

Student name _____

ORH 4223 - Golf and sports turf management 20 Dec 2002

University of Florida - Fort Lauderdale

Final Exam: Open book, open notes

Multiple choice

(21 pts.)

Please read these carefully. One and only one response (a, b, c, d, or e) completely and correctly answers the question, or completes the statement. Circle the appropriate response and turn in this exam. You may refer to your notes and handouts from class, and any other textbook, or other prepared material. Another person may not assist you. Make sure your circle is unambiguous.

1. As described and demonstrated by John Mascaro, infiltration is:
 - a. The movement of water through soil
 - b. The carrying of solutes (e.g., nitrates), through the soil
 - c. The movement of water into the soil
 - d. Localized dry spots
 - e. Water which runs off the turf

2. The main factor in evapotranspiration (water loss from plants and soil) is:
 - a. rainfall
 - b. radiant energy
 - c. wind
 - d. relative humidity
 - e. temperature

3. Hybrid bermudagrass has how many chromosomes?
 - a. 9
 - b. 18
 - c. 27
 - d. 36
 - e. 45

4. The approximate value added to the Florida economy from the cultivation of turfgrass (golf, sports, lawns, etc.), based on a 1991-92 survey, was:
 - a. \$90 million
 - b. \$300 million
 - c. \$1 billion
 - d. \$3 billion
 - e. \$9 billion

5. Approximately how many cubic yards of root zone mix must you order to topdress a 6-acre sports complex to a depth of 1/8 inch?
- 10
 - 30
 - 100
 - 300
 - 1000
6. The best non-chemical preventative for goosegrass is:
- preemergence
 - aeration
 - fertilization
 - fumigation
 - postemergence
7. The basic unit of the grass inflorescence is?
- glume
 - spikelet
 - peduncle
 - lodicule
 - root hair

Essay, Problem solving (use extra pages as necessary)

(180 pts.)

8. A four-acre fairway was treated with 45 bags of Milorganite (6-2-0) at 50 pounds per bag. How many pounds of phosphoric acid (P_2O_5) are applied per thousand square feet? Show your work in detail! Also explain why this would be different from the number of pounds of phosphorus.

9. You have started a new job or assignment. For the purposes of this question, you will have to decide whether you are a golf course superintendent or a sports turf manager. Also, you will have to specify to whom you report directly, whether a Greens Committee Chair, a Club Manager, a Parks Manager, etc. In addition, you must give an example of a broader group to whom you report, whether it be the Members of the golf course, the parents of the PAL youth who play in the ball fields, etc.

The question is, "How will you determine the needs/objectives and resources of your employer?" Give examples of specific needs or objectives pertinent to your job situation. How will you learn the resources, e.g., money and supplies available?

As a second part of this question, how will you deal with the fact that there will inevitably be some differences in priorities between your direct supervisor and the broader group to whom you also report informally?

10. An administrator in the Pesticide Assessment section of the EPA called you this afternoon, to find out the cost of alternatives to goosegrass control in bermudagrass golf course fairways, assuming that in one scenario, at some time in the future, the postemergence herbicide MSMA will no longer be available. The reason for this is because the EPA is contemplating taking MSMA off the shelf, because of fears of arsenic contamination of groundwater.

With your knowledge of pest management including environmental effects, try to give the EPA administrator as reasonable and balanced perspective on golf course management, to assess the potential impacts of taking MSMA off the shelf, and citing alternative goosegrass management practices, their relative cost and feasibility. Since you have only been asked for the facts, you are not to lie or exaggerate, you are not to create doomsday scenarios, but if you do so, nothing you say will be believed. In fact, there are others who have talked to the EPA, including those who say that golf courses should be eliminated, who have basically blown their credibility. You are allowed to have a point of view as a golf course superintendent, but it will defeat your point of view if you are inaccurate in your handling of the facts.

11. Explain the “Disease Triangle” and how the same three components can be applied to pest situations other than diseases.

12. Which field trip was most memorable in showing concepts of Golf and Sports Turf Management, and why? Make sure to draw on components of management that we have discussed such as supervision, safety, planning, and organization.

13. What are the possible information resources that may help you in the job of Golf Course Superintendent or Sports Turf Manager? In two columns, list at least 10 possible sources of information and the advantages and disadvantages for solving problems.