

Team _____

Score _____

2005 ENVIROTHON – SOIL TEST QUESTIONS

1. Using the Soil Survey for Portage county, determine the page number of the Soil Survey Sheet that covers the Wisconsin Lions Camp at Rosholt? Sheet # _____.
2. Using the Soil Survey for this county, determine the slope range for the soil map unit bordering the east side of Lions Lake? _____ - _____ %.
3. List the two types of soil that are listed as inclusions in the Norgo Silt Loam (NoB) map unit description. _____ & _____.
4. What is the depth range of the organic deposits in the Markey Muck Series?
_____ to _____ inches.
5. The Altdorf (Af) map unit would be a suitable source of Sand & Gravel? Yes or No?
6. What is the permeability in inches per hour of the subsoil in Richford (RfA) _____ - _____.
7. Would Dolph (DoA) be a suitable soil to install an in ground Septic tank absorption field? Yes or No?
8. List three tree species that are suitable for reforestation on Wyocena (WyB).
1. _____ 2. _____ 3. _____.
9. Mineral soil particles less than 0.002 millimeters in diameter are referred to as silt.
True or False?
10. A layer of organic material on the surface of a mineral soil consisting of decaying plant residue is called an A horizon B horizon C horizon or O horizon? _____ horizon. .
11. A soil with has a pH ranging from 7.4 to 7.8 is expressed as being Moderately Alkaline.
True or False ?
12. Excessively drained soils have rapid permeability and high available water capacity.
True or False?
13. Nitrogen is the major nutrient in runoff water that is associated with lake eutrophication. True or False?
14. Study the soil sample in the container labeled A. What redoximorphic feature is present? _____.
15. Identify the type of soil structure in the container labeled B. _____ .

16. Identify the soil material in the container labeled C. _____.
17. Identify the soil material in the container labeled D. _____.
18. The particle size of the soil material in container E would be referred to as:
 Very Fine Sand () Silt () Clay ().
19. The addition of lime to a field will increase or decrease the pH of the surface.
 Increase () Decrease ().
20. Wetlands are identified through the confirmation of what three wetland criteria?
 (1) _____ (2) _____ (3) _____.
21. What effect does soil compaction have on (1) infiltration (2) runoff (3) plant growth?
 (1) Increase _____ Decrease _____
 (2) Increase _____ Decrease _____
 (3) Increase _____ Decrease _____
22. Using the textural triangle on the back of the test, determine the textural class of a sample containing 30% clay, 40% silt and 30% sand. _____.
23. Is the type of soil on this site (CoC) subject to wind erosion when cropped? Yes or No.
 If cropped, list three ways that a farmer could reduce wind erosion.
 (1) _____
 (2) _____
 (3) _____.
24. Using pacing techniques determine the distance between the flags. The change in elevation between the flags is four feet. What is the percent slope? _____%
25. Five major factors largely influence the kinds of soil that develop in the world. What are the five factors:
 (1) _____
 (2) _____
 (3) _____
 (4) _____
 (5) _____.

Tie Breaker:

Several days after it stops raining the downward movement of water in the soil essentially ceases. The soil is then said to be at _____ . At this time soil _____ are filled with air and soil _____ are filled with water.