



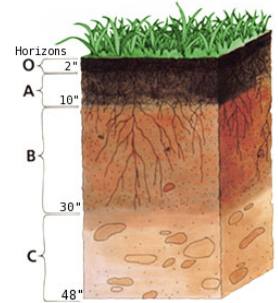
Event Area Career/Leadership Development Event

Created: June 18, 2023

Instructions for completion of exam

EVENT EXAM SECTION NAME

1. A soil profile is made up of horizons. In the example there are 4 horizons. What is the B horizon called?
 - A. Subsoil
 - B. Parent material
 - C. Topsoil
 - D. Substratum
2. Soil has two key characteristics that help to determine overall physical properties of the soil. What are these key properties?
 - A. Aggregates and Organic Matter
 - B. Texture and Structure
 - C. Water content and percent Silt
 - D. Water and air
3. World-wide, soils have been classified into soil orders (Soil Taxonomy). How many soil orders are recognized in the system of taxonomic soil classification (SSSA Soil Types)?
 - A. 3
 - B. 15
 - C. 12
 - D. 9
4. What soil taxonomy order is found in the driest regions of the world?
 - A. Aridisols
 - B. Gelisols
 - C. Oxisols
 - D. Entisols
5. One soil order is comprised of deeply weathered soil found near the tropics where warm and wet conditions dominate. What soil type is this?
 - A. Oxisol
 - B. Ultisol
 - C. Entisol
 - D. Gelisol
6. Which soil would be the most likely to resist erosion by water?
 - A. Sandy Loam
 - B. Clay
 - C. Loam
 - D. Silt Loam

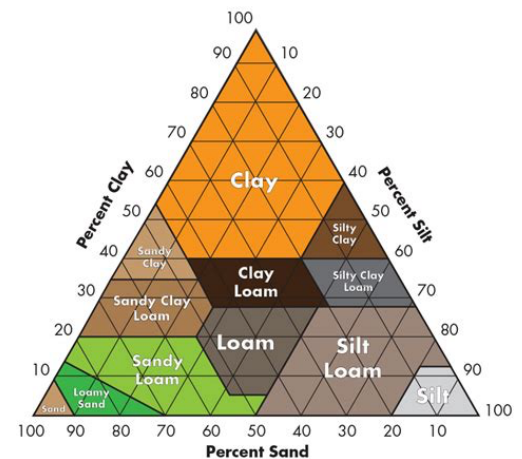


7. Using a soil texture triangle, what type of soil has 60% clay, 20% silt, and 20% sand?

- A. Loam
- B. Clay Loam
- C. Clay
- D. Silt Loam

8. Using the soil texture triangle, select the correct % components for a Sandy Loam soil.

- A. 35% clay, 35% silt, 30% sand
- B. 35% clay, 50% silt, 15% sand
- C. 10% clay, 30% silt, 60% sand
- D. 20% clay, 60% silt, 20% sand



9. The soil consists of four major components i.e., mineral, organic matter, soil air and soil water. In an ideal soil, which component makes up the smallest portion?

- A. air
- B. water
- C. mineral
- D. organic matter

10. Soil texture is made up of soil particles and determines, in large part, how the soil feels. Which of the particles is the smallest and can only be seen with an electron microscope?

- A. sand
- B. silt
- C. mineral
- D. clay

11. Field capacity is the point where the soil water holding capacity has reached its maximum for the entire field. What soil texture has the greater water holding capacity?

- A. soils with large particle size
- B. particles with large surface area
- C. deep sandy soils
- D. soils without clay particles

12. What soil type by soil map unit name comprises the largest acreage observed in the AOI?

- A. Tubac sandy clay loam
- B. Elfrida silty clay loam
- C. Cogswell clay
- D. Sonoita sandy loam

13. Rounded to the nearest acre, how many of the acres in the AOI are designated as Cogswell clay?

- A. 23
- B. 172
- C. 195
- D. 46

14. What is the soil map scale of the AZ Soil Report AOI if printed in landscape on a 11" x 8.5" sheet?
- A. 1:20,000
 - B. 1:32,400
 - C. 1:34,700
 - D. 1:50,000
15. How many acres, to the nearest acre, are included on the AZ Soil Map AOI?
- A. 4510
 - B. 1314
 - C. 5130
 - D. 4678
16. Special point features from the Map Legend indicate certain things on the map. Which one indicates a sandy spot?
- A. 
 - B. 
 - C. 
 - D. 
17. What is the available water supply of the Elfrida silty clay loam, (0 to 60 inches)?
- A. 15.6
 - B. 16.18
 - C. 14.68
 - D. 9.9
18. On the AZ Farmland classification map, some are designated as "Prime Farmland if Irrigated." How many acres (rounded to the nearest acre) are identified as "Prime Farmland if Irrigated"?
- A. 3180
 - B. 2559
 - C. 1951
 - D. 5117
19. The AZ Soil Report AOI provides information about each soil unit. What is the "landform" of the Tubac sandy clay loam (TwA)?
- A. Valleys, plains
 - B. Alluvial fans, valleys
 - C. Flood plains
 - D. Flood plains, terraces
20. Rounded to the nearest acre, How many acres have a "Fragile Soil Index Rating?"
- A. 729
 - B. 709
 - C. 516
 - D. 1314

21. What dates were the images photographed of the AZ Soil Map AOI?
- A. Aug 29, 2022
 - B. Feb 23, 2020 – Feb 25, 2020
 - C. Feb 13, 2020 – Feb 15, 2020
 - D. Aug 13, 2020 – Feb 15, 2020
22. What soil unit has the parent material made of the Mixed alluvium derived from igneous rock?
- A. Cogswell sandy loam
 - B. Sonoita sandy loam
 - C. Pima loam
 - D. Karro loam
23. What is the depth to restrictive layer for the Pima loam?
- A. 37-60 inches
 - B. More than 80 cm
 - C. More than 80 inches
 - D. 0-37 inches
24. The soil units provide information about each soil including a listing of a typical soil profile. In the AZ Soil Report AOI which soil unit does not have a typical soil profile listed?
- A. Cogswell clay loam
 - B. Grabe loam
 - C. Torrifuents
 - D. Sonoita sandy loam
25. The soil units have different ranges of elevation. Which soil unit has the lowest range of elevation on the AZ Soil Report AOI?
- A. Karro loam
 - B. McAllister loam
 - C. Pima loam
 - D. Elfrida silty clay loam

Answers

1. A
2. B
3. C
4. A
5. A
6. B
7. C
8. C
9. D
10. D
11. B
12. D
13. B
14. C
15. C
16. B
17. D
18. A
19. B
20. A
21. C
22. B
23. C
24. C
25. D