

Questions 1 through 4 are specific to the soil pit

1. What is the bottom depth of the A Horizon?
 - a. 30"
 - b. 17"
 - c. 12"
 - d. 9"**

2. What is the soil drainage class (Depth to gray mottles)?
 - a. Well drained (no mottles above 40 inches)
 - b. Moderately well drained (no mottles above 16 inches)
 - c. Somewhat poorly drained (no mottles above 8 inches)**
 - d. Poorly drained (mottles above 8 inches)

3. The redox features in this soil are caused by the presence of which element?
 - a. Iron**
 - b. Carbon
 - c. Sulfur
 - d. Nitrogen

4. One of the features of the soil on this site is the presence of a fragipan. A fragipan is a loamy, brittle subsurface horizon that is low in porosity and restricts plant rooting depth. In the soil pit this layer starts at a depth of 18". With which combination of letters would you label this horizon?
 - a. Bg
 - b. Bx**
 - c. Bw
 - d. Bt

5. How would you describe the landscape position of the soil pit location?
- a. Backslope
 - b. Summit**
 - c. Footslope
 - d. Toeslope
6. Soil series map unit abbreviations are shorthand codes used on soil maps to identify specific soil types, slope phases, and characteristics within a survey area. The first 2 letters of the abbreviation represent the soil series name and the following letter(s) describe slope. The Lake County Soil Survey identifies this site as a **Platea silt loam, 2 to 6 percent slopes**. What is its soil series map unit abbreviation
- a. TyA
 - b. GoF
 - c. PsB**
 - d. OtB
7. Glacial till is the predominant parent material on this site. Which statement best describes glacial till?
- a. Unsorted material deposited by rivers that formed under glaciers
 - b. Stratified layers of sand and gravel deposited by glacial meltwater
 - c. Unsorted, non-stratified material consisting of clay, silt, sand and boulders deposited by glacial ice.**
 - d. Material deposited by wind following retreat of the glaciers
8. Soil particles naturally bond into larger aggregates. What term defines an individual soil aggregate?
- a. Pedon
 - b. Ped**
 - c. Clump
 - d. Soil separates
9. Which of the following has the largest influence on soil texture?
- a. Time
 - b. Vegetation
 - c. pH
 - d. Parent material**

10. Which soil characteristic would be most important when selecting a site for pond construction?

- a. **Permeability**
- b. ph
- c. Elevation
- d. Cation exchange capacity

11. Which farming practice is best for reducing soil erosion?

- a. Ridge tillage
- b. Conventional tillage
- c. **No till**
- d. Minimum tillage

12. Which of the following is not a soil texture class found on the soil textural triangle?

- a. **Coarse**
- b. Sandy clay loam
- c. Clay
- d. Loam

13. The 4 Rights (4Rs) of sustainable management and plant nutrition is a practice developed to benefit both farmers and the environment. What are the four components of this practice?

- a. source, economics, environment, and time
- b. **source, rate, time, and place**
- c. time, place, rate, and environment
- d. time, environment, economy, and place

14. Which of the following soil properties has the SMALLEST effect on a soil's ability to treat wastewater from a residential septic system?

- a. depth to bedrock
- b. drainage class
- c. **pH**
- d. permeability

15. The color of the topsoil in Ohio is typically dark brown. What agent is most responsible for this?
- a. Nitrogen
 - b. Iron
 - c. Manganese
 - d. **Organic matter**
16. Soil color is described using a specific classification system called the Munsell notation. What component of the color 10YR/4/3 is the chroma?
- a. 10
 - b. YR
 - c. 4
 - d. **3**
17. Which of the following nutrients are the most mobile in soil?
- a. Phosphorus
 - b. **Nitrogen**
 - c. Potassium
 - d. Calcium
18. Which of the following statements best describes infiltration?
- a. Downward movement of water between soil horizons
 - b. **Downward movement of water into the soil surface**
 - c. Lateral movement of water throughout a soil horizon
 - d. Deep movement of water into an aquifer
19. Soil formed under this parent material in Ohio are typically the youngest.
- a. Glacial till
 - b. Colluvium
 - c. Residium
 - d. **Alluvium**
20. What are soils called that exist in wetlands?
- a. Hydrophobic
 - b. **Hydric**
 - c. Subaqueous
 - d. Aquic

21. What term defines an organic layer commonly found in forests consisting of fallen plant material that is in the process of decomposition?

- a. Lignin
- b. Muck
- c. Cellulose
- d. **Duff**

22. Which microorganism is most responsible for the earthy smell of soil?

- a. Protozoa
- b. Bacteria
- c. **Actinomyces**
- d. Algae

23. Legumes are plants that form a symbiotic relationship with bacteria which enables them to use what important nutrient from air?

- a. Potassium
- b. Phosphorus
- c. **Nitrogen**
- d. Sulfur

24. Which of the following crops is a legume

- a. Wheat
- b. Corn
- c. **Soybean**
- d. Oat

25. What soil order, not found in Ohio, formed from parent material deposited by volcanoes?

- a. Vertisol
- b. Aridisol
- c. **Andisol**
- d. Gelisol