

1. When we refer to a biome in an environment which of the following best describes the meaning?
 - a. **A group of ecosystems within a region that have similar types of vegetation and climatic conditions.**
 - b. A system of interrelated organisms and their physical and chemical environment.
 - c. An ecosystem where evaporation rates are low, precipitation is minimal and swamp like conditions exist.
 - d. The change in plant species that live in an area as a damaged ecosystem returns to its original state of ecological development.
2. What can decaying plant and animal tissues form if they are buried and compressed over a long period of time?
 - a. **Fossil fuels**
 - b. Geothermal energy
 - c. Carcinogens
 - d. Volatile Organic Compounds
3. Particulate matter is a major concern when we deal with...
 - a. **Air pollution**
 - b. Soil contamination
 - c. Water pollution
 - d. All of the above
4. A type of pollution that cannot be traced to a single source or point of origin is called....
 - a. Noxious pollution
 - b. Point source pollution
 - c. **Non-point source pollution**
 - d. Radiant pollution
5. What is the natural process of plants releasing water into the atmosphere called?
 - a. Condensation
 - b. Evaporation
 - c. Respiration
 - d. **Transpiration**
6. The process that changes water from a gas to a liquid is called _____.
 - a. **Condensation**
 - b. Evaporation
 - c. Respiration
 - d. Transpiration
7. What is the ability of an organism to survive more easily in a shared environment than another called?
 - a. Adaptive superiority
 - b. **Competitive advantage**
 - c. Competitive exclusion
 - d. Secondary succession
8. _____ occurs when an ecosystem is damaged or partly destroyed and remnants of the former community still exist.
 - a. Competitive advantage
 - b. Competitive exclusion
 - c. Primary succession
 - d. **Secondary succession**

9. What is the most abundant element found in living organisms?
- Carbon**
 - Hydrogen
 - Nitrogen
 - Water
10. The water of a lake and the chemicals that dissolve from the atmosphere and land affecting the water's acidity level are all examples of a/an_____.
- Abiotic system**
 - Biotic system
 - Biological synthesis
 - Transformer systems
11. The number of a particular species of plant or animal in a given area at a specific point in time is an example of
- Biologistics
 - Carrying capacity
 - Multiple use
 - Population level**
12. If you are to measure the number of hydrogen ions a sample of water contains, what are you measuring?
- Purity
 - pH**
 - Salinity
 - Temperature
13. What are you measuring when you measure a water sample for salinity?
- The number of hydrogen ions the sample contains
 - The solubility of oxygen in the sample
 - The total concentration of all dissolved ions in the sample**
 - The acidity of the sample
14. Decay of organic matter is caused by
- Amphibians
 - Insects
 - Microbes**
 - Water
15. Tendency of soil particles or aggregates to break apart as erosion occurs is called...
- Decomposition
 - Erodibility**
 - Illuviation
 - Weathering
16. Anaerobic digestion of animal waste produces what gases?
- Butane, carbon monoxide and sulfur monoxide
 - Ethane, nitrogen monoxide and sulfur trioxide
 - Methane, carbon dioxide and hydrogen sulfide**
 - Propane, nitrogen dioxide and sulfur dioxide
17. What type of farm activity can increase particulate air pollution?
- Dust from fields caused by wind erosion**
 - Methane production from animal waste piles
 - Odor from animal feedlots
 - Pesticide aerosol from crop spraying

18. The organisms unable to manufacture their own food are called...
- a. **Consumers**
 - b. Decomposers
 - c. Producers
 - d. Providers
19. The most important factor determining how many and what types of organisms live in an ecosystem is the available...
- a. **Energy**
 - b. Soil
 - c. Temperature
 - d. Water
20. Photosynthesis is a process. By which...
- a. Consumers make their own food
 - b. One plant community is replaced by another over time
 - c. **Plants transform the sun's energy into usable energy (food)**
 - d. Plants use sunlight to break down food
21. The predictable and gradual change from one community with the passage of time is called...
- a. Community change
 - b. Ecological change
 - c. Ecosystem drift
 - d. **Ecological succession**
22. A material is not considered waste until...
- a. It is declared toxic
 - b. **It is discarded**
 - c. It is incinerated
 - d. It is recycled
23. Most of the solid waste in the municipal waste stream comes from...
- a. Aluminum
 - b. Landscape debris
 - c. **Paper**
 - d. Plastics
24. Foods that should generally not be included in a compost heap include....
- a. Coffee grounds
 - b. Egg shells
 - c. **Meats**
 - d. Potato peels
25. Two results of decomposition in a sanitary landfill are...
- a. Earthworms and humus
 - b. **Methane and leachate**
 - c. Oxygen and helium
 - d. Photosynthesis and leachate
26. The Biochemical Oxygen Demand Test or BOD test aids in the detection of what form of pollution?
- a. **Organic wastes**
 - b. Leachate
 - c. Radioactive materials
 - d. Thermal pollution

27. Which discharged form of water pollution can enter the food chain by adhering to body tissue and cannot be cooked out?
- Inorganic wastes
 - Organic wastes
 - Radioactive materials**
 - Thermal pollution
28. What primary air pollutant is produced when there is insufficient oxygen for complete combustion of fossil fuel?
- Carbon dioxide
 - Carbon monoxide**
 - Nitrogen dioxide
 - Sulfur dioxide
29. Particulate pollutants may come from the combustion of:
- Gasoline
 - Natural gas
 - Propane
 - Wood, coal and diesel**
30. Dissolved Oxygen (DO) is an important water quality measurement. If there is an excess amount of decaying plant material in a body of water how will this affect DO levels?
- This will raise the levels of DO in the water
 - This will lower the levels of DO in the water**
 - This will have no effect on the levels of DO in the water
 - This will block sunlight and limit photosynthesis which will increase DO levels.
31. Soil texture describes...
- The aeration of the soil
 - The arrangement of the soil particles into shapes or pieces
 - The physical condition of the soil
 - The proportion of sand, silt and clay in the soil**
32. Which of the following statements is true when referring to soil particles?
- Clay is the largest particle in soil
 - Clay is the smallest particle in soil**
 - Clay is smaller than sand but larger than silt
 - Silt is the smallest particle in soil
33. Which of the following soils has the most water holding capacity?
- Soils high in sand content
 - Soils that have an even amount of sand and silt
 - Soils that have a high clay content**
 - Soils that have more mineral content
34. Lines of longitude _____.
- Run in an east/west direction.
 - Are unequal in length.
 - Are known as meridians.**
 - Are known as parallels.
35. The amount of dissolved oxygen in warm water is _____ than it is in cold water.
- Better
 - Higher
 - Lower**
 - The same

36. _____ errors are known to occur from signal reflection from various nearby objects.
- a. Ephemeris
 - b. Ionosphere
 - c. **Multipath**
 - d. Troposphere
37. What is the over accumulation of pollutants at successive levels in the food chain called?
- a. Bio adaptability
 - b. **Biomagnification**
 - c. Eutrophication
 - d. Point source pollution
38. Which soil horizon is composed of mostly parent material?
- a. B horizon
 - b. Subsoil
 - c. **C horizon**
 - d. Topsoil
39. What is the process by which the molecules of a chemical adhere to the surface of some other material?
- a. Absorption
 - b. **Adsorption**
 - b. Attenuation
 - c. Attraction
40. With which type of soils are wetlands primarily associated?
- a. **Hydric**
 - b. Organic
 - c. Loamy
 - d. Sandy
41. What is considered a measurement of the ability of an organism to reproduce sufficient numbers of offspring in order to maintain a stable population?
- a. Biomass power
 - b. Biological synthesis
 - c. Biological succession
 - d. **Biotic potential**
42. An overly wet soil is often low in productivity. Which of the following are true in these wet soils?
- a. Fungi and bacteria are present in too great of number to be beneficial
 - b. **Little or no air can penetrate the soil**
 - c. Organic matter decomposes too quickly to be of a benefit to plants
 - d. Tend to have less natural mineral deposit
43. Which of the following items are not considered to be a factor, that influences the toxicity of chemicals?
- a. Absorbed dose
 - b. Frequency of exposure
 - c. Length of exposure
 - d. **Weather conditions**

44. Water that is clouded with suspended particles of silt is described as...
- a. Having a Low pH
 - b. Having a high salinity content
 - c. Stratified
 - d. **Turbid**
45. Ecosystems are...
- a. Complex relationships among living things and their environment
 - b. Complex relationships among nonliving organisms
 - c. **Complex networks of living and nonliving organisms in which each organism may be affected by the others**
 - d. Natural resources
46. What is the leading cause of eutrophication?
- a. Accumulation of salts in irrigated lands
 - b. Accumulation of organic material in very wet soils
 - c. **Fertilizer runoff**
 - d. Use of heavy metals in soils
47. The greenhouse effect is...
- a. **A buildup of carbon dioxide and other specific gases in the atmosphere**
 - b. A disruption in photosynthesis
 - c. An increase in plant growth
 - d. A theory that has been disproven
48. What is an area bound by geographic features in which precipitation is absorbed in the soil to form groundwater, and ultimately drains into a body of water.
- a. Riparian Zone
 - b. Water table
 - c. **Watershed**
 - d. Wetland
49. What is the area of Earth that supports life called?
- a. The Atmosphere
 - b. **The Biosphere**
 - c. The Hydrosphere
 - d. The Rhizosphere
50. What is a relationship in which one type of wildlife lives in, on or with another without either harming or helping it?
- a. Community
 - b. **Commensalism**
 - c. Parasitism
 - d. Mutualism