

8. Which factor is the most significant in the development of hydric soils? (3pts)

- a. parent material originally limestone
- b. an excess of microbial activity
- c. lack of oxygen from water saturation
- d. rapid decomposition of organic matter

9. What is the percent slope of a field that has a change in elevation of 47 feet and is 420 feet long? (3pts)

% slope = _____ (rounded to nearest whole number)

10. Earthworm burrowing improves infiltration? **T F** (2pts)

11. Which major nutrient, contained in runoff water, is associated with lake eutrophication? (3pts)

Nitrogen or Phosphorus or Potassium

12. What two effects does soil compaction have on water running down a steep hill in a field? (3pts)

It increases _____

It decreases _____

13. Five major factors largely influence the kinds of soil that develop in the world. What are the five factors? (10pts)

1. _____

2. _____

3. _____

4. _____

5. _____

* **Visit the soil pit to answer the following questions.**

14. The soil in the pit would be considered a _____ soil. (2pts)
- a. poorly drained
 - b. well drained
 - c. excessively drained
15. What is the moist color of the sample in container 4? _____ (2pts)
16. What is the symbol used to notate the top horizon in the soil pit? (2pts)
- a. A horizon
 - b. B horizon
 - c. Ap horizon
 - d. C horizon
17. What is the structure of the lower horizon in the soil pit? (2pts)
- a. Prismatic
 - b. Loose
 - c. Sub-angular blocky
 - d. Massive

* **Use the samples in the containers to answer the next series of questions.**

18. What is the soil texture in container 1? (circle one) (3pts)
- sand sandy loam loam silt loam clay
19. What is the soil texture in container 2? (circle one) (3pts)
- sand sandy loam loam silt loam clay
20. What is the soil texture in container 3? (circle one) (3pts)
- sand sandy loam loam silt loam clay
21. What three particle size fractions make up the mineral part of a soil? (6 pts)
- (Hint: What we can touch)*
- _____
22. Soil pH affects the availability of nutrients to plants and crops? T F (3pts)

23. What is the symbol used to notate the top horizon or layer in a plowed field?
_____ (2pts)
24. Using the shaded relief map identify the landforms associated with the letter.
(3pts)
- A. _____
B. _____
C. _____
25. Sand, silt and clay content is estimated in the field and then placed within the
_____ to determine texture class. (3pts)
26. The naturally occurring arrangement of soil particles into aggregates that result
from pedogenic processes is called _____. (3pts)
27. What would most likely be the cause of rills and exposed areas of subsoil?
_____ . (2pts)
28. The primary cause (s) of accelerated erosion is: (2pts)
- a. Tillage
 - b. Grazing
 - c. Cutting timber
 - d. All of the above
29. Soils high in organic matter have good engineering properties. T or F (2pts)
30. What is the parent material in the tray? (3pts)
- a. loess
 - b. till
 - c. outwash
 - d. organic sediments

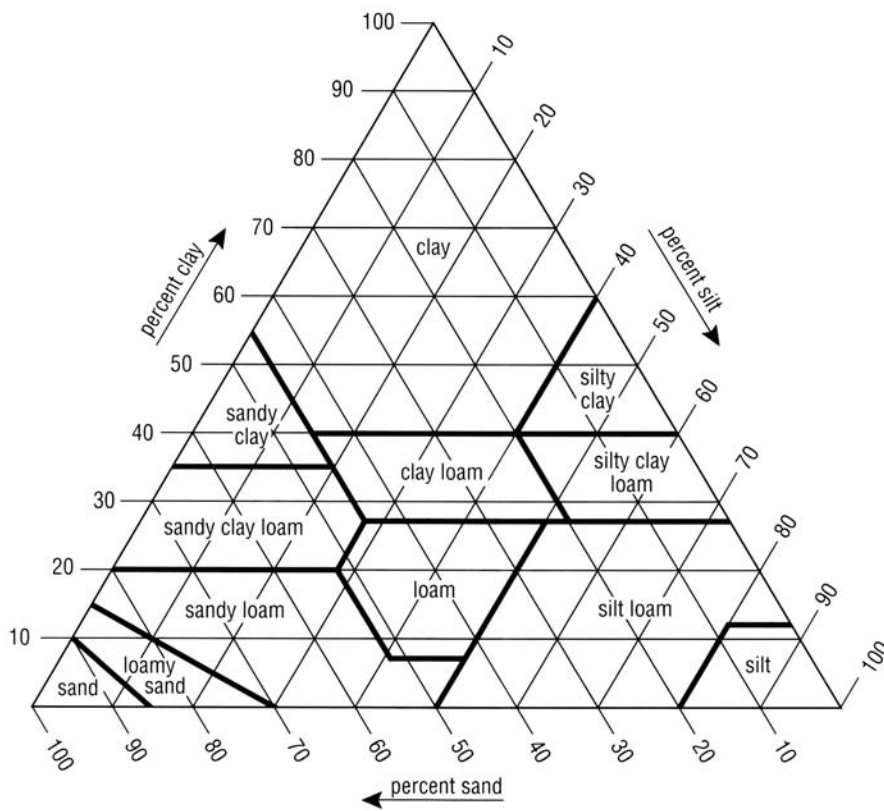
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31. Using the texture triangle, identify the texture of the three soils based on their relative proportions of clay, sand, and silt. (6pts)

a. 37% clay, 23% silt, and 40% sand _____

b. 50% clay, 45% silt, and 5% sand _____

c. 10% clay, 5% silt, and 85% sand _____



Tie Breaker:

(3pts)

The water table that lies above an unsaturated zone is called a _____ water table.