted from the municipal solid waste stream by

A. instituting an aggressive recycling agenda
B. requiring composting of food and yard wastes
C. managing waste stream on construction sites
D. all of the above

26. Seattle's goal of achieving 60% recycling or diversion is

A. not feasible
B. about the E.U. average
C. in line with Germany's performance
D. is better than France's performance

27. Valid reasons for encouraging recycling and diversion include

A. energy savings
B. job creation
C. resource conservation
D. all of the above

"I certainly hope you're composting the leftovers."

28. Answers to the four questions about environmental costs are related to
    A. relative efficiency of buildings and their systems
    B. appropriate matching of energy source to task
    C. selecting an optimum amount of embodied energy
    D. all of the above

29. The way to assess the economic wisdom of design options is
    A. compare first costs
    B. compare operating costs
    C. conduct a life-cycle cost analysis
    D. compare potential LEED points

30. The most impact on bottom line economic performance of a green building is
    A. energy savings
    B. building life expectancy
    C. improved worker productivity
    D. all of the above

Get ready for Quiz #3!