



2022 ENVIRONMENT AND NATURAL RESOURCES EXAM

1. All the ecosystems of the Earth, when considered as a whole, are called the _____.
 - a. Atmosphere
 - b. Biomass
 - c. Biosphere
 - d. Rhizosphere
2. Which of the following processes produces oxygen for an ecosystem?
 - a. Digestion
 - b. Decomposition
 - c. Photosynthesis
 - d. Respiration
3. Which process takes place within the individual cells of plants and animals, involving the breakdown of foods into their components along with the release of energy?
 - a. Digestion
 - b. Decomposition
 - c. Photosynthesis
 - d. Respiration
4. Which is the most abundant element found in living organisms?
 - a. Carbon
 - b. Oxygen
 - c. Nitrogen
 - d. Water
5. Which is the most abundant element in the atmosphere?
 - a. Carbon
 - b. Oxygen
 - c. Nitrogen
 - d. Water

6. Plants give up large amounts of water to the atmosphere through a process called _____.
- Evaporation
 - Perspiration
 - Respiration
 - Transpiration
7. In environmental science, a "niche" refers to...
- When an ecosystem is damaged, but remnants of the former community still exist
 - When one organism is more able to survive in an environment than another
 - When an organism did not exist before in an environment but can now
 - The role the organism fulfills in an environment
8. 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
9. The ability of an organism to survive changes in an environment is a demonstration of its...
- Comfort zone
 - Competitive exclusion principle
 - Niche
 - Range of tolerance
10. Which of the following forms of energy occurs as a result of photosynthesis?
- Chemical
 - Electrical
 - Kinetic
 - Thermal
11. Which of the following is not considered a renewable resource?
- Forests
 - Plants
 - Soil
 - Wildlife

12. The practice of using natural resources while protecting against harm and waste is called...
 - a. Biotechnology
 - b. Conservation
 - c. Preservation
 - d. Resource renewal
13. The number of a particular plant or animal species in a given area at a specific time is an example of...
 - a. Biologistics
 - b. Carrying capacity
 - c. Multiple use
 - d. Population level
14. Which of the following is a product of decaying plant or animal matter?
 - a. Chlorofluorocarbons
 - b. Methane
 - c. Nitrous oxide
 - d. Ozone
15. What pollutant compound has been used as an aerosol propellant and refrigeration gas?
 - a. Carbon dioxide
 - b. Chlorofluorocarbons
 - c. Fluorine gas
 - d. Radon
16. What part of the stable aerosol compound actually destroys ozone molecules?
 - a. Carbon
 - b. Chlorine
 - c. Fluorine
 - d. Hydrogen
17. Which automotive gas cannot be removed with current technologies?
 - a. Carbon Dioxide
 - b. Carbon Monoxide
 - c. Chlorofluorocarbons
 - d. Ozone

18. Which of the following best describes the Greenhouse effect?
- Accumulation of radioactive gases in the atmosphere
 - Heat from the earth's crust absorbs, radiates and reflects heat back into the air above, and Earth's atmosphere traps this heat.
 - Hot exhausts from car emissions as well as other manufacturing releasing compounds that contain nitrogen and oxygen heating up the atmosphere
 - The thinning of the protective layer in the Earth's atmosphere causing surface temperatures to rise
19. Radon gas is a threat to air quality...
- In factories
 - In homes
 - In wooded areas
 - On the highway
20. What are large areas of land where water from rain and snow is absorbed into the soil to emerge as spring water?
- Marshes
 - Water table
 - Watershed
 - Wetlands
21. Which of the following is not an indicator species when we refer to water quality?
- Algae
 - Aquatic invertebrates
 - Ferns
 - Fish
22. Groundwater that is unavailable for plant root absorption is called?
- Capillary
 - Free
 - Gravitational
 - Hygroscopic
23. What is the measure of the total concentration of all dissolved ions in water?
- Dissolved Oxygen
 - pH
 - Salinity
 - Turbidity

24. Which of the following is essential for aquatic life and is characteristically absent in groundwaters?
- Dissolved Oxygen
 - pH
 - Salinity
 - Turbidity
25. A pH of 7 is considered...
- Acidic
 - Basic
 - Neutral
 - 7ppm
26. The process by which water changes from liquid form to a vapor or gas is...
- Condensation
 - Distillation
 - Evaporation
 - Precipitation
27. Which of the following soil property refers to the proportions of sand, silt, and clay in a soil?
- Drainage
 - Erosion
 - Slope
 - Texture
28. Which soil property refers to the natural ability of the soil to allow water to flow through it?
- Drainage
 - Erosion
 - Slope
 - Texture
29. Referring to the most basic use of soil, it provides individual plants with the following except...
- Anchorage
 - Nutrients
 - Photosynthesis
 - Water

30. Which of the following soil parent materials is deposited by wind?
- Alluvial deposits
 - Loess deposits
 - Mineral and Rock
 - Organic deposits
31. Which of the following soil particles is the smallest?
- Clay
 - Gravel
 - Sand
 - Silt
32. Which of the following is not considered a physical property of the soil?
- Drainage
 - Slope
 - Soil solution
 - Texture
33. Which class of animals is primarily supported by a grassland habitat?
- Carnivores
 - Herbivores
 - Omnivores
 - Producers
34. Which term describes a species that will be expected to survive if immediate steps are taken to protect the environment they live in?
- Endangered species
 - Extinct species
 - Preserved species
 - Threatened species
35. When referring to wildlife biology, which of the following terms fits the description of a plant or animal that is in, on, or with another, sharing its food but neither helping nor harming it?
- Commensalism
 - Competition
 - Mutualism
 - Predation

36. What is the single greatest threat facing wildlife today and for the foreseeable future?
- Air pollution
 - Climate change
 - Habitat destruction
 - Water shortages
37. The following are all factors that contribute to the extinction of a species except for...
- Alien species introduction
 - Introduction of Bioengineered bacteria
 - Habitat loss
 - Over-hunting by humans
38. A water habitat in which water tends to stand for long periods of time is called a _____ habitat.
- Lentic
 - Lotic
 - Murky
 - Turbid
39. High levels of dissolved mineral in the water such as nitrates and phosphates can cause...
- A growth of algae and other plants that benefit the aquatic habitat
 - A dense blue-green algae bloom and aquatic animals and fish may die
 - The pH of the water drops very low
 - The water becomes turbid and cloudy with suspended particles limiting photosynthesis
40. What is the most promising practice for reducing the amount of solid waste deposited in landfills?
- Eliminating paper and plastic packaging materials
 - Eliminating the production of toxic wastes
 - Recycling waste materials
 - Reducing consumption of packaged goods
41. What is a combustible gas that is obtained from decaying vegetation, sewage and animal waste?
- Ethanol
 - Gasohol
 - Helium
 - Methane

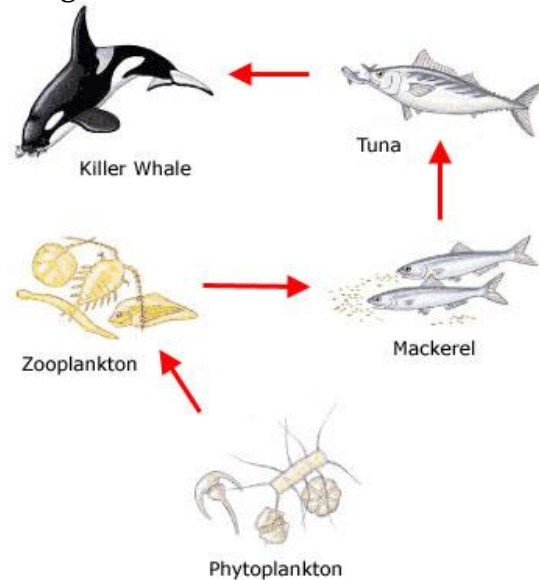
42. What is the energy source obtained from the heat of the Earth's molten core?
- a. Geothermal power
 - b. Methane
 - c. Nuclear power
 - d. Solar energy
43. Which energy source contributes most to atmospheric pollution?
- a. Ethanol
 - b. Methane
 - c. Nuclear power
 - d. Wood
44. Which of the following energy sources is produced from a biodigester?
- a. Ethanol
 - b. Geothermal
 - c. Methane
 - d. Nuclear
45. When an underground fuel tank has leaked some of its contents into the surrounding soil it is considered...
- a. A causal agent
 - b. Non-point source pollution
 - c. Point source pollution
 - d. Safe because of the soil's ability to absorb toxins
46. Pollution that can be traced back to a specific source is known as...
- a. Carcinogenic
 - b. Mutagenic
 - c. Non-point source pollution
 - d. Point source pollution
47. Which of the following is not considered to be a route of entry for hazardous material?
- a. Digestion
 - b. Ingestion
 - c. Inhalation
 - d. Injection

48. Which of the following soils has the most water holding capacity?
- a. Soils high in sand content
 - b. Soils that have an even amount of sand and silt
 - c. Soils that have a high clay content
 - d. Soils that have more mineral content
49. 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
50. Lines of longitude _____.
- a. Run in an east/west direction.
 - b. Are unequal in length.
 - c. Are known as meridians.
 - d. Are known as parallels

ENR Exam 2017

1. Which of the following negatively impacts the environment?
 - a. reducing the demand for fossil fuels
 - b. replanting deforested areas
 - c. using more pesticides**
 - d. using renewable resources

2. The diagram below shows a food chain.



- What do the arrows in the diagram represent?
- a. flow of energy**
 - b. life cycle stages
 - c. one community replacing another
 - d. renewable resource depletion

 3. If producers in a food web were removed, which of the following changes would most likely occur?
 - a. Consumers of the web would begin making energy for the food web
 - b. the entire food web would collapse over time**
 - c. the food web would depend on the decomposers for energy
 - d. the populations of the remaining organisms in the food web would increase

 4. The most abundant element found in living organisms is...
 - a. carbon**
 - b. hydrogen
 - c. nitrogen
 - d. oxygen

5. What is the interdependence of plants and animals on each other for food known as...

- a. a universal relationship
- b. domestic
- c. symbiosis
- d. the food chain**

6. A food web is different from a food chain because...

- a. animals eat plants in a food web and they do not in a food chain
- b. a food web is a combination of several food chains**
- c. decomposers eat animals in a food chain but not in a food web
- d. a food web and a food chain are the same thing

7. Material placed on soil to break the fall of raindrops is called _____.

- a. contour farming
- b. lime
- c. mulch**
- d. strip cropping

8. In the water cycle when water is changed from a liquid to a gas it is called _____.

- a. condensation
- b. evaporation**
- c. precipitation
- d. transpiration

9. Which of the following ingredients is not associated with photosynthesis?

- a. carbon dioxide
- b. oxygen
- c. radon**
- d. water

10. The buildup of heat resulting from sunlight passing through clear objects and heating trapped air in the interior area is called?

- a. infrared energy
- b. the greenhouse effect**
- c. radiation
- d. ultraviolet

11. Humans can survive how long without proper air to breathe?

- a. 6 minutes**
- b. 12 minutes
- c. 2 hours
- d. 12 hours

12. The source of radioactive dust is most likely from...
- a. cracks in the basement floors
 - b. damaged ozone layer
 - c. improperly adjusted furnaces
 - d. nuclear reactions**
13. Which has the lowest tendency to form clods, the least moisture holding capacity and the least fertility?
- a. clay
 - b. loam
 - c. sand**
 - d. silt
14. Scientists identified the buildup of **what substance** as the cause of the thinning ozone layer?
- a. carbon monoxide
 - b. chlorofluorocarbons**
 - c. nitrous oxide
 - d. radon
15. Which of the following are the basis of food chains?
- a. carnivores
 - b. consumers
 - c. herbivores
 - d. producers**
16. What kind of water is unavailable to plant roots because it is held tightly against the soil particles?
- a. alluvial water
 - b. capillary water
 - c. gravitational water
 - d. hygroscopic water**
17. What are sensitive organisms that show the state of an environment's overall health called?
- a. consumers
 - b. endangered species
 - c. indicator species**
 - d. limiting factor
18. All of the following are examples of recommended practices to reduce or prevent wind and water erosion except for...
- a. conservation tillage
 - b. crop rotation
 - c. sheet erosion**
 - d. strip cropping

19. What is the process by which organic matter is reduced to organic compounds?
- a. **decomposition**
 - b. photosynthesis
 - c. respiration
 - d. symbiosis
20. Which of the following soil particles is the smallest?
- a. **clay**
 - b. organic matter
 - c. sand
 - d. silt
21. Which of the following layers of soil contributes the least to plant nutrition?
- a. bedrock
 - b. Horizon A
 - c. Horizon B
 - d. **Horizon C**
22. What is the wildlife relationship that refers to a plant or animal that lives in, on or with another, sharing its food, but not helping or harming it?
- a. **commensalism**
 - b. mutualism
 - c. parasitism
 - d. predation
23. The amount of dissolved oxygen in warm water is _____ than it is in cold water.
- a. better
 - b. higher
 - c. **lower**
 - d. no different
24. 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
25. One species of fish that is often undesirable in lakes and ponds is...
- a. bass
 - b. **carp**
 - c. sunfish
 - d. trout

26. Water quality is least affected by which of the following factors?
- a. chemical runoff
 - b. fish density
 - c. fish species**
 - d. weather
27. What occurs when heritable traits that increase an organism's chances for survival are passed from one generation to the next?
- a. adaptation**
 - b. assimilation
 - c. extinction
 - d. mutation
28. This limits photosynthesis and visibility; it is caused by the presence of suspended matter in water.
- a. buffer
 - b. temperature
 - c. toxins
 - d. turbidity**
29. Renewable resources are...
- a. any material that provides energy
 - b. irreplaceable
 - c. replaceable**
 - d. not natural resources
30. The groundwater that is available for plant root absorption is called?
- a. capillary**
 - b. free
 - c. gravitational
 - d. hygroscopic
31. The process of bacteria changing dead organisms into ammonia, then to nitrites, and finally to nitrates useful to plants is called _____.
- a. ammonification
 - b. electrolysis
 - c. nitrification**
 - d. photosynthesis
32. Carbon is returned to the atmosphere through...
- a. carbon is completely used and never returns to the environment
 - b. respiration of producers, consumers, and decomposers**
 - c. the burning of fossil fuels
 - d. the water cycle

33. Approximately 78% of the earth's atmosphere is made up of what gas?
- a. carbon
 - b. nitrogen**
 - c. oxygen
 - d. water vapors
34. The organisms unable to manufacture their own food are called...
- a. consumers**
 - b. decomposers
 - c. producers
 - d. providers
35. 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**
36. _____ breakdown waste products and organisms that have died into chemical substances that are released into the environment.
- a. Food chains
 - b. Producers
 - c. Consumers
 - d. Decomposers**
37. Consumers...
- a. are the beginning of any food chain
 - b. cannot make their own food**
 - c. manufacture their own food by participating in food chains/webs.
 - d. outnumber the producers in the world.
38. Salinization, alkalization, and water logging **usually** occur from...
- a. cultivation of poor soils
 - b. improper irrigation practices**
 - c. improper utilization of sewage sludge
 - d. low-input cultivation of crops
39. Depth of surface soil is important for which of the following reasons?
- a. is not important
 - b. root development occurs in the upper 12 inches of soil**
 - c. shallow surface soil holds structures depth of surface soil
 - d. water cannot drain through deep surface soils
40. In the field of chemistry, excessive "misplaced matter" is considered _____.

- a. acid rain
- b. hazardous waste
- c. nuclear fusion
- d. pollution**

41. Which of the following are not considered to be a factor influencing the toxicity of chemicals?

- a. absorbed dose
- b. frequency of exposure
- c. length of exposure
- d. weather conditions**

42. Which of the following chemical elements is not needed to form an organic chemical?

- a. carbon
- b. chlorine**
- c. hydrogen
- d. oxygen

43. The natural process of plants releasing water into the atmosphere is called _____.

- a. condensation
- b. evaporation
- c. respiration
- d. transpiration**

44. The build up of plant nutrients in a body of water, which leads to excessive algae growth is called _____.

- a. equinoctial
- b. equatorial
- c. eradication
- d. eutrophication**

45. The process that changes water from a gas to a liquid is called _____.

- a. condensation**
- b. evaporation
- c. respiration
- d. transpiration

46. Air pollutants which adhere to precipitation and falls to the earth is called _____.

- a. acid drainage
- b. acid rain**
- c. leachate
- d. leaching

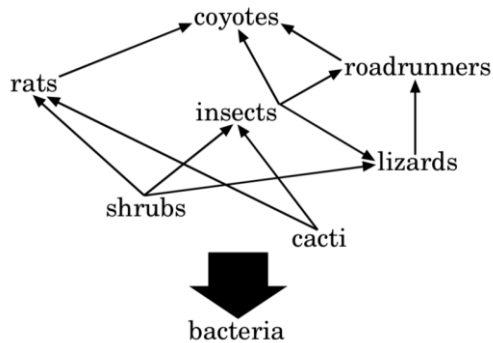
47. Nitrates are...^[L]_[SEP]
- a. common gases found in the atmosphere.^[L]_[SEP]
 - b. formed from the decomposing of dead organisms and animal wastes.**
 - c. man-made fertilizers utilized in the production of the food we eat.^[L]_[SEP]
 - d. not useful to plants until converted to nitrites
48. Which of the following influences the solubility of oxygen?
- a. alkalinity
 - b. pH
 - c. temperature**
 - d. water hardness
49. 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
50. Which of the following is not a process of soil degradation?
- a. nitrogen fixation**
 - b. salinization
 - c. soil erosion
 - d. soil pollution

Environmental and Natural Resources Career Development Event

General Knowledge Test

2018

Use this diagram of a food web to answer the next five questions



- 1) In which biome is this food web most likely to be found?
 - a. Forest
 - b. Desert**
 - c. Grassland
 - d. Urban
- 2) What is the function of bacteria in this food web?
 - a. Decomposers**
 - b. Producers
 - c. Primary consumers
 - d. Secondary consumers
- 3) If these organisms were arranged in a food pyramid, which organism would have the least amount of total energy available?
 - a. Coyote**
 - b. Insect
 - c. Lizard
 - d. Shrub
- 4) Which population would increase most if the insects were eliminated?
 - a. Decomposers
 - b. Producers**
 - c. Primary consumers
 - d. Secondary consumers
- 5) Which of the following populations begins the flow of energy through the food web?
 - a. Coyotes
 - b. Insects
 - c. Lizards
 - d. Shrub**

- 6) Two environmentally sound methods of solid waste disposal are
- a. **Incineration and sanitary landfills**
 - b. Ocean dumping and sanitary landfills
 - c. Town dumps and sanitary landfills
 - d. Compaction and town dumps
 - e. Town dumps and recycling centers
- 7) Which of the following is a consequence of compaction?
- a. Increased soil salinity
 - b. Increased weathering of rocks
 - c. **Decreased absorption of water**
 - d. Decreased soil fertility
- 8) Air is
- a. 78 percent argon
 - b. 21 percent nitrogen
 - c. **21 percent oxygen**
 - d. 10 percent carbon dioxide
- 9) The largest soil particle is
- a. Clay
 - b. Gravel
 - c. **Sand**
 - d. Silt
- 10) Brackish water is
- a. Colored black
 - b. **Located in tidal areas**
 - c. Collected from small creeks and branches
 - d. Mostly high in salinity (20-34 ppt)
- 11) This type of erosion can be responsible for up to 95 percent of soil loss.
- a. Splash Erosion
 - b. **Sheet Erosion**
 - c. Gully Erosion
 - d. Wind Erosion
- 12) What role do forests have in the environment?
- a. Filter groundwater
 - b. Prevent soil erosion
 - c. Convert carbon dioxide into oxygen
 - d. Provide wildlife habitat
 - e. **All of the above**

- 13) The horizon that is most supportive of plant growth is
- a. Horizon O
 - b. Horizon A**
 - c. Horizon B
 - d. Horizon C
- 14) _____ is a species of fish adapted to cold, running water in streams.
- a. Carp
 - b. Catfish
 - c. Trout**
 - d. Sunfish
- 15) Ecosystems that are characterized by partially enclosed coastal bodies of water where salty seawater mixes with freshwater from streams and rivers are called?
- a. Euphotic zones
 - b. Coral reefs
 - c. Estuaries**
 - d. Benthic zones
- 16) _____ is the sequential replacement of species in an ecosystem which underwent an artificial or natural disturbance.
- a. Primary succession
 - b. Secondary succession**
 - c. Tertiary succession
 - d. None of the above
- 17) Which of the following is NOT one of the four basic elements of a habitat?
- a. Macronutrients**
 - b. Space
 - c. Shelter
 - d. Food
 - e. Water
- 18) What is ecology?
- a. A complex network of living and nonliving organisms
 - b. The branch of science dealing with the complex relationships of nonliving organisms
 - c. The branch of science dealing with the complex relationships of living things and the environment**
 - d. The branch of science dealing only with natural resources
 - e. The branch of science dealing with nature's effect of living things

19) Define riparian area.

- a. The grassy areas located along the borders of a field
- b. Land and vegetation adjacent or near the banks of a waterway**
- c. Areas that are covered with water at least part of the year
- d. The ridge or high area from which water drains either toward or away from a watershed

20) A snag tree is most commonly defined as a

- a. Live standing tree that shelters wildlife and is a valuable timber source
- b. Dead tree which is also a shelter for wildlife but is of little to no timber value**
- c. Live tree that is hollow or contains holes large enough to shelter wildlife
- d. None of the above

21) Fish that migrate between freshwater and saltwater are called?

- a. Diadromous**
- b. Desalination
- c. Flocculation
- d. Hygrophyte

22) Transpiration is

- a. The process when a plant absorbs water into its roots and then gives off water vapor through the pores in its leaves**
- b. The process of water filtering down through aerated soil due to gravity
- c. The process of turning from liquid to vapor
- d. The process of precipitating a substance from a solution

23) Which of the following is considered a non-exhaustible resource?

- a. Solar energy
- b. Geothermal sources
- c. Tidal energy
- d. Wind power
- e. All of the above**

24) What percentage of the average soil are minerals?

- a. 25 percent
- b. 45 percent**
- c. 5 percent
- d. 10 percent

25) Which of the following is considered the largest contributor to the problem of acid precipitation?

- a. Sulfur
- b. Sulfur Dioxide**
- c. Sulfur Monoxide
- d. None of the above

- 26) What is the first step in the chemical breakdown by bacteria during the nitrification process?
- a. Ammonia to nitrates
 - b. Ammonia to nitrites**
 - c. Nitrates to nitrites
 - d. Nitrites to nitrates
- 27) Which of the following is a primary producer?
- a. cows
 - b. trees**
 - c. blue crab
 - d. striped bass
- 28) Contaminants of food and water include
- a. Registered pesticides
 - b. Contact by cockroaches
 - c. Feces and urine
 - d. All of the above**
- 29) The product of decaying plant or animal matter is
- a. Chlorofluorocarbons
 - b. Methane**
 - c. Nitrous oxide
 - d. Ozone
- 30) Decay of organic matter is caused by
- a. Large animals
 - b. Microbes**
 - c. Rodents
 - d. Water
- 31) The land class with the fewest limitations is
- a. Class I**
 - b. Class III
 - c. Class VI
 - d. Class VIII
- 32) There are about _____ acres of productive forests in the continental United States
- a. 105 million
 - b. 235 million
 - c. 500 million
 - d. 751 million**

- 33) The most important commercial species of trees in the United States is
- a. Oak
 - b. Douglas fir**
 - c. Redwood
 - d. Walnut
- 34) A forest that has never been harvested is called
- a. Virgin**
 - b. Hardwood
 - c. Clear cut
 - d. Seedling
- 35) The seed-tree method of harvesting
- a. Cuts all trees over a certain diameter
 - b. Cuts all trees under a certain diameter
 - c. Cuts about one-third of the trees in a woodlot
 - d. Cuts all but a few trees left for seed**
- 36) Forest wildlife generally survive best in forest that are
- a. Of mixed-age trees**
 - b. Deciduous
 - c. Evergreen
 - d. Of even age trees
- 37) Trees going along streams help to
- a. Regulate water flow
 - b. Provide food for aquatic wildlife
 - c. Regulate stream temperatures
 - d. All of the above**
- 38) When two species of wildlife live together for the benefit of both, the relationship is called
- a. Mutualism**
 - b. Predation
 - c. Commensalism
 - d. Competition
- 39) Wetlands should be made up of about _____ shallow, standing water for optimum wildlife use.
- a. One fourth
 - b. One third**
 - c. One-half
 - d. Two-thirds

- 40) The highest salinity level is measured in
- a. Pond water
 - b. Irrigation water
 - c. Creeks
 - d. **Ocean water**
- 41) A fish death can occur when a pond “rolls over”
- a. Because of the temperature shock
 - b. Because the sages sink to the bottom
 - c. **Because of low levels of dissolved oxygen**
 - d. Because the fish turn upside down
- 42) The rate at which photosynthesis is carried out depends on
- a. The amount of fertilizer in the water
 - b. The amount of oxygen in the atmosphere
 - c. The amount of respiration carried on during the daylight hours
 - d. **The intensity, temperature and concentration of carbon dioxide**
- 43) Conservation is best defined as...
- a. An attempt to prevent the use or modification of some natural resource.
 - b. A natural resource that for all practical purposes will never run out.
 - c. **The “wise use” of our natural resources to provide as much usefulness as possible to people both now and in the future.**
 - d. A social or political activity intended to benefit a Natural Resource.
- 44) Slope, texture, flood hazard, and drainage are used to describe physical properties of ...
- a. **Soils**
 - b. Forestry
 - c. Watersheds
 - d. None of the Above
- 45) Which of these would be considered a keystone species?
- a. **Grey wolf**
 - b. White-footed mice
 - c. White-tailed deer
 - d. Red fox
- 46) _____ is the process by which an organism maintains a fairly constant internal environment when the external environment changes.
- a. **Homeostasis**
 - b. Periodicity
 - c. Poikilotherm
 - d. Homeotherm

- 47) This made it a federal offense to transport illegally acquired wildlife across state boundaries
- a. **Lacey Act, 1900**
 - b. Migratory Bird Act, 1929
 - c. Lea Act, 1948
 - d. Pitman-Robertson Act, 1950
- 48) The ability of a given area to provide food, water, and shelter for the population of a given animal is defined as:
- a. Maximum daily load
 - b. **Carrying capacity**
 - c. Resource consumption
 - d. Minimum viable population
- 49) _____ is a special type of wetland that may only last for a few months each year.
- a. **Vernal pool**
 - b. Excavated pond
 - c. Embankment pond
 - d. None of the above
- 50) Chlorophyll is important in plants because it
- a. Creates an atmosphere where it can determine the osmotic pressure
 - b. Allows the plant to make good xylem tissue
 - c. **Allows photosynthesis to occur**
 - d. Is also known as the chloroplasts



Environmental and Natural Resources Career/Leadership Development Event

GENERAL KNOWLEDGE EXAM KEY—2019

1. What is the branch of science that deals with the complex relationships between living things and their environment?
 - A. Biology
 - B. Ecology**
 - C. Ichthyology
 - D. Geology

2. How does energy move through ecosystems on earth?
 - A. From the sun to consumers and producers
 - B. From the sun to consumers to producers then back to consumers**
 - C. From sun to producers to consumers to decomposers
 - D. From the sun to decomposers to producers to consumers

3. Which of the following is a renewable or inexhaustible resource?
 - A. Atmosphere**
 - B. Minerals
 - C. Natural gas
 - D. Petroleum products

4. Which of the following is an exhaustible resource?
 - A. The atmosphere
 - B. Water being replenished by the hydrologic system
 - C. Solar energy
 - D. Forest**

5. Ecosystems are.....
- A. Complex relationships among living things and their environment.
 - B. Complex relationships among nonliving organisms.
 - C. Natural resources.
 - D. Complex networks of living and nonliving organisms in which each organism may be affected by the others.**
6. Natural resources.....
- A. Are only important to plants and animals.
 - B. Are not important to humans.
 - C. Are important to humans because they rely upon them for everyday life.**
 - D. Are important to the United States' international trade policy.
7. What is the process by which plant leaves emit water into the atmosphere?
- A. Condensation
 - B. Precipitation
 - C. Respiration
 - D. Transpiration**
8. Carbon is returned to the environment by decomposers feeding on dead matter, waste and subsequently releasing carbon dioxide through the process of_____.
- A. Condensation
 - B. Evaporation
 - C. Respiration**
 - D. Transpiration

9. Approximately 78% of the earth's atmosphere is made up of _____.
- A. Carbon dioxide
 - B. Nitrogen**
 - C. Oxygen
 - D. Water
10. The primary source of food energy in a food chain comes from _____.
- A. Consumers
 - B. Decomposers
 - C. Producers**
 - D. Water
11. Nitrates are _____.
- A. Common gases found in the atmosphere
 - B. Formed from the decomposing of dead organisms and animal wastes**
 - C. Man-made fertilizers utilized in the production of the food we eat
 - D. Not useful to plants until converted to nitrites
12. Plants that undergo the process of nitrogen-fixing by absorbing nitrogen gas and converting it to nitrates are called _____.
- A. Cool season grasses
 - B. Legumes**
 - C. Nitrators
 - D. Warm season grasses
13. 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**

14. The gradual transformation of a pond into a bottomland forest over the passage of years is an example of...
- A. Community rather than an ecosystem
 - B. Ecological succession**
 - C. Ecological transformation
 - D. Limiting factors
15. Consumers in an ecosystem
- A. Are the beginning of any food chain
 - B. Cannot make their own food**
 - C. Manufacture their own food
 - D. Outnumber the producers in the world
16. Close interaction between organisms of different species over an extended period of time in which one individual benefits while the other individual neither benefits nor is harmed by the relationship, is known as:
- A. Competition
 - B. Commensalism**
 - C. Mutualism
 - D. Parasitism
17. The build up of plant nutrients in a body of water, which leads to excessive algae growth, is called _____.
- A. Competition
 - B. Eutrophication**
 - C. Nitrification
 - D. Succession

18. What soil particle holds water the tightest and has the least permeability?
- A. Clay**
 - B. Gravel
 - C. Sand
 - D. Silt
19. The best way to determine soil texture in the field is by ...
- A. Kicking the soil with you shoe and seeing how it crumbles
 - B. Looking at the color
 - C. Using the "Ribbon Test"**
 - D. Weighing the soil sampled
20. The process of bacteria changing dead organisms into ammonia, then to nitrites and finally to nitrates useful to plants is called _____.
- A. Ammonification
 - B. Electrolysis
 - C. Eutrophication
 - D. Nitrification**
21. What are the four textural classes in the textural triangle?
- A. Gravel, sand, silt and clay
 - B. Sand, silt, clay and topsoil
 - C. Sand, silt, clay and loam**
 - D. Sand, silt, clay and platy
22. Which soil type tends to be very low in the ability to hold nutrients, however they are very high in permeability?
- A. Clay soils
 - B. Loam soils
 - C. Sandy soils**
 - D. Silty soils

23. An example of geological soil erosion is.....
- A. A shortage in food due to poor soil fertility
 - B. Glaciers forming rivers, leveling mountains, filling valleys, forming lakes and depositing soil**
 - C. Loss of plants due to lack of water
 - D. Water washing off of a field because soil was plowed on a slope
24. Which of the following is not a process of soil degradation?
- A. Nitrogen fixation**
 - B. Salinization
 - C. Soil erosion
 - D. Soil pollution
25. Which of the following is not a benefit of soil organic matter?
- A. Improves the permeability of soil
 - B. Improves soil tilth
 - C. Improves water infiltration into soil
 - D. Kills all microorganisms in the soil**
26. 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**
27. Which of the following items is not found on a chemical label?
- A. Directions
 - B. Ingredients
 - C. Precautions
 - D. Safety tests**

28. Which sphere contains all of the plant and animal life on the earth's surface?

- A. Atmosphere
- B. Biosphere**
- C. Hydrosphere
- D. Lithosphere

29. The process that changes water from a gas to a liquid is called _____.

- A. Condensation**
- B. Evaporation
- C. Respiration
- D. Transpiration

30. Air pollutant that adheres to precipitation and falls to the earth is called _____.

- A. Acid rain**
- B. Bleaching
- C. Leachate
- D. Leaching

31. Pollution caused by discharging heated water into rivers and streams is created by _____.

- A. Inorganic pollution
- B. Organic waste
- C. Radioactive materials
- D. Thermal pollution**

32. The function of a watershed is to...
- A. Protect potable water tanks from the weather
 - B. Protect water from contaminants
 - C. Shelter a water pump
 - D. Release a consistent flow of water throughout the year**
33. A pH of 7 is considered...
- A. Acidic
 - B. Basic
 - C. Neutral**
 - D. 7ppm
34. A measurement of the total concentration of all dissolved ions in water is...
- A. Acidity
 - B. Alkalinity
 - C. Salinity**
 - D. Temperature
35. Groundwater that is unavailable for plant root absorption is called...
- A. Capillary water
 - B. Free water
 - C. Gravitational water
 - D. Hygroscopic water**
36. Which of the following terms is not considered to be a physical property of soil?
- A. Drainage
 - B. Slope
 - C. Soil solution**
 - D. Texture

37. Low biotic potential is defined as...
- A. A high susceptibility to poisons in the environment
 - B. A slow reproductive rate**
 - C. The failure to adapt well to a changing environment
 - D. The production of large numbers of offspring each year
38. A wildlife population that is forced to feed, water or travel too great a distance from its escape cover is likely to encounter a high rate of...
- A. Growth
 - B. Mortality**
 - C. Reproduction
 - D. Survival
39. A group of ecosystems within a region that have similar types of vegetation and similar climate conditions is...
- A. A biome**
 - B. An estuary
 - C. A habitat
 - D. A stratum
40. Water that is clouded with suspended particles of silt is described as...
- A. Clean
 - B. Salty
 - C. Stratified
 - D. Turbid**
41. The world's largest biome is the _____ biome.
- A. Coniferous forest
 - B. Freshwater
 - C. Marine**
 - D. Temperate forest

42. The biggest component of municipal waste is...

- A. Paper**
- B. Plastics
- C. Metals
- D. Yard waste

43. Which of the following is not a characteristic that defines hazardous waste?

- A. Biodegradable**
- B. Corrosive
- C. Reactive
- D. Toxic

44. Which of the following is not a renewable resource?

- A. Forest
- B. Plants
- C. Soil**
- D. Wildlife

45. The practice of using natural resources while protecting against harm and waste is called...

- A. Biotechnology
- B. Conservation**
- C. Preservation
- D. Resource renewal

46. The practice of maintaining an environment and the resources within it in their natural state simply because we value them is called...

- A. Biotechnology
- B. Conservation
- C. Preservation**
- D. Resource renewal

47. The number of a particular species of plants or animals in a given area at a specific point in time is an example of
- A. Biologistics
 - B. Carrying capacity
 - C. Food Chain capacity
 - D. Population level**
48. Primary succession occurs when...
- A. An ecosystem is damaged or partly destroyed
 - B. Plants displace animals from an environment
 - C. Organisms live in an area where they did not live before**
 - D. Remnant of former community still exist
49. The ability of an organism to survive environmental fluctuations from the norm in an environment is a demonstration of its
- A. Comfort zone
 - B. Competitive exclusion principle
 - C. Niche
 - D. Range of tolerance**
50. The most simple arrangement of organisms in an environment in a ranking order that connects all of the producers to the primary and secondary consumers is called a...
- A. Food chain**
 - B. Food network
 - C. Food pyramid
 - D. Food web

1. What is the area of Earth that supports life called?
 - a. The atmosphere
 - b. The biosphere**
 - c. The hydrosphere
 - d. The rhizosphere
2. All the parts of a particular environment form a(n) _____; some parts living and others nonliving.
 - a. Biosphere
 - b. Ecosystem**
 - c. Habitat
 - d. Niche
3. Effluent water is described as...
 - a. Particulate polluted water.
 - b. Water that erodes soil.
 - c. Water that is discharged from factories or farms.**
 - d. Water that is a source of point source pollution.
4. The term "biodegradable" refers to materials that can be broken down such as newspapers. "Bio" in this term refers to what?
 - a. Bacteria breaking down these materials.**
 - b. Environmental factors breaking down these materials.
 - c. Pollution breaking down these materials.
 - d. Toxins breaking down these materials.
5. Material that is the result of decomposition of organic matter is...
 - a. Agricultural pollution
 - b. Compost**
 - c. Liquid
 - d. Toxic
6. A type of resource that can be replaced or recreated once they are used.
 - a. Exhaustible
 - b. Fuel
 - c. Nonrenewable
 - d. Renewable**
7. _____ are living and nonliving things found on Earth that people need.
 - a. Fossil fuels
 - b. Natural resources**
 - c. Nonrenewable resources
 - d. Renewable resources

8. In the hydrologic cycle, evaporation and transpiration would cause which of the following?
- a. Ground water
 - b. Oceans
 - c. **Precipitation**
 - d. Rivers
9. The most abundant element in Earth's atmosphere
- a. Argon
 - b. Iron
 - c. **Nitrogen**
 - d. Oxygen
10. Acid rain is associated with which of the following?
- a. **Burning of fossil fuels**
 - b. Damage to the tropical rain forests
 - c. Formation of the Antarctic ozone hole
 - d. Release of PCBs into the atmosphere
11. Dissolved Oxygen (DO) is an important water quality measurement. If there is an excess amount of decaying plant material in a body of water will this affect DO levels?
- a. This will raise the levels of DO in the water
 - b. **This will lower the levels of DO in the water**
 - c. This will have no effect on the levels of DO in the water
 - d. This will block sunlight and limit photosynthesis which will increase DO levels.
12. Soil texture describes...
- a. The aeration of the soil
 - b. The arrangement of the soil particles into shapes or pieces
 - c. The physical condition of the soil
 - d. **The proportion of sand, silt and clay in the soil**
13. Which of the following statements is true when referring to soil particles?
- a. Clay is the largest particle in soil
 - b. **Clay is the smallest particle in soil**
 - c. Clay is smaller than sand but larger than silt
 - d. Silt is the smallest particle in soil
14. Which of the following soils has the most water holding capacity?
- a. Soils high in sand content
 - b. Soils that have an even amount of sand and silt
 - c. **Soils that have a high clay content**
 - d. Soils that have more mineral content

15. Which of the following would be typical of very little to no slope for a piece of land?
- a. Dries out quickly
 - b. Experiences faster runoff
 - c. Loses fertile top soil to erosion
 - d. **May stay wet longer and limit decay of organic matter**
16. Water quality is less affected by
- a. Chemical runoff
 - b. Fish density
 - c. **Fish species**
 - d. Weather
17. When two species of wildlife live together for the benefit of both, the relationship is called
- a. Commensalism
 - b. Competition
 - c. **Mutualism**
 - d. Predation
18. Which relationship refers to a plant or animal that lives in, on, or with another sharing its food, but not helping or harming it?
- a. **Commensalism**
 - b. Competition
 - c. Mutualism
 - d. Predation
19. Soil pH is generally raised by adding...
- a. Complete fertilizer
 - b. **Lime**
 - c. Nitrogen
 - d. Sulfur
20. In which of the following soil horizons is parent material usually found in?
- a. Horizon A
 - b. Horizon B
 - c. **Horizon C**
 - d. All of the above
21. 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

22. 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 deposits
23. A soil profile is...
- a. A cross sectional view of soil**
 - b. Detailed description of a type of soil
 - c. Layers of organic material
 - d. The unconsolidated material from which soil develops
24. In the air, what filters out harmful ultraviolet rays from the sun?
- a. The greenhouse phenomena
 - b. Naturally occurring hydrocarbons
 - c. The ozone in the air**
 - d. Particulates in the air
25. The sulfur in the air combines with oxygen and moisture form _____, which has been found to damage and kill trees and other plants.
- a. Radioactive dust
 - b. Radon**
 - c. Sulfuric acid**
 - d. Sulfur dioxide
26. The process of bacteria changing dead organisms into ammonia, then to nitrite and finally to nitrates which are useful to plants is called _____.
- a. Ammonification
 - b. Electrolysis
 - c. Nitrification**
 - d. photosynthesis
27. Nitrous Oxide is a troublesome pollutant, occurring from which of the following major sources?
- a. Decaying plant material
 - b. Farming residue
 - c. Gasoline engines**
 - d. Refrigeration units
28. What is the ozone damaging substance?
- a. Carbon dioxide
 - b. Chlorofluorocarbons**
 - c. Methane
 - d. Nitrous Oxide

29. What is the poisonous gas we cannot remove from auto exhaust?
- Carbon dioxide
 - Carbon monoxide**
 - Hydrocarbons
 - Nitrous oxides
30. What is the over accumulation of pollutants at successive levels in the food chain called?
- Bio adaptability
 - Biomagnification**
 - Eutrophication
 - Point source pollution
31. If producers in a food web were removed, which of the following changes would most likely occur?
- Consumers of the web would begin making energy for the food web
 - the entire food web would collapse over time**
 - the food web would depend on the decomposers for energy
 - the populations of the remaining organisms in the food web would increase
32. A food web is different from a food chain because...
- animals eat plants in a food web and they do not in a food chain
 - a food web is a combination of several food chains**
 - decomposers eat animals in a food chain but not in a food web
 - a food web and a food chain are the same thing
33. Which has the lowest tendency to form clods, the least moisture holding capacity and the least fertility?
- clay
 - loam
 - sand**
 - silt
34. The amount of dissolved oxygen in warm water is _____ than it is in cold water.
- Better
 - Higher
 - Lower**
 - Temperature has no effect on dissolved oxygen
35. Lines of longitude _____.
- Run in an east/west direction.
 - Are unequal in length.
 - Are known as meridians.**
 - Are known as parallels.

36. _____ data includes information pertaining to satellite orbital corrections
- a. **Ephemeris**
 - b. Ionosphere
 - c. Multipath
 - d. Troposphere
37. _____ errors are known to occur from signal reflection from various nearby objects.
- a. Ephemeris
 - b. Ionosphere
 - c. **Multipath**
 - d. Troposphere
38. GPS is a constellation of approximately _____ satellites.
- a. 4
 - b. 5
 - c. 12
 - d. **24**
39. Prolonged presence of water, hydric soils and presence of hydrophytic plants are characteristics of ...
- a. Grasslands
 - b. Harwood bottomlands
 - c. Tundra
 - d. **Wetlands**
40. Oxygen can be added to a pond by doing which of the following?
- a. **Aeration**
 - b. Adding fertilizer
 - c. Adding more fish
 - d. Dredging
41. Which of the following atmospheric zones is farthest from the surface of the earth?
- a. **Ionosphere**
 - b. Mesosphere
 - c. Stratosphere
 - d. Troposphere
42. Which of the following absorbs almost all the ultra-violet radiation that reaches the earth?
- a. Atmosphere
 - b. Greenhouse gases
 - c. **Stratospheric ozone**
 - d. Tropospheric ozone

43. Which is NOT true about non-renewable resources?
- a. They are finite and non-sustainable
 - b. Their exploitation and use will eventually lead to their exhaustion
 - c. They cannot be stored for future use**
 - d. These resources take millions of years to form
44. What is a form of heat energy, which originates deep in the earth's molten interior?
- a. Biomass
 - b. Geothermal**
 - c. Hydropower
 - d. Solar
45. Of the following sources, which supplies the most commercial energy in the world today?
- a. Hydroelectric
 - b. Oil**
 - c. Nuclear
 - d. Solar
46. Which of the following is an environmental problem associated with abandoned coal mines?
- a. Acid drainage due to leaching of spoil heaps by rainwater**
 - b. Air pollution caused by smog from ozone formation
 - c. Released nutrients that cause eutrophication into streams
 - d. Thermal pollution of streams in the area
47. Particulates released into the air from industrial processes affecting air quality, can be removed by the process of _____.
- a. Chemical oxidation
 - b. Filtering
 - c. Scrubbing**
 - d. Titration
48. Which of the following is **not** an area of concentration to prevent contamination of groundwater by crop pesticides?
- a. Conservation tillage practices
 - b. Improved computer models
 - c. Improved pesticide application technology
 - d. Overgrazing areas of concern**

49. Which of the following is a type of groundwater that is available to plant roots?
- a. **Capillary water**
 - b. Free water
 - c. Gravitational water
 - d. Hygroscopic water
50. The accumulation of salts in water occurs most often when...
- a. Water collects in a drainage ditch
 - b. **Water is lost through evaporation**
 - c. Water runs across agricultural land
 - d. Water settles in a pond



2022 ENVIRONMENT AND NATURAL RESOURCES EXAM

1. All the ecosystems of the Earth, when considered as a whole, are called the _____.
 - a. Atmosphere
 - b. Biomass
 - c. Biosphere
 - d. Rhizosphere
2. Which of the following processes produces oxygen for an ecosystem?
 - a. Digestion
 - b. Decomposition
 - c. Photosynthesis
 - d. Respiration
3. Which process takes place within the individual cells of plants and animals, involving the breakdown of foods into their components along with the release of energy?
 - a. Digestion
 - b. Decomposition
 - c. Photosynthesis
 - d. Respiration
4. Which is the most abundant element found in living organisms?
 - a. Carbon
 - b. Oxygen
 - c. Nitrogen
 - d. Water
5. Which is the most abundant element in the atmosphere?
 - a. Carbon
 - b. Oxygen
 - c. Nitrogen
 - d. Water

6. Plants give up large amounts of water to the atmosphere through a process called _____.
- Evaporation
 - Perspiration
 - Respiration
 - Transpiration
7. In environmental science, a "niche" refers to...
- When an ecosystem is damaged, but remnants of the former community still exist
 - When one organism is more able to survive in an environment than another
 - When an organism did not exist before in an environment but can now
 - The role the organism fulfills in an environment
8. 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
9. The ability of an organism to survive changes in an environment is a demonstration of its...
- Comfort zone
 - Competitive exclusion principle
 - Niche
 - Range of tolerance
10. Which of the following forms of energy occurs as a result of photosynthesis?
- Chemical
 - Electrical
 - Kinetic
 - Thermal
11. Which of the following is not considered a renewable resource?
- Forests
 - Plants
 - Soil
 - Wildlife

12. The practice of using natural resources while protecting against harm and waste is called...
 - a. Biotechnology
 - b. Conservation
 - c. Preservation
 - d. Resource renewal
13. The number of a particular plant or animal species in a given area at a specific time is an example of...
 - a. Biologistics
 - b. Carrying capacity
 - c. Multiple use
 - d. Population level
14. Which of the following is a product of decaying plant or animal matter?
 - a. Chlorofluorocarbons
 - b. Methane
 - c. Nitrous oxide
 - d. Ozone
15. What pollutant compound has been used as an aerosol propellant and refrigeration gas?
 - a. Carbon dioxide
 - b. Chlorofluorocarbons
 - c. Fluorine gas
 - d. Radon
16. What part of the stable aerosol compound actually destroys ozone molecules?
 - a. Carbon
 - b. Chlorine
 - c. Fluorine
 - d. Hydrogen
17. Which automotive gas cannot be removed with current technologies?
 - a. Carbon Dioxide
 - b. Carbon Monoxide
 - c. Chlorofluorocarbons
 - d. Ozone

18. Which of the following best describes the Greenhouse effect?
- a. Accumulation of radioactive gases in the atmosphere
 - b. Heat from the earth's crust absorbs, radiates and reflects heat back into the air above, and Earth's atmosphere traps this heat.
 - c. Hot exhausts from car emissions as well as other manufacturing releasing compounds that contain nitrogen and oxygen heating up the atmosphere
 - d. The thinning of the protective layer in the Earth's atmosphere causing surface temperatures to rise
19. Radon gas is a threat to air quality...
- a. In factories
 - b. In homes
 - c. In wooded areas
 - d. On the highway
20. What are large areas of land where water from rain and snow is absorbed into the soil to emerge as spring water?
- a. Marshes
 - b. Water table
 - c. Watershed
 - d. Wetlands
21. Which of the following is not an indicator species when we refer to water quality?
- a. Algae
 - b. Aquatic invertebrates
 - c. Ferns
 - d. Fish
22. Groundwater that is unavailable for plant root absorption is called?
- a. Capillary
 - b. Free
 - c. Gravitational
 - d. Hygroscopic
23. What is the measure of the total concentration of all dissolved ions in water?
- a. Dissolved Oxygen
 - b. pH
 - c. Salinity
 - d. Turbidity

24. Which of the following is essential for aquatic life and is characteristically absent in groundwaters?
- a. Dissolved Oxygen
 - b. pH
 - c. Salinity
 - d. Turbidity
25. A pH of 7 is considered...
- a. Acidic
 - b. Basic
 - c. Neutral
 - d. 7ppm
26. The process by which water changes from liquid form to a vapor or gas is...
- a. Condensation
 - b. Distillation
 - c. Evaporation
 - d. Precipitation
27. Which of the following soil property refers to the proportions of sand, silt, and clay in a soil?
- a. Drainage
 - b. Erosion
 - c. Slope
 - d. Texture
28. Which soil property refers to the natural ability of the soil to allow water to flow through it?
- a. Drainage
 - b. Erosion
 - c. Slope
 - d. Texture
29. Referring to the most basic use of soil, it provides individual plants with the following except...
- a. Anchorage
 - b. Nutrients
 - c. Photosynthesis
 - d. Water

30. Which of the following soil parent materials is deposited by wind?
- Alluvial deposits
 - Loess deposits
 - Mineral and Rock
 - Organic deposits
31. Which of the following soil particles is the smallest?
- Clay
 - Gravel
 - Sand
 - Silt
32. Which of the following is not considered a physical property of the soil?
- Drainage
 - Slope
 - Soil solution
 - Texture
33. Which class of animals is primarily supported by a grassland habitat?
- Carnivores
 - Herbivores
 - Omnivores
 - Producers
34. Which term describes a species that will be expected to survive if immediate steps are taken to protect the environment they live in?
- Endangered species
 - Extinct species
 - Preserved species
 - Threatened species
35. When referring to wildlife biology, which of the following terms fits the description of a plant or animal that is in, on, or with another, sharing its food but neither helping nor harming it?
- Commensalism
 - Competition
 - Mutualism
 - Predation

36. What is the single greatest threat facing wildlife today and for the foreseeable future?
- Air pollution
 - Climate change
 - Habitat destruction
 - Water shortages
37. The following are all factors that contribute to the extinction of a species except for...
- Alien species introduction
 - Introduction of Bioengineered bacteria
 - Habitat loss
 - Over-hunting by humans
38. A water habitat in which water tends to stand for long periods of time is called a _____ habitat.
- Lentic
 - Lotic
 - Murky
 - Turbid
39. High levels of dissolved mineral in the water such as nitrates and phosphates can cause...
- A growth of algae and other plants that benefit the aquatic habitat
 - A dense blue-green algae bloom and aquatic animals and fish may die
 - The pH of the water drops very low
 - The water becomes turbid and cloudy with suspended particles limiting photosynthesis
40. What is the most promising practice for reducing the amount of solid waste deposited in landfills?
- Eliminating paper and plastic packaging materials
 - Eliminating the production of toxic wastes
 - Recycling waste materials
 - Reducing consumption of packaged goods
41. What is a combustible gas that is obtained from decaying vegetation, sewage and animal waste?
- Ethanol
 - Gasohol
 - Helium
 - Methane

42. What is the energy source obtained from the heat of the Earth's molten core?
- a. Geothermal power
 - b. Methane
 - c. Nuclear power
 - d. Solar energy
43. Which energy source contributes most to atmospheric pollution?
- a. Ethanol
 - b. Methane
 - c. Nuclear power
 - d. Wood
44. Which of the following energy sources is produced from a biodigester?
- a. Ethanol
 - b. Geothermal
 - c. Methane
 - d. Nuclear
45. When an underground fuel tank has leaked some of its contents into the surrounding soil it is considered...
- a. A causal agent
 - b. Non-point source pollution
 - c. Point source pollution
 - d. Safe because of the soil's ability to absorb toxins
46. Pollution that can be traced back to a specific source is known as...
- a. Carcinogenic
 - b. Mutagenic
 - c. Non-point source pollution
 - d. Point source pollution
47. Which of the following is not considered to be a route of entry for hazardous material?
- a. Digestion
 - b. Ingestion
 - c. Inhalation
 - d. Injection

48. Which of the following soils has the most water holding capacity?
- a. Soils high in sand content
 - b. Soils that have an even amount of sand and silt
 - c. Soils that have a high clay content
 - d. Soils that have more mineral content
49. 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
50. Lines of longitude _____.
- a. Run in an east/west direction.
 - b. Are unequal in length.
 - c. Are known as meridians.
 - d. Are known as parallels



ENVIRONMENT & NATURAL RESOURCES CDE

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Written Exam Key- 2022

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

24.	A	2			
25.	C	2			
26.	C	2			
27.	D	2			
28.	A	2			
29.	C	2			
30.	B	2			
31.	A	2			
32.	C	2			
33.	B	2			
34.	D	2			
35.	A	2			
36.	C	2			
37.	B	2			
38.	A	2			
39.	B	2			
40.	C	2			
41.	D	2			
42.	A	2			
43.	D	2			
44.	C	2			
45.	C	2			
46.	D	2			
47.	A	2			
48.	C	2			
49.	A	2			
50.	C	2			