

Student Name \_\_\_\_\_

**Turfgrass Culture, ORH3222C Section 7982  
and Grad. – Res. And Develop. in Turfgrass Sci. HOS6523 Section  
5819**

**University of Florida - Davie**

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### **Hour Test 1**

**(Multiple choice - circle the right answers, 3 points each)**

1. The first known use of turfgrass was in:
  - a) Bermuda
  - b) British Isles
  - c) Holland
  - d) Japan
  - e) St. Augustine
  
2. Which warm-season species has high recuperative ability, is responsive to high rates of N fertilization, and is suitable for full-sun environments?
  - a) bermudagrass
  - b) centipedegrass
  - c) seashore paspalum
  - d) tall fescue
  - e) zoysiagrass
  
3. Good writing is good storytelling, which includes novelty, interest, and plausibility. Plausibility means:
  - a) baffle them with statistics
  - b) reusing phrases and longer passages from other authors
  - c) speculating
  - d) telling the sources of your information
  - e) using the scientific method

4. The most difficult thing to measure for irrigation budgeting is:
  - a) Evapotranspiration
  - b) Precipitation rate from a sprinkler system
  - c) Radiant energy
  - d) Rainfall
  - e) Root available water
5. The production of carbon dioxide from turf, involving the consumption of carbohydrates, is from:
  - a) evapotranspiration
  - b) photosynthesis
  - c) pollination
  - d) respiration
  - e) translocation
6. Basic tools for turfgrass culture, e.g., the lawn mower, were invented during:
  - a) The American Revolution
  - b) The Anglo-Prussian Trade Embargo
  - c) The Digital Revolution
  - d) The Industrial Revolution
  - e) The Renaissance
7. The scientific name for Kentucky bluegrass is:
  - a) *Poa annua*
  - b) *Poa arachnifera*
  - c) *Poa pratensis*
  - d) *Poa trivialis*
  - e) *Stenotaphrum secundatum*
8. Horizontal underground runners:
  - a) culms
  - b) inflorescences
  - c) racemes
  - d) rhizomes
  - e) spikelets

9. Cool-season bunch-type grass that is notable for its wear resistance and is used for overseeding:
- bahiagrass
  - perennial ryegrass
  - Poa trivialis*
  - red fescue
  - tall fescue
10. A type of mower which uses helical blades that pass across a horizontal blade or bedknife; originally developed as a spinoff (no pun) from the textile trade:
- flail
  - fly
  - reel
  - rotary
  - string trimmer
11. The name of an important UF cultivar of St. Augustinegrass:
- Florentine
  - Floritam
  - Florantan
  - Floratam
  - Florigami
12. What is the most likely reason a plant requires frequent irrigation:
- because it has a small rootzone
  - because it has high evapotranspiration
  - because it is adapted to the desert
  - because it is drought resistant
  - because it is susceptible to drought
13. Where does water move under tension (negative pressure) in a plant:
- chloroplast
  - guard cells
  - mitochondrion
  - phloem
  - xylem

14. A warm-season turfgrass with very coarse leaves:
  - a) bermudagrass
  - b) centipedegrass
  - c) St. Augustinegrass
  - d) tall fescue
  - e) zoysiagrass
15. The approximate number of grass species in the world is:
  - a) 1 million
  - b) 20,000
  - c) 400
  - d) 10,000
  - e) 250,000
16. Turfgrass texture refers to:
  - a) grain
  - b) growth habit
  - c) leaf width
  - d) shoot density
  - e) uniformity
17. The primary driver of evapotranspiration is:
  - a) radiant energy
  - b) rain
  - c) relative humidity
  - d) respiration
  - e) ribosomes
18. Based on the concept of having a protective area, which type of turfgrass propagation involves the smallest risk:
  - a) plugging
  - b) sodding
  - c) spot sodding
  - d) sprigging
  - e) stolonizing

19. Based on the concept of compounded exponential growth, which type of turfgrass propagation unit yields the greatest increase:
- plugging
  - sodding
  - spot sodding
  - sprigging
  - stolonizing
20. Of the seven steps in turfgrass establishment (P-E-G-I-S-I-D) which must occur immediately before rough grading (lettering differs):
- construction of irrigation system
  - design
  - preparation of seedbed
  - selection of turfgrass variety
  - spraying with nonselective herbicide to remove torpedograss
21. If any nutrients are added to the soil before planting turfgrass, then types that are most justifiable are:
- natural nitrogen sources such as cow manure
  - nutrients used in small quantities such as Fe (iron) and Mn (manganese)
  - quick available N (nitrogen) sources as ammonium nitrate
  - quick available organic N (nitrogen) such as urea
  - slowly mobile nutrients such as P (phosphorus) and Ca (Calcium)
22. Where does water move under tension (negative pressure) in a pumping system:
- flood irrigation
  - main line
  - municipal water source
  - sprinkler head
  - suction line
23. The most commonly used cool-season turfgrass, which has rhizomes, is:
- Festuca arundinacea*
  - Agrostis palustris*
  - Cynodon dactylon*
  - Poa pratensis*
  - Lolium perenne*

24. The paper by Kneebone and Pepper on consumptive water use of turfgrasses:
- Showed that drought-conditioned turfgrass uses less water
  - Showed that warm season grasses have higher water use
  - Showed that water use varies by management and grass
  - Showed that water use is determined mainly by management
  - Showed that water use is determined mainly by type of grass
25. A part of the grass leaf that clasps:
- auricle
  - bract
  - collar
  - sheath
  - spikelet
26. C<sub>3</sub> grasses:
- are most commonly propagated vegetatively
  - are limited by sunlight concentration, performing best at high radiation
  - have heavy walled bundle sheath cells
  - thrive best in cool climates
  - thrive best in warm climates
27. The scientific name of 'Common' bermudagrass is:
- Cynodon dactylon*
  - Eremochloa ophiuroides*
  - Festuca arundinacea*
  - Paspalum notatum*
  - Zoysia japonica*
28. The soil particle that most dominates soil physical properties is:
- clay
  - gravel
  - organic matter
  - sand
  - silt

**(Short essay - 8 points each)**

29. In the Kneebone article (Kneebone, W. R. and I. L. Pepper. 1982. Consumptive water use by sub-irrigated turfgrasses under desert conditions. Agron. J. 74:419-423) explain how St. Augustinegrass and tall fescue may have measured as providing unrealistically high evapotranspiration rates. In other words, there was a possible bias and confounded effect due both to the way the grasses were maintained as well as the way the experiment was designed. Explain:

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30. List and describe at least four distinctive benefits of turfgrass:

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