

2013 ENR CDE Exam

1. The continuous movement of water from one form to another in the hydrosphere is...
 - a. effluent
 - b. erosion
 - c. recycling
 - d. the water cycle
2. What is the area of earth that can support life called?
 - a. the biosphere
 - b. the environment
 - c. the food chain
 - d. a niche
3. What is an ecosystem?
 - a. the area of the earth that can support life
 - b. the living and nonliving factors in a particular environment
 - c. the specific way of life of each plant or animal
 - d. the practices used to maintain the ability to produce food, fiber and shelter
4. The most important factor determining how many and what type of organisms live in an ecosystem is the available...
 - a. abiotic factors
 - b. energy
 - c. soil
 - d. water
5. What are materials that can be broken down by the action of bacteria called?
 - a. abiotic
 - b. biodegradable
 - c. effluent
 - d. symbiotic
6. What is a natural occurring thing that supports life?
 - a. Abiotic factors
 - b. Biodegradable
 - c. Natural resources
 - d. Sustainable agriculture
7. The area of earth that supports life is called the...
 - a. Atmosphere
 - b. Biosphere
 - c. Rhizosphere
 - d. Stratosphere
8. Abiotic factors influencing ecosystems include...
 - a. food chains and the loss of heat at each step
 - b. producers, consumers and decomposers
 - c. water, soil, air, climate, and space.
 - d. The living parts of an ecosystem
9. An ecosystem includes a biotic community and its...
 - a. abiotic environment
 - b. animal associations
 - c. chemical nature
 - d. plants

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10. What is all the practices used to maintain our ability to produce food, fiber and shelter ?
 - a. best management practices
 - b. recycling
 - c. sustainable agriculture
 - d. symbiosis
11. What is the relationship between living things that benefits at least one of them?
 - a. Commensalism
 - b. Parasitism
 - c. Succession
 - d. Symbiosis
12. _____ breakdown waste products and organisms that have died into chemical substances that are released into the environment.
 - a. Consumers
 - b. Decomposers
 - c. Parasites
 - d. Producers
 - e. food
13. Plants that undergo the process of nitrogen-fixing by absorbing nitrogen gas (N₂) and converting it to nitrates are called _____.
 - a. cool season grasses
 - b. legumes
 - c. nitrators
 - d. warm season grasses
14. Which of the following is not an effect of invasive or nonnative species
 - a. Are a direct threat to agricultural crops
 - b. Compete directly and indirectly with native species
 - c. Decrease the biological diversity of native ecosystems
 - d. Increase the biological diversity of native ecosystems
15. When two species of wildlife live together for the benefit of both, the relationship is called _____.
 - a. Commensalism
 - b. Competition
 - c. Mutualism
 - d. Predation
16. What purpose does vegetation along a river or stream bank serve?
 - a. Inhibits human activity
 - b. Feeds the aquatic life of the river or stream
 - c. Stabilizes the bank of the river
 - d. Provides oxygen for fish
17. A community refers to the parts of an ecosystem including.....
 - a. the animals in one place.
 - b. all the living organisms and how they interact.
 - c. the physical environment.
 - d. the abiotic organisms.

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18. Fire is an important factor in maintaining grasslands because it.....
 - a. leaves behind litter
 - b. serves to weaken competing trees
 - c. burns up all the nutrients
 - d. damages roots of grass species.
19. Which are not good crop and management techniques?
 - a. reducing use of chemical fertilizers if profitable
 - b. no-till
 - c. propagation of the same crop year to year
 - d. integrated pest management
20. 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.
21. The primary source of food energy in a food chain comes from.....
 - a. decomposers.
 - b. producers.
 - c. consumers.
 - d. water.
22. The three components of the food chain are...
 - a. earth, wind and fire.
 - b. producers, consumers, and decomposers.
 - c. soil, plants, and animals.
 - d. dogs, cats, and horses.
23. Approximately 78% of the earth's atmosphere is made up of what gas?
 - a. carbon
 - b. nitrogen
 - c. oxygen
 - d. water vapor
24. Nitrates are.....
 - a. man-made fertilizers utilized in the production of the food we eat.
 - b. common gases found in the atmosphere.
 - c. not useful to plants until converted to nitrites.
 - d. formed from the decomposing of dead organisms and animal wastes.
25. The process of bacteria changing dead organisms into ammonia, then to nitrites, and finally to nitrates useful to plants is called _____.
 - a. photosynthesis
 - b. electrolysis
 - c. nitrification
 - d. ammonification

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26. Soil organic matter is measured in which of the following units?
- a. ounces
 - b. inches
 - c. percentages
 - d. pounds
27. Soil erosion is.....
- a. the movement of plants and trees under the influence of water, wind, ice, or gravity.
 - b. the movement of water particles under the influence of water, wind, ice, or gravity.
 - c. the movement of soil particles under the influence of water, wind, ice, or gravity .
 - d. when people disturb the environment.
28. Dried manure can be used for.....
- a. feed additives.
 - b. gravel road beds.
 - c. making storage basins.
 - d. runoff diversion and control.
29. Which of the following is not a process of soil degradation?
- a. soil erosion
 - b. salinization
 - c. nitrogen fixation
 - d. soil pollution
30. Which of the following is most likely to cause desertification of soil?
- a. overgrazing of pastures
 - b. a large accumulation of heavy metals
 - c. improper irrigation
 - d. improper handling of chemicals
31. Which type of soil conservation replaces nutrients in soil, and helps to insure vegetative cover?
- a. building terraces
 - b. preventing soil pollution
 - c. heavily irrigating
 - d. applying fertilizer
32. Which of the following is not a benefit of agricultural chemicals?
- a. leaching of chemicals into groundwater
 - b. killing weeds that are harmful to crops
 - c. killing insects that destroy crops
 - d. supplying nutrients needed by crops
33. What is the purpose of adding calcium carbonate to soil?
- a. to improve the structure of the soil
 - b. to increase the pH of soil (decrease acidity)
 - c. to replace nitrogen of soil
 - d. to prevent erosion by working as an adhesive to soil

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34. Which of the following is a benefit of applying animal manure to soil?
- a. over application causes excess heavy metals in the soil
 - b. excess salts from over application of manure
 - c. manures running into streams and lakes
 - d. increasing organic matter in soils
35. Which of the following is not a government agency associated with soil conservation?
- a. The Federal Bureau of Intelligence
 - b. The United States Forestry Service
 - c. The Natural Resources Conservation Service
 - d. The Agriculture Stabilization and Conservation Service
36. Which of the following is not a benefit of planting grass on bare soil?
- a. Prevents raindrops from striking bare soil and breaking it loose
 - b. Keeps all erosion from occurring even in very strong rains
 - c. Plant roots tend to hold soil in place so that it is less susceptible to erosion
 - d. Adding organic matter to soil
37. Which of the following is true about wind erosion?
- a. Wind erosion erodes more soil than water erosion in all areas of the United States.
 - b. Winds are able to move large quantities of the soil from one place to another.
 - c. If wind erosion occurs in a certain area there is nothing a land owner can do about it.
 - d. Only very strong winds can erode soil.
38. Which of the following is considered a mechanical erosion control?
- a. terracing
 - b. strip cropping
 - c. cover crops
 - d. shelter belts
39. Which of the following is considered a vegetative erosion control?
- a. conservation tillage
 - b. contour farming
 - c. crop rotation
 - d. diversion ditches or beams
40. Which of the following is not a benefit of soil organic matter?
- a. improves water infiltration into soil
 - b. improves the permeability of soil
 - c. kills all microorganisms in the soil
 - d. improves soil tilth
41. Which of the following is a benefit of crop rotation?
- a. The muddy water is held long enough for the sediment to settle out in the form of mud.
 - b. Soil tilth is better maintained.
 - c. Each row acts like a small dam to stop runoff from moving straight downhill.
 - d. Runoff is conducted across the slope to some protected areas.

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42. Which of the following is not an advantage of sodding?
- a. Quick development of a heavy growth of grass.
 - b. It is quicker than seeding or plugging grass.
 - c. It is more expensive than seeding or plugging grass.
 - d. It is more effective than seeding or plugging grass.
43. The strategies known as the “Three R’s,” include...
- a. reduce, renew, and/or recycle.
 - b. reduce, redirect, and/or renew.
 - c. redirect, recycle, and/or renew.
 - d. reduce, reuse, and/or recycle.
44. Foods that should not be placed in a compost heap include.....
- a. potato peels.
 - b. meats.
 - c. coffee grounds.
 - d. egg shells.
45. 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.
46. All of the following types of energy may be obtained from solid waste except:
- a. Methane
 - b. Electricity
 - c. Leachate
 - d. Biomass fuels
47. Which action will not directly contaminate groundwater?
- a. Runoff from yards and gardens
 - b. Incineration of domestic waste
 - c. Roadside dumping of large appliances
 - d. Pouring used motor oil into a storm sewer
48. An energy recovery facility.....
- a. recovers recyclables from landfills.
 - b. produces energy while burning solid waste.
 - c. recovers wasted electricity from households.
 - d. cleans used motor oil for reuse in engines.
49. A major cost associated with solid waste incineration is.....
- a. pollution monitors and scrubbers.
 - b. generating electricity.
 - c. generating steam.
 - d. burning coal and steam.

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50. Which of the following is not an example of point source pollution?
- a. A downstream fish kill
 - b. An above ground tank leak
 - c. Accidental manure spill
 - d. A lagoon over flow