

Multiple Choice Questions

1. Biodiversity is a broad term used to describe the
  - A. diversity of genes.
  - B. diversity of species.
  - C. diversity of ecosystems.
  - D. All of these are correct.
  
2. Complete extinction occurs when
  - A. all individuals of a species are eliminated.
  - B. all species in a community merge.
  - C. all organisms within niche migrate.
  - D. All of these are correct.
  
3. The number one cause of extinction is
  - A. introduction of exotic species.
  - B. over hunting/fishing.
  - C. habitat fragmentation and loss.
  - D. persecution of pest organisms.
  
4. Which of the following is considered to be a biodiversity hotspot?
  - A. Tropical Andes
  - B. Central Chile
  - C. Caribbean
  - D. All of these are correct.

5. A biodiversity hotspot is

- A. an area where species are not threatened or endangered.
- B. an area where the most endangered habitats are found.
- C. an area close to the equator where temperatures are extreme.
- D. None of these are correct.

6. Extinction of a species in one area of its range is called

- A. local extinction.
- B. total extinction.
- C. partial extinction.
- D. spatial extinction.

7. The productivity of ecosystems depends on policy choices relating to

- A. investment.
- B. trade.
- C. regulation.
- D. All of these are correct.

8. Over the past few hundred years, humans have increased the species extinction rate by as much as

- A. 100 times.
- B. 50 times.
- C. 1000 times.
- D. 10 times.

9. Impact to ecosystems from human activity has sometimes been referred to as

- A. "Anthropomorphic ecologies."
- B. "Engineered ecologies."
- C. "Non-native ecologies."
- D. None of these are correct.

10. An individual can help to control the spread of invasive species by

- A. becoming informed about the issue.
- B. growing native plants.
- C. not releasing non-native plants, fish, or other animals into water.
- D. All of these are correct.

11. Pollution \_\_\_\_\_ with population density.

- A. increases
- B. decreases
- C. remains constant

12. Genetic diversity is influenced by which of the following?

- A. migration
- B. mutation
- C. sexual reproduction
- D. All of these are correct.

13. The reduced size of the California condor population is thought to have been caused by

- A. the increased number of electric power lines.
- B. the extinction of large Ice Age mammals.
- C. natural predation.
- D. pesticides effecting egg formation.

14. Waterfowl present special wildlife management problems because

- A. they only eat small freshwater fish.
- B. they only nest on rocky ledges.
- C. they overwinter near the Arctic Circle.
- D. they are migratory.

15. Sport hunting seasons are regulated to the fall so that
- A. surplus animals are taken before the challenges of winter.
  - B. females are not able to reproduce.
  - C. weak juveniles are removed from the population.
  - D. there will be fewer females than males.

16. Many migratory waterfowl
- A. hatch in Mexico and winter in Canada.
  - B. mate in Canada and winter in Mexico.
  - C. hatch in the southern U.S. and winter in the northern U.S.
  - D. None of these are correct.

17. Which of the following do fish require for a healthy population?
- A. cover
  - B. spawning beds
  - C. high dissolved oxygen
  - D. All of these are correct.

18. What does a red-cockaded woodpecker need that it cannot get from a well-managed forest plantation?
- A. insects found in snag trees
  - B. decaying logs on the ground for nests
  - C. old, diseased, living trees for nests
  - D. fungi growing on dead, standing trees

19. Which harvesting method allows cutting of mature trees without damaging the forest?
- A. clear-cutting
  - B. selective harvesting
  - C. patchwork clear-cutting
  - D. seed tree harvest

20. Which area of the world could increase timber production?

- A. northern Russia
- B. western U.S.
- C. southern Africa
- D. Mediterranean Europe

21. Which of the following is NOT a technique for managing wildlife?

- A. establishment of refuges
- B. predator control
- C. habitat management
- D. introduction of exotic species

22. Which of the following factors is NOT characteristic of a species likely to become extinct?

- A. low reproductive rate
- B. small habitat area
- C. low population density
- D. generalized niche

23. Species are more likely to become extinct if they

- A. have both a low population density and reproductive rate.
- B. have both a high population density and reproductive rate.
- C. can travel over large areas.
- D. can survive in many different types of habitats.

24. Which of the following is an example of a species that is not likely to become extinct soon?

- A. rabbits
- B. cheetah
- C. whooping crane
- D. All of these are correct.

25. Which of the following causes desertification?

- A. overgrazing
- B. flooding
- C. cutting of trees for firewood
- D. overgrazing and cutting of trees for firewood

26. Which is the greatest cause of extinction?

- A. pollution
- B. habitat alteration
- C. hunting for food
- D. agriculture

27. What happened to private landowners who had northern spotted owls nesting in their forests when the owl was declared a threatened species?

- A. The landowners protested and cut all their trees.
- B. The landowners succeeded in electing new government officials.
- C. The landowners were not allowed to cut any of their trees and sued for compensation.
- D. The landowners sold their land to the government for under market value.

28. World fish harvests have remained constant since 1989 which indicates

- A. fisheries have been exploited to their capacity.
- B. people have stopped eating as much fish.
- C. new laws have limited fishing to protect dolphins.
- D. more people are now vegetarian.

29. Salmon introduction in the Great Lakes has brought in millions of dollars from sportfishing, yet environmentally it has

- A. increased exotic invasive fish populations.
- B. improved water quality.
- C. decreased migratory bird populations.
- D. decreased native fish populations and disrupted spawning.

30. What invasive species is an external parasite of lake trout and decimated populations for more than 20 years?

- A. eel
- B. alewife
- C. zebra mussel
- D. lamprey

31. Environmental impacts from freshwater aquaculture include

- A. introduction of heavy metals into native fish.
- B. nutrient overload and escape of exotic species.
- C. water loss due to increased irrigation.
- D. economic loss of income from sport fishing.

32. The Endangered Species Act of 1973

- A. allowed the state governments to manage all wildlife within their borders.
- B. required city governments to pay a tax to support wilderness habitat areas.
- C. gave the federal government jurisdiction over any species that were designated as endangered.
- D. restricted the importation of plants and animals from 25 countries.

33. The taxonomic group that displays the greatest biodiversity is

- A. plants.
- B. insects.
- C. birds.
- D. amphibians.
- E. mammals.

34. \_\_\_\_\_ is an organization that certifies whether or not products are dolphin-safe.

- A. The Forest Stewardship Council
- B. The Marine Aquarium Council
- C. The Earth Island Institute
- D. The Rainforest Alliance
- E. The International Fisheries Cooperative





Which of the following best matches the description?

35. Elimination of all of the individuals of a species.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

36. Those species that could become extinct if a critical factor in their environment were changed.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

37. Term used to describe all of the different types of species in a particular region.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

38. Set of physical features that conceals and protects animals from the elements or their enemies.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

39. Those species that are present in such small numbers that they are in jeopardy of becoming extinct.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

40. Process of developing a new species.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

41. Process of changing the natural community to encourage the increase in populations of certain desirable species.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

42. Any change in the DNA of an organism.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

43. Term used to describe all of the different types of genes, species, and ecosystems in a particular region.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

44. Process of replanting an area after the original trees are removed.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

45. Forest harvesting method in which all trees in a large area are cut and removed.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

46. Forest harvesting method in which patches of trees are clear-cut among patches of timber that are uncut.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

47. Forest harvesting method in which individual high-value trees are removed from the forest, leaving the majority of the forest undisturbed.

- A. threatened species
- B. clear-cutting
- C. reforestation
- D. selective harvesting
- E. endangered species
- F. speciation
- G. extinction
- H. habitat management
- I. patchwork clear-cutting
- J. cover
- K. biodiversity
- L. mutation
- M. species diversity

#### True / False Questions

48. High genetic diversity means that almost all of the individuals of a population have the same characteristics.

FALSE

49. A species with a low reproductive rate is more likely to become extinct than one with a high reproductive rate.

TRUE

50. Mutations can be considered the original force driving species change.

TRUE

51. Large populations have less genetic diversity than small populations.

FALSE





52. Grazing of arid and semiarid lands provides little value or food to the people of that area.

FALSE

53. Erosion of unvegetated land adjacent to lakes and rivers causes siltation.

TRUE

54. If trees are removed from a streamside, the water is likely to become warmer.

TRUE

55. Cutting small, as opposed to large, areas of a forest can prevent erosion of the soil by wind and water.

TRUE

56. The introduction of exotic species into a freshwater ecosystem generally increases the population of the native species.

FALSE

57. Due to isolation there is a high degree of endemism in species occupying river systems.

TRUE

58. Some remote areas of the world have been changed very little by humans.

TRUE

59. Urban sprawl is the leading cause of species imperilment in California.

TRUE



60. As the human population increases extinction rates also increase.  
TRUE

61. Early human induced extinction was most likely due to over-hunting.  
TRUE

62. One of the consequences of selective breeding is the loss of genetic diversity.  
TRUE

63. In the past few hundred years, global trade and tourism have in many ways rendered natural barriers ineffective, allowing non-native species to travel vast distances.  
TRUE

64. The World Conservation Union estimates that about 30 percent of birds and 15 percent of plants are threatened by competition from exotic species.  
TRUE

65. In 2005 a major study called the "Millennium Ecosystem Assessment Synthesis Report" (MA) was published.  
TRUE

66. Approximately 20 percent of the world's coral reefs have been lost to extinction.  
TRUE

67. Ecosystems have not been significantly influenced by people in virtually all parts of the world.  
FALSE



68. Humans have changed ecosystems more rapidly and extensively in the last 50 years than in any other period.

TRUE

69. There is very little that a person can do to help control the spread of exotic species.

FALSE

70. Funding by Microsoft will help develop a computer program to analyze environmental data and project the impact of climate change on species biodiversity in the cloud forests of Mexico.

TRUE