

# Environment Olympiad

## Workbook

### Class 7

1. Which of the following is not the environmental effect of industrialisation, in general?
  - a. Solid waste
  - b. Water pollution
  - c. Air pollution
  - d. Economic growth
  
2. Which of the following are major environmental issues involved in mining?
  - a. Air pollution
  - b. Water pollution
  - c. Soil degradation
  - d. All of the above
  
3. Sustainable development means
  - a. Meeting present needs without compromising on future needs
  - b. Progress of human beings
  - c. Balance between human needs and the ability of earth to provide the resources
  - d. All of the above
  
4. The most important remedy to avoid negative impact due to industrialisation is
  - a. Industry should be closed
  - b. Don't allow new industrial units
  - c. Industry should treat all the wastes generated by it before disposal
  - d. Industries should be shifted far away from human habitats
  
5. Mining means
  - a. To conserve and preserve minerals
  - b. To check pollution due to mineral resources
  - c. To extract minerals and ores
  - d. None
  
6. E.I.A can be expanded as
  - a. Environmental And Industrial Act
  - b. Environment And Impact Activities
  - c. Environmental Impact Assessment
  - d. Environmental Important Activity
  
7. E.I.A is related to
  - a. Resource conservation
  - b. Efficient equipment/process
  - c. Waste minimization
  - d. All of the above
  
8. In order to protect health of the people living along the adjoining areas of roads, one should
  - a. Plant trees alongside of the roads
  - b. Not allow diesel driven vehicles
  - c. Shift them (people) to other places
  - d. None of the above

9. The pollution caused by transportation/vehicular activities depends on
- Type of the vehicle's engine
  - Age of the vehicle
  - Traffic congestion
  - All of the above
10. Sustainable development will not aim at
- Social economic development which optimizes the economic and social benefits available in the present, without spoiling the likely potential for similar benefits in the future
  - Reasonable and equally distributed level of economic well-being that can be perpetuated continually
  - Development that meets the needs of the present without compromising the needs of future generations to meet their own needs
  - Maximising the present day benefits through increased resource consumption
11. Which of the following is a key element of EIA?
- Scoping
  - Screening
  - Identifying and evaluating alternatives
  - All of the above
12. 'Earth day' is held every year on
- June 5<sup>th</sup>
  - November 23<sup>rd</sup>
  - April 22<sup>nd</sup>
  - May 7<sup>th</sup>
13. Eutrophication is
- An improved quality of water in lakes
  - A process in carbon cycle
  - The result to accumulation of plant nutrients in water bodies
  - A water purification technique
14. Major purpose of most of the Dams around world is
- Power generation
  - Drinking water supply
  - Flood control
  - Irrigation
15. Which of the following is the most environmental friendly agricultural practice?
- Using chemical fertilizers
  - Using insecticides
  - Organic farming
  - None of the above
16. The adverse effect of modern agriculture is
- Water pollution
  - Soil degradation
  - Water logging
  - All of the above
17. Soil erosion removes surface soil which contains
- Organic matter
  - Plant nutrients
  - Both a and b
  - none of the above

18. Water logging is a phenomenon in which

- a. Crop patterns are rotated
- b. Soil root zone becomes saturated due to over irrigation
- c. Erosion of soil
- d. None of the above

19. The impact of construction of dams

- a. Submerged forest
- b. Loss of wild life habitat
- c. Damages downstream ecosystem
- d. All of the above

20. Which of the following statements is false

- a. Soil erosion affects the productivity
- b. It takes 300 years for 1 inch of agricultural top soil to form
- c. The amount of soil erosion depends on soil type, slope, drainage pattern and crop management practices
- d. Soil erosion helps to retain water and nutrients in the root zone

21. Which of the following statements are true

- a. Surface runoff do not carry pesticides into streams
- b. Water percolating downwards through agriculture lands carries with it dissolved chemicals and contaminate ground water
- c. Present agricultural practice does not contaminate water
- d. None of the above

22. Farmers have a tendency to

- a. Use optimum quantity of water
- b. to over irrigate crops
- c. To conserve water
- d. All of the above

23. Organic farming is

- a. Farming without using pesticides and chemical fertilizers
- b. Enhances biodiversity
- c. Promotes soil biological activity
- d. All of the above

24. What would you do to prevent environmental damage

- a. Plant trees
- b. Halt deforestation
- c. Control pollution
- d. All of the above

25. Environmental impact assessment

- a. Is the study of feasibility of a project
- b. Is a study of bio-physical characteristics of the environment that may result from a human action
- c. Both a and b
- d. None of the above

26. EIA study will help

- a. Maximising the benefits without overloading the planets ecosystem
- b. To estimate the future needs of the society
- c. To smooth implementation of the project
- d. To cope up with rapid growth of population

27. Ecosystem is disturbed by housing activity because
- Large volume of raw materials like brick, stone, timber, cement, steel, plastic etc., are required to be produced
  - Housing is required to provide shelter to growing population
  - Majority of housing projects are concentrated in cities only
  - Standard of living is increased by modern houses
28. Environmental impact of mining
- Brings order into social setup
  - Devastation of eco-system
  - Present mining activity is a sustainable development
  - Mining has no adverse effect on ecosystem as it is located in remote areas
29. Effect of modern agriculture on soil is due to
- Erosion
  - Acidification
  - Salinization
  - All
30. Bio-remediation means the removal of contamination from
- Soil
  - Wastewater
  - Groundwater
  - Both soil and ground water
31. The water(Prevention & Control Of Pollution) Act was enacted in the year
- 1986
  - 1974
  - 1994
  - 2004
32. The wild life protection was enacted in the year
- 1986
  - 1974
  - 1994
  - 1972
33. The Forest (conservation) Act was enacted in the year
- 1986
  - 1974
  - 1980
  - 1972
34. Environmental protection is the fundamental duties of the citizen of India under the article:
- 51-A(g)
  - 48-A
  - 47
  - 21

35. Which of the following choices is false? Oceans are important because they
- Regulate climates.
  - Provide a source of many natural resources, such as minerals and fossil fuels.
  - Are one of the most highly productive ecosystems in the world on a unit area basis.
  - Participate in the biogeochemical cycles.
  - Are important in the hydrologic cycle.
36. The ecosystems with the world's highest net primary productivities per unit area are found in the
- Euphotic zone.
  - Abyssal zone.
  - Bathyal zone.
  - Coastal zone.
  - Benthic zone.
37. Estuaries exhibit
- Constant temperature and salinity.
  - Constant temperature and variable salinity.
  - Variable temperature and constant salinity.
  - Variable temperature and salinity.
  - Constant temperature.
38. Estuaries and coastal wetlands are important for all of the following reasons except
- Spawning and nursery grounds for marine fish and shellfish.
  - Filtering out waterborne pollutants from swimming and wildlife areas.
  - Breeding grounds for waterfowl.
  - Providing coral for limestone production and the tourist trade.
  - Habitat for alligators.
39. Which of the following trees is characteristic of tropical coastal wetlands?
- Cypress
  - Coconut
  - Mangrove
  - Palm
  - Live oak
40. Which of the following ecosystems is least likely found in a temperate coastal wetland?
- Bay
  - Salt flat
  - Mud flat
  - Mangrove swamp
  - Estuary
41. Mangrove swamps serve all of the following functions except
- Erosion protection for the coastline.
  - Prevention of typhoon and hurricane damage.
  - Entrapment of sediment washed off the land.
  - Salt mining.
  - Nursery for many aquatic organisms.
42. Organisms of the intertidal zone
- Are constantly being swept away.
  - Are exposed to constant salinity levels.
  - Are exposed to both air and underwater conditions.
  - Must avoid drowning at high tide.
  - Are exposed to constant temperatures.

43. Cities established on barrier islands are subject to
- Beach erosion.
  - Hurricanes.
  - Flooding.
  - All of these answers.
  - None of these answers.
44. In terms of biodiversity, the tropical rain forest is to land environments as \_\_\_\_ is to water environments.
- The Abyssal Zone
  - The Bathyal Zone
  - The Euphotic Zone
  - The Coral Reef
  - The Benthic Zone
45. Marine biologists have estimated that about \_\_\_\_% of the world's coral reefs have been destroyed by human activities.
- 5
  - 10
  - 15
  - 20
  - 40
46. Researchers have estimated that more that more than \_\_\_\_ of the world's mangrove forests have been destroyed by human activities.
- 1/4
  - 1/3
  - 1/2
  - 2/3
  - 3/4
47. The least appropriate use of coastal wetlands is for
- Spawning and nursery grounds.
  - Condominiums and disposal of landfill waste.
  - Food production.
  - Recreational diving.
  - Educational activities.
48. The best long-range strategy to reduce beach erosion is
- Building groins.
  - Preventing development on beach areas or allowing development only behind
  - Protective dunes.
  - Importing sand.
  - Extensive building on barrier beaches.
49. Over half of the area of estuaries and coastal wetlands in the United States has been destroyed or damaged by
- Sewage runoff.
  - Filling.
  - Pesticide and heavy metal pollution.
  - All of these answers.
  - None of these answers
50. China's Three Gorges project will
- Be the world's largest hydroelectric plant.
  - Flood large areas of forest.
  - Increase habitat for endangered pandas.
  - Prevent flooding.

51. Because of increased irrigation, Africa's Lake Chad has shrunk by \_\_\_\_% since the 1960s.
- 55
  - 65
  - 75
  - 85
  - 95
52. Which of the following bodies of water has experienced an 11-meter drop in its water level since 1941 when water began being diverted to Los Angeles?
- Lake Mead
  - Mono Lake
  - Lake Tahoe
  - The Colorado River
  - Lake Powell
53. Most water-transfer projects illustrate
- The climate-biome principle.
  - The principle that you can't do just one thing.
  - The concept of ecological succession.
  - The principle of genetic variability.
  - Energy is conserved.
54. In California, the greatest user of water is
- Pollution dilution.
  - Industry.
  - Agriculture.
  - Urban dwellers.
  - Manufacturing.
55. The volume of the world's fourth largest freshwater lake has been decreased by almost 75% to provide water for agriculture. This lake is located in
- China.
  - Bangladesh.
  - Soviet Union (erstwhile).
  - Africa.
  - US
56. Which of the following statements about the Aral Sea is false?
- Water has been diverted from the Aral Sea and the two rivers that replenish its water primarily for use in manufacturing.
  - The volume of the Aral Sea has dropped by about 75%.
  - The salinity levels have risen threefold.
  - All native fish species have disappeared.
  - The surface area has decreased by 54%.
57. All of the following would improve the Aral Sea ecological/economic situation except
- Charging farmers more for irrigation water.
  - Introducing water-saving technologies.
  - Shifting displaced fishermen to logging.
  - Slowing the area's rapid population growth.
  - All of these answers.
58. . The relationship between water demand and policies that subsidize water-thirsty crops exemplifies
- A positive feedback loop.
  - A negative feedback loop.
  - A delay.
  - A synergistic interaction.
  - A competitive relationship.

59. Desalination may be accomplished by
- Distillation.
  - Osmosis.
  - Salt-eating bacteria.
  - Macro-filtration.
  - Reverse filtration.
60. Which of the following statements about desalination is true?
- The common methods of desalination are reverse-osmosis and evaporation.
  - Desalination is expensive.
  - The greatest amount of desalination occurs in the United States.
  - Desalination is the best approach to solving irrigation problems.
  - Desalination is the best method of acquiring clear water for drinking.
61. Which choice completes the sentence incorrectly? Cloud seeding
- Is most useful in very dry areas.
  - Could change regional rainfall patterns.
  - Could introduce large amounts of cloud-seeding chemicals into natural ecosystems.
  - Is impeded by legal disputes.
  - None of these answers.
62. The largest producer of freshwater from seawater is
- The United States
  - Saudi Arabia
  - Israel
  - China
  - Egypt
63. It is most economically and environmentally sound to focus water resource management on
- Increasing the water supply.
  - Controlling the "mining" of groundwater.
  - Increasing the efficiency of the way we use water.
  - Developing desalination plants.
  - Cloud seeding and towing icebergs to arid regions.
64. Approaches to increasing the water supply can be outstripped by
- Increased industrialization.
  - Soaring population.
  - Increased food needs.
  - All of these answers.
  - None of these answers.
65. Which of these helps keep manure from cows in a field from getting into a nearby stream?
- Making sure the cows only have one spot where they can stand in the stream
  - Building a ditch to carry the cow's waste downhill
  - Building a fence to keep cows away from the stream
  - Using herbicide to kill the plants near the edge of the stream
66. What is point source water pollution?
- Cows standing in a stream
  - The storm water that flows off a city's streets and parking lots
  - Wastewater or storm water that flows over land into a body of water
  - Wastewater or storm water that flows from a pipe into a body of water



67. What happens to scum in a septic tank?

- a. It floats on top of the liquid wastewater in the tank and needs to be pumped out every few years
- b. It collects at the bottom of the tank and needs to be pumped out every few years
- c. It dries out and form clumps that have to be shoveled out every few years
- d. It flows through pipes in the septic tank to the drain field

68. What happens during the disinfection step at a wastewater treatment plant?

- a. Scum and sludge are separated from the liquid wastewater
- b. Large solid things are screened out
- c. Treatment with chlorine or ultraviolet light to kill pathogens
- d. Liquid wastewater is mixed with air to help bacteria breakdown small particles of solid material

69. Which of these is an example of an endocrine disruptor that can get into municipal wastewater?

- a. Aspirin
- b. Caffeine
- c. Ketones
- d. Steroids

70. How does a pit toilet or latrine work?

- a. By holding feces and urine in a pit or tank until it can be removed for further treatment
- b. By mixing in air to speed up the breakdown of liquid wastewater
- c. By allowing feces and urine to flow directly to a drain field for bacteria to continue their work
- d. By separating sludge and scum from the liquid wastewater

71. What is scum?

- a. The solids that are heavier than liquid wastewater and sink to the bottom
- b. Insects that live under rocks in streams
- c. The solids, like fats, grease, and oil, that float on top of liquid wastewater
- d. The liquid part of wastewater

72. What do factories do with their wastewater before sending it to a wastewater treatment plant?

- a. A they pretreat it and then send it to a wastewater treatment plant
- b. They don't send it to a plant, they just recycle it endlessly
- c. They just send it directly to a wastewater treatment plant
- d. They store it in large lagoons until the acids evaporate

73. What is the first thing that happens to wastewater at a wastewater treatment plant?

- a. Large solid things are screened out
- b. Liquid wastewater is mixed with air to help bacteria breakdown small particles of solid material
- c. Treatment with chlorine or ultraviolet light to kill pathogens
- d. Scum and sludge are separated from the liquid wastewater

74. What happens in a septic system's drain field?

- a. Sunlight disinfects the wastewater
- b. Bacteria living on the surface of soil particles break down the waste in the wastewater
- c. The scum and sludge are separated from the liquid part of the wastewater
- d. Sunlight breaks down the waste in the wastewater

75. Which branch of biodiversity provides 60% of all the worlds medicine
- Animals
  - Bacteria
  - Plants
  - All of the above
76. Which of the following is causing the most extinction?
- Pollution
  - Loss of habitat
  - Farts
  - They are dying of old age
77. Which of the following environments would you expect to have the most biodiversity?
- Sahara Desert
  - Amazon Rainforest
  - North Pole
  - Mt Everest
78. Which of the following does biodiversity NOT contribute to
- Food
  - Clothes
  - Wireless Internet
  - Petrol
79. How many new species are found every year?
- 1 million
  - 15, 000
  - 38
  - 200,000
80. Zoos are examples for
- In situ conservation
  - In vivo conservation
  - Ex situ conservation
  - Ex vivo conservation
81. What is the meaning of the word “endemic”
- Rare and occur only in a few location
  - Rare and occur everywhere
  - Abundant and seen everywhere
  - Abundant and only in few locations
82. Increase in ultraviolet radiation is likely to cause all of the following except
- Decrease in aquatic life.
  - Increased acid rain.
  - Increased yields of food crops.
  - Increased eye cataract and skin cancer in some species.
83. The “Red Data Books” published by the International Union for Conservation of Nature and Natural Resources (IUCN) contain lists of
- Endemic plant and animal species present in the biodiversity hotspots
  - Threatened plant and animal species.
  - Protected sites for conservation of nature and natural resources in various countries.

Select the correct answer using the codes given below:

- a. 1 and 3
- b. 2 only
- c. 2 and 3
- d. 3 only

84. What is the major role of a greenhouse gas that contributes to temperature rise of the Earth's surface?

- a. Transparent to both incoming sunlight and outgoing infrared radiation
- b. Stops both incoming sunlight and outgoing infrared radiation
- c. Lets outgoing infrared radiation pass through but stops incoming sunlight
- d. Lets incoming sunlight pass through but stops outgoing infrared radiation

85. What country consumes the most energy in the world?

- a. Russia
- b. China
- c. United States
- d. Canada

86. What country produces the most energy in the world?

- a) Iraq
- a. Saudi Arabia
- b. United States
- c. Russia

87. What is the leading source of energy in the United States?

- a. Coal
- b. Oil
- c. Nuclear power
- d. Natural gas

88. Which of the following sources of energy is NOT renewable?

- a. Petroleum
- b. Hydropower
- c. Biomass
- d. Solar power

89. How much of the world's water is available for human use?

- a. 97%
- b. 23%
- c. 3%
- d. Less than 1%

90. About how long does it take a Styrofoam cup to decompose?

- a. 10 years
- b. 2 months
- c. 400 years
- d. 150 years

91. According to the World Health Organization, what is the most polluted city in the world?

- a. Los Angeles, California
- b. Mexico City, Mexico
- c. New Dehli, India
- d. Shanghai, China

92. What is the most common type of debris that litters our oceans?

- a. Bags
- b. Plastic beverage bottles
- c. Cigarettes
- d. Food packaging

93. Three Mile Island was the site of what disaster?

- a. The worst nuclear explosion in the world
- b. The worst forest fires in U.S. history
- c. The worst accident in U.S. nuclear-reactor history
- d. The worst oil spill in U.S. history

94. What is the most common type of trash thrown away by Americans?

- a. Paper products and cardboard
- b. Metals
- c. Glass
- d. Plastics

95. In which year was the Geneva Protocol signed?

- a. 1918
- b. 1928
- c. 1921
- d. 1925

96. Forests are extremely important because they

- a. Provide clean water and clean air
- b. Provide habitat for wildlife
- c. Provide recreation and a change from hectic urban life
- d. All of the above

97. Deforestation means

- a. Conversion of forest land for agricultural/pasture/homes etc.,
- b. Creation of new forest land for the wild life
- c. Planting trees in the cities
- d. Not managing the forest properly

98. The oceans are the largest storage of water on earth containing:

- a. 95% of earth's water
- b. 85% of earth's water
- c. 97% of earth's water
- d. 75% of earth's water

99. Which of the following is not a part of the hydrological cycle

- a. Precipitation
- b. Infiltration
- c. Transpiration
- d. Perspiration

100. World summit on sustainable development was held at

- a. Johannesburg in 2002
- b. Rio de Janeiro in 1992
- c. Kyoto in 1994
- d. Stockholm in 2000

101. Aquatic ecosystems provide all of the following ecological services except
- Pharmaceuticals
  - Climate moderation
  - Flood control
  - Nutrient cycling
  - None of these answers.
102. Approximately what percent of fish spawn in the world's coral reefs, mangrove swamps, coastal wetlands, or rivers?
- 10
  - 20
  - 30
  - 50
  - 0
103. The direct threat of climate change to marine habitat is
- Melting glaciers
  - Spread of tropical diseases
  - Decreased salinity of seawater
  - Rising sea levels
  - Ozone depletion
104. Water that is held behind dams throughout the world contains \_\_\_\_\_ of water compared to the water in all rivers and lakes in the world.
- Approximately the same amount
  - Slightly less
  - Slightly more
  - Twice as much
  - Half the amount
105. Which of the following is not a major cause for species loss in marine ecosystems?
- Overfishing
  - Habitat destruction
  - Pollution
  - Cruise ships
  - Erosion
106. Which of the following has the most destructive effects on ocean floor ecosystems?
- Trawl fishing
  - Sport fishing
  - Boat anchors
  - Shipwrecks
  - Gill nets
107. When fish populations are temporarily reduced due to overfishing, they are said to be
- Locally extinct
  - Commercially extinct
  - Economically extinct
  - Biologically extinct
  - Ecologically extinct

108. The depletion of the world's marine fish stocks due to overfishing is a classic example of
- Sustainable resource use.
  - The tragedy of the commons.
  - Ecological extinction.
  - Failure of international treaties.
  - Lack of regulation.
109. Through land use activities, humans have increased the amount of \_\_\_\_\_ by two-fold (since 1860) and the amount is expected to increase by another two-thirds by 2050
- Sulphur
  - Sedimentation
  - Nitrate fertilizer
  - Phosphate fertilizer
  - Potassium fertilizer
110. Freshwater systems are mostly threatened by
- Fertilizer runoff
  - More people seeking homes and places for recreation near lakes and streams
  - More people seeking homes and places for recreation on coastal areas
  - Invasive species
  - Industrial development
111. In the United States, over half of the fish extinctions in the last century were driven to extinction by
- Oil spills
  - Agricultural runoff
  - Alien species
  - Overfishing
  - Pollution
112. World Wetlands Day is celebrated on February 2nd every year to mark the adoption of the convention:
- Paris convention
  - Biodiversity Convention
  - Vienna convention
  - Ramsar convention
113. Vienna Convention is aimed at:
- Protection of ozone layer
  - Conservation of biodiversity
  - Sustainable utilization of wetlands
  - Reduction of pollutants
114. When did Vienna convention enter into force?
- 1985
  - 1980
  - 1978
  - 1971

115. Which day is observed every year globally to commemorate the signing of the Montreal Protocol?
- World environment day
  - World wetlands day
  - World biodiversity day
  - World ozone day
116. Which protocol is meant for prohibiting chemical and biological weapons in war?
- Geneva protocol
  - Montreal protocol
  - Kyoto protocol
  - Madrid protocol
117. In which year was the Geneva Protocol signed?
- 1918
  - 1928
  - 1921
  - 1925
118. What would be a good way to preserve biodiversity
- By not littering
  - Reduce Reuse Recycle
  - Not driving as often
  - All of the above
119. What is a dead zone?
- An area of water near the mouth of a major river where excess nutrients from fertilizer have led to the death of most or all living things
  - An area of water in the middle of the ocean where floating trash collects and kills seabirds and fish
  - An area of water in a river where heat pollution from power plants has driven most species away
  - A place like a desert where there is not much plant life
120. What role do non-governmental organizations (NGOs) play in protecting water quality?
- They encourage passage of water protection laws and support their enforcement
  - They set specific standards for water protection laws, help people, businesses and other agencies follow them and enforce them when they are not followed
  - They pass water protection laws, assign protection to an agency and provide funding for enforcement
  - They decide if a water quality protection law or regulation is being broken
121. How can a person find out what chemicals local factories or facilities have released into area waterways over time?
- By going to the local library and looking the information up in the annual chemical releases book
  - By calling their local county health department
  - By typing their zip code into the federal toxics release inventory website
  - By calling their state environmental agency

122. Which three characteristics mean a facility has to file a Toxics Release Inventory (TRI)?
- a) 1) If they are in a specific industry sector;  
2) They have more than 10 employees;  
3) They make more than 25,000 lbs or use more than 10,000 lbs of a listed chemical in a year
  - b) 1) If they are in a specific industry sector;  
2) They have more than 5 employees;  
3) Make or process more than 1000 lbs or use more than 100 lbs of a listed chemical in a year
  - c) 1) If they are in a specific industry sector;  
2) They have more than 10 employees;  
3) Make or process more than 100,000 lbs or use more than 40,000 lbs of a listed chemical in a year
  - d) 1) If they are in a specific industry sector;  
2) They have more than 100 employees;  
3) Make or process more than 25,000 lbs or use more than 10,000 lbs of a listed chemical in a year
123. How do algal blooms kill fish?
- a) When the algae die, their decomposition uses up so much oxygen that fish suffocate.
  - b) The fish aren't actually killed; they are just hard to see with all the algae.
  - c) The algae are so dense that the fish can't find each other to mate and reproduce, so they go extinct locally.
  - d) The algae provide lots of places for the normal food of the fish to hide, so the fish starve.
124. What governmental factors affect how vigorously water protection laws are carried out?
- a) An administration's attitude towards the law and how much money congress or a legislature provides for enforcement
  - b) Whether human health concerns are worth the cost of cleaning up the pollution
  - c) Whether environmental concerns are worth the cost of cleaning up the pollution
  - d) Whether the courts think it is a good law or a bad law
125. An aquatic environment
- a) Concentrates toxic metabolic wastes
  - b) Increases fluctuations in temperature
  - c) Increases chances of overheating
  - d) Dissolves nutrients and makes them readily available
  - e) All of these answers
126. Populations of organisms living in aquatic life zones may be limited by
- a) Access to light
  - b) Nutrient availability
  - c) Dissolved oxygen
  - d) All of these answers
  - e) None of these answers
127. Oxygen in the water varies widely because of
- a) Number of producers
  - b) Number of decomposers
  - c) Temperature
  - d) Number of consumers
  - e) All of these.



128. The major types of flora and fauna found in aquatic ecosystems are determined primarily by
- Temperature
  - Salinity
  - pH
  - Dissolved oxygen
  - Light
129. Zooplankton are:
- Primary consumers.
  - Secondary consumers.
  - Tertiary consumers.
  - A and Bs only.
130. You are scuba diving in the Atlantic Ocean and find a new diatom you classify as phytoplankton. One piece of your supporting evidence for this classification is that you found the diatom in the
- Euphotic zone
  - Bathyl zone
  - Profundal zone
  - Disphotic zone
  - Benthic zone
131. Dams and reservoirs
- May kill young salmon as they pass through turbines.
  - Slow downstream migration, exposing juvenile salmon to more predation.
  - Without ladders prevent upstream migration of mature salmon.
  - All of these answers.
  - None of these answers.
132. Salmon ranching results in all of the following except
- Increasing the need to add ladders and bypasses for migrating salmon.
  - Environmental stress after release of the fish.
  - Competition of the fish raised by ranching with wild species.
  - Increased susceptibility to diseases because of genetic uniformity.
  - None of these answers.
133. Approximately \_\_\_% of earth's water supply is available to us as liquid freshwater.
- .02
  - .2
  - 2
  - 22
  - 42
134. The hydrologic cycle will naturally purify and recycle fresh water as long as humans don't
- Pollute the water faster than it is replenished.
  - Withdraw water from groundwater supplies faster than it is replenished.
  - Overload it with slowly degradable and non-biodegradable wastes.
  - A and B only.
  - All of these answers.
135. Porous water-saturated layers of underground rock are known as
- Aquifers.
  - Recharge areas.
  - Watersheds.
  - Runoff areas.
  - Water tables.

136. Which of the following statements is false?
- Recharging of water is a slow process.
  - The water table moves down in dry weather.
  - Water in a confined aquifer is under pressure.
  - Groundwater is stationary and does not move.
  - The water table is located at the top of the zone of saturation.
137. Which of the following stages of cultural eutrophication occurs last?
- Fish kills
  - Blooms of algae
  - Increase in aerobic bacteria
  - Increase in anaerobic bacteria
  - Increase of plants such as duckweed
138. In which zone of a river would an ecologist look for a deep meandering stream?
- First
  - Second
  - Third
  - Benthic
  - Fourth
139. Inland wetlands are valuable for
- Recharging groundwater supplies.
  - Recreation.
  - Biogeochemical cycling of carbon, nitrogen, and sulphur.
  - Water fowl habitat.
  - All of these answers.
140. All of the following would be considered seasonal wetlands except
- Flood plains
  - Bottomland hardwood swamps
  - Prairie potholes
  - Cypress swamps
  - None of the above.
141. Most of the wetlands that are lost are used for
- Mining.
  - Urban development.
  - Agriculture.
  - Forestry.
  - Recreation.
142. "Mitigation banking" refers to
- The federal policy of zero net loss of wetlands.
  - Creating or restoring as much wetlands as are destroyed.
  - The World Bank's support of wetlands protection policies.
  - Debt-for-nature swaps.
  - Auctioning wetlands.
143. Life in both saltwater and freshwater ecosystems can be limited by
- Dissolved oxygen for respiration.
  - Temperature.
  - Access to sunlight for photosynthesis.
  - All of these answers.
  - None of these answers.

144. Which of the following illustrations does not match the accompanying ecological concept?
- a) Coral reefs have high biodiversity.
  - b) Estuaries have high productivity.
  - c) Dissolved oxygen is a primary limiting factor in the upper layer of a stratified lake.
  - d) The open ocean is the least productive of aquatic life zones.
  - e) Littoral zones have high biodiversity.
145. Which of the following is not that caused a dramatic drop in aquatic biodiversity in Lake Victoria?
- a) Invasive predatory fish species introduced which displaced native species.
  - b) Habit destruction by developing coastal wetlands.
  - c) Increase in algal blooms following nutrient runoff from farms.
  - d) Invasive water hyacinth which, among other things, blocked sunlight to reduce diversity of aquatic plant species.
  - e) Nile Perch decreased food supply and experienced massive dieback.
146. Which of the following do we know the least about?
- a) Deep space
  - b) Deep ocean basins
  - c) Tropical rainforests
  - d) Antarctica
  - e) Arctic
147. Where is most of the marine biodiversity found?
- a) Deep ocean floor
  - b) Salt flats
  - c) Coral reefs
  - d) Tide pools
  - e) Estuaries
148. Approximately \_\_\_\_ percent of the human population depend on seas for their primary source of food.
- a) 25
  - b) 33
  - c) 50
  - d) 75
  - e) 80
149. What are technology-based water quality standards?
- a) Standards that rely on achievable, cost-effective technologies
  - b) Standards based on not having to pay more than a certain amount for cleaning the water
  - c) Standards that seek to achieve a specific level of environmental quality
  - d) Standards based on having no contaminants in the water
150. The use of microorganism metabolism to remove pollutants such as oil spills in the water bodies is known as :
- a) Biomagnification
  - b) Bioremediation
  - c) Biomethanation
  - d) Bioreduction