

1. What is ecology?
 - a. the branch of science dealing with the complex relationships among living things and their environment
 - b. the branch of science dealing with the complex relationships of nonliving organisms
 - c. the branch of science dealing with only natural resources
 - d. complex network of living and nonliving organisms
2. What is an ecosystem?
 - a. a complex network of living and non living organisms in which each organism may be affected by the others
 - b. a complex relationship among living things and their environment
 - c. a complex relationship among nonliving organisms
 - d. natural resources
3. What is known as the universal solvent?
 - a. gasoline
 - b. kerosene
 - c. any liquid
 - d. water
4. Decaying plant and animal matter produce...
 - a. chlorofluorocarbons
 - b. methane
 - c. nitrous oxide
 - d. ozone
5. A gas that is poisonous that can't be removed from auto exhaust is...
 - a. carbon monoxide
 - b. hydrocarbons
 - c. nitrous oxides
 - d. radon
6. Which of the following is not associated with photosynthesis?
 - a. carbon dioxide
 - b. oxygen
 - c. radon
 - d. water

7. Air pollutants which adhere to precipitation and falls to the earth is called _____.
a. acid drainage
b. acid rain
c. leachate
d. leaching
8. What is groundwater that is available for plant root absorption called?
a. capillary
b. free
c. gravitational
d. hygroscopic
9. Which of the following is the smallest soil particle?
a. clay
b. gravel
c. sand
d. silt
10. Which of the following would not be a recommended practice to reduce or prevent wind and water erosion?
a. crop rotation
b. contour farming
c. liming the soil
d. strip cropping
11. pH of water is a measure of...
a. cations
b. oxygen ions
c. hydrogen ions
d. salts
12. When plants lose water through pores in their leaf surface it is known as....
a. condensation
b. evaporation
c. precipitation
d. transpiration

13. What is an organism called that is sensitive to pollution and is used to determine the suitability of a living environment?
- a. indicator species
 - b. invasive species
 - c. limiting factor
 - d. native species
14. What type of water is held tightly to the soil particles and is not available to plant roots?
- a. capillary water
 - b. gravitational water
 - c. hygroscopic water
 - d. saturated water
15. When you measure the total concentration of all dissolved ions in water you are measuring the...
- a. dissolved oxygen
 - b. pH
 - c. salinity
 - d. saturation point
16. Which of the following influences the solubility of oxygen?
- a. alkalinity
 - b. water hardness
 - c. temperature
 - d. pH
17. What is the process by which organic matter is reduced to organic compounds?
- a. decomposition
 - b. photosynthesis
 - c. respiration
 - d. symbiosis
18. In an ecosystem one of the components that produces new food by means of photosynthesis is known as...
- a. decomposers
 - b. producers
 - c. synthesizer
 - d. transformers

19. A green plant can be a member of which of the following groups?
- a. decomposers and producer
 - b. producer and transformer
 - c. synthesizer and decomposer
 - d. transformer and synthesizer
20. Which is the process by which plant tissues are broken down to produce heat, water, and carbon dioxide?
- a. chlorophyll
 - b. decomposition
 - c. photosynthesis
 - d. respiration
21. What happens when lightening strikes in an environment?
- a. decomposition
 - b. denitrification
 - c. nitrogen fixation
 - d. transpiration
22. Which of the following is not an example of a type of hydroponic system?
- a. aeroponic culture
 - b. aggregate culture
 - c. conventional bench culture
 - d. nutriculture
23. What is a biotic factor?
- a. the living parts of an ecosystem
 - b. any non living factor in our environment that is useful in our lives
 - c. anything that is produced that is useful in our lives
 - d. living things organized into various levels
24. What is the over accumulation of pollutants at successive levels of the food chain called?
- a. biomagnification
 - b. bio permeability
 - c. eutrophication
 - d. non point source pollution

25. Thermal pollution has a harmful effect on aquatic environments because
- a. it decreases the nutrient levels in aquatic environments
 - b. it reduces the amount of dissolved oxygen in aquatic environments
 - c. it increases the number of disease-causing organisms in aquatic environments
 - d. water has been circulated around power plant generators.
26. Which of the following is not a process of soil degradation?
- a. soil erosion
 - b. salinization
 - c. nitrogen fixation
 - d. soil pollution
27. Soil pH is generally increased by adding
- a. complete fertilizer
 - b. nitrogen
 - c. lime
 - d. sulfur
28. Which type of soils are deposited and transported by streams?
- a. alluvial deposits
 - b. colluvial deposits
 - c. glacial deposits
 - d. lacustrine deposits
29. The insect-control practice that relies on the introduction of parasites and predators is...
- a. biological
 - b. chemical
 - c. cultural
 - d. regulatory

30. What is a natural resource?
- a. anything that was not produced by humans and that is useful in our lives
 - b. any living factor in our environment that is useful in our lives
 - c. any non living factor in our environment that is useful in our lives
 - d. any product produced that is useful in our lives
31. Which of the following is least likely to be considered a wetland?
- a. a floodplain
 - b. a marsh
 - c. a plateau
 - d. a prairie pothole
32. Primary succession occurs when...
- a. an ecosystem is damaged or partly destroyed
 - b. organisms live in an area where they did not live before
 - c. Plants displace animals from an environment
 - d. Remnants of a former community still exist
33. Which of the following pollutants causes artificial eutrophication?
- a. heavy metals from unlined landfills
 - b. inorganic plant nutrients from wastewater and fertilizer run off
 - c. radioactive waste from nuclear power plants
 - d. toxic chemicals from factories
34. The area of earth that supports life is called the...
- a. Atmosphere
 - b. Biosphere
 - c. Rhizosphere
 - d. Stratosphere
35. The primary source of food energy in a food chain comes from...
- a. consumers
 - b. decomposers
 - c. producers
 - d. water

36. Carbon is returned to the atmosphere through
- carbon is completely used and never returns to the environment
 - the burning of fossil fuels
 - the water cycle
 - respiration of producers, consumers, and decomposers
37. Consumers.....
- are the beginning of any food chain..
 - cannot make their own food
 - manufacture their own food by participating in food chains or webs.
 - out number the producers in the world.
38. Pollution that can be traced back to a specific source is known as...
- carcinogenic
 - non-point source pollution
 - mutagenic
 - point source pollution
39. What is it called when a group of ecosystems within a region have similar types of vegetation and similar climatic conditions?
- biome
 - estuary
 - habitat
 - stratum
40. What is a group of similar organisms that is found in a defined area known as?
- community
 - family
 - herd
 - population
41. Transpiration is important in which natural cycle?
- the carbon cycle
 - the conservation of matter
 - the nitrogen cycle
 - the water cycle

42. Highly degraded soil organic matter is/are known as....
- a. humus
 - b. microbial soil
 - c. pedogenesis
 - d. soil beginnings
43. The conversion of energy from one form to another is always accompanied by the loss of...
- a. carbon
 - b. heat
 - c. matter
 - d. water
44. The most abundant element found in living organisms is...
- a. carbon
 - b. hydrogen
 - c. nitrogen
 - d. oxygen
45. What is the function of a watershed?
- a. protect potable water tanks from the weather
 - b. protect water from contaminants
 - c. release a consistent flow of water throughout the year
 - d. shelter a water pump
46. Which of the following is not a function of a wetland?
- a. a safe dumpsite for leftover farm and garden chemicals
 - b. natural water-treatment site for nitrates and phosphates
 - c. migratory bird refuge
 - d. sediment filtering from surface water
47. What is the relationship called when a plant or animal that is in, on or with another, neither sharing its food but neither helping nor harming it?
- a. commensalism
 - b. competition
 - c. predation
 - d. symbiosis

48. What percentage of the average soil is organic matter?
- a. 5 %
 - b. 17%
 - c. 25 %
 - d. 45 %
49. Which has the least tendency to form clods, the least moisture holding capacity, and the least fertility?
- a. clay
 - b. loam
 - c. sand
 - d. silt
50. Abiotic factors influencing ecosystems include.....
- a. food chains and the loss of heat at each step
 - b. producers, consumers, and decomposers
 - c. the living parts of an ecosystem
 - d. water, soil, air, climate, and space