

QUIZ - Soil and Agriculture

Name \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) Humus is \_\_\_\_\_. 1) \_\_\_\_\_
- A) the artificial fertilizer applied to monocultures
  - B) a layer sometimes found in a soil horizon that is created by eluviation; it causes serious problems in agricultural fields
  - C) composed of organic compounds and is necessary for fertile soils and for holding soil moisture
  - D) one of the primary causes of desertification if it is present in excess
  - E) caused by agricultural runoff into waterways or into the water table
- 2) We lose 5 to 7 million ha of productive cropland per year to \_\_\_\_\_. 2) \_\_\_\_\_
- A) recreational use and other factors
  - B) erosion, overirrigation, and other factors
  - C) abandonment, feralization, and other factors
  - D) subsidization and other factors
  - E) forest replanting and other factors
- 3) During most of our species' 100,000-year existence, and until about 10,000 years ago, we depended on \_\_\_\_\_. 3) \_\_\_\_\_
- A) crops and cattle
  - B) crops
  - C) cattle
  - D) hunting and gathering
  - E) hunting

- 4) Agricultural practices, where the members of a farming family produce only enough food for themselves and do not make use of large-scale irrigation, chemical fertilizer, or machinery and technology, is called \_\_\_\_\_. 4) \_\_\_\_\_
- A) advanced organic farming
  - B) subsistence agriculture
  - C) subsidence agriculture
  - D) intensive traditional agriculture
  - E) reduced tillage agriculture
- 5) Factors involved in soil formation \_\_\_\_\_. 5) \_\_\_\_\_
- A) seasonal changes in the tides
  - B) nitrogen-fixing bacteria, grazing by herbivores
  - C) erosion, level terrain, absence of rooted vegetation
  - D) tropical climate, acid precipitation, frequent wildfires
  - E) weathering of parent material, freezing/thawing, growth of tree roots
- 6) A soil deficient in humus would \_\_\_\_\_. 6) \_\_\_\_\_
- A) have a large amount of vegetative detritus at the surface
  - B) have a very high pH
  - C) have unusually high levels of biological activity
  - D) have very little mineral material
  - E) have very few decomposers and be unable to hold much moisture

- 7) The breakdown of large rocks into smaller pieces is \_\_\_\_\_.  
 A) affected by rainfall, freezing and thawing  
 B) primarily caused by topsoil erosion  
 C) unaffected by winds  
 D) a major cause of topsoil erosion  
 E) mineralization
- 8) Leaching \_\_\_\_\_.  
 A) is caused by movement of water upward through soil from the water table  
 B) adds nutrients to soil naturally  
 C) can help plant growth only if done properly  
 D) is a common agricultural practice to improve soil  
 E) removes nutrients from soil
- 9) The O horizon is \_\_\_\_\_.  
 A) composed of equal amounts of bedrock and organic material  
 B) primarily composed of organic materials  
 C) primarily loam  
 D) composed primarily of bedrock  
 E) usually more sand than silt or clay
- 10) The zone beneath the A horizon, where leaching has deposited materials, is called the \_\_\_\_\_.  
 A) O horizon  
 B) B horizon  
 C) E horizon  
 D) C horizon  
 E) Leaching does not result in deposits of materials
- 11) oxidation of minerals, warm and wet conditions, reactions of water with parent material: all are components of \_\_\_\_\_.  
 A) leaching  
 B) physical/mechanical weathering of soils  
 C) erosion  
 D) humus formation  
 E) chemical weathering of soils
- 12) pH influences \_\_\_\_\_.  
 A) erosion  
 B) plant growth  
 C) soil compaction  
 D) soil clumpiness  
 E) the number of soil horizons
- 13) The loss of more than 10% productivity in arid areas due to erosion, soil compaction, forest removal, and an array of other factors is called \_\_\_\_\_.  
 A) global change  
 B) climatization  
 C) desertification  
 D) stratification  
 E) salinization
- 14) The U. S. agency charged with slowing soil degradation is the \_\_\_\_\_.  
 A) Conservation Integration Service  
 B) Soil Aggregation Service  
 C) Agricultural Standards Agency  
 D) Natural Resources Conservation Service  
 E) There is no U.S. agency charged with soil degradation, only private firms funded by farmers.
- 15) Shelterbelts are to \_\_\_\_\_ as terraces are to \_\_\_\_\_.  
 A) water erosion; wind erosion  
 B) leaching; desertification  
 C) salinization; stratification  
 D) wind erosion; water erosion  
 E) stratification; salinization

16) The buildup of salts in soils as a result of overirrigation is \_\_\_\_\_.

- A) leaching
- B) weathering
- C) erosion
- D) salinization
- E) evaporation

16) \_\_\_\_\_

17) Green manure is \_\_\_\_\_.

- A) fresh vegetation (dead plants, but not composted)
- B) expensive organic manure
- C) raw sewage mixed with fresh water
- D) organic fertilizer mixed with fresh water
- E) chemical fertilizer that is not processed

17) \_\_\_\_\_

18) To make organic fertilizer by composting you do *not* include \_\_\_\_\_.

- A) wastes from butchering animals
- B) crop residues
- C) fresh vegetation
- D) microbes
- E) animal manures

18) \_\_\_\_\_

19) The consequences of overfertilization can include \_\_\_\_\_.

- A) very fertile soils in future years
- B) very large fruits and vegetables
- C) large crop yields per acre
- D) crops spreading rapidly into nearby areas
- E) eutrophication in nearby waters

19) \_\_\_\_\_

20) The Conservation Reserve Program pays farmers to \_\_\_\_\_.

- A) grow soybeans
- B) grow cattle feed instead of commercial crops
- C) stop growing tobacco
- D) stop cultivating highly erodible cropland
- E) grow native crops such as corn and beans

20) \_\_\_\_\_

## Answer Key

Testname: QUIZ - SOIL AND AGRICULTURE

- 1) C
- 2) B
- 3) D
- 4) B
- 5) E
- 6) B
- 7) A
- 8) E
- 9) B
- 10) C
- 11) E
- 12) B
- 13) C
- 14) D
- 15) D
- 16) D
- 17) A
- 18) A
- 19) E
- 20) D