

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?
- decomposers and producer
 - producer and transformer**
 - synthesizer and decomposer
 - transformer and synthesizer
20. Which is the process by which plant tissues are broken down to produce heat, water, and carbon dioxide?
- chlorophyll
 - decomposition
 - photosynthesis
 - d. respiration**
21. What happens when lightening strikes in an environment?
- decomposition
 - denitrification
 - c. nitrogen fixation**
 - transpiration
22. Which of the following is not an example of a type of hydroponic system?
- aeroponic culture
 - aggregate culture
 - c. conventional bench culture**
 - nutriculture
23. What is a biotic factor?
- a. the living parts of an ecosystem**
 - any non living factor in our environment that is useful in our lives
 - anything that is produced that is useful in our lives
 - living things organized into various levels
24. What is the over accumulation of pollutants at successive levels of the food chain called?
- a. biomagnification**
 - bio permeability
 - eutrophication
 - 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?
- anything that was not produced by humans and that is useful in our lives**
 - any living factor in our environment that is useful in our lives
 - any non living factor in our environment that is useful in our lives
 - any product produced that is useful in our lives
31. Which of the following is least likely to be considered a wetland?
- a floodplain
 - a marsh
 - a plateau**
 - a prairie pothole
32. Primary succession occurs when...
- an ecosystem is damaged or partly destroyed
 - organisms live in an area where they did not live before**
 - Plants displace animals from an environment
 - Remnants of a former community still exist
33. Which of the following pollutants causes artificial eutrophication?
- heavy metals from unlined landfills
 - inorganic plant nutrients from wastewater and fertilizer run off**
 - radioactive waste from nuclear power plants
 - toxic chemicals from factories
34. The area of earth that supports life is called the...
- Atmosphere
 - Biosphere**
 - Rhizophere
 - Stratosphere
35. The primary source of food energy in a food chain comes from...
- consumers
 - decomposers
 - producers**
 - 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**