Question 1: What is the study of living organisms and their interactions with the environment?
Student Answer: Ecology

Question 2: What term refers to all the living organisms in a particular area?
Student Answer: Ecosystem

Question 3: What is the term for a group of organisms of the same species in a specific area?
Student Answer: Population Ecology

Question 4: What is the term for the area where an organism lives and interacts with other organisms?
Student Answer: genetic diversity

Question 5: What term refers to the physical and biological factors that influence organisms in a particular area?
Student Answer: Adaptation

Question 6: What term describes the diversity of species, ecosystems, and genetic variation in an area?
Student Answer: Biosphere

Question 7: What term refers to the organisms at the first trophic level of an ecosystem, typically plants?
Student Answer: Producers

Question 8: What is the process by which plants make their own food using sunlight?
Student Answer: photo synthesis

Question 9: What term refers to the movement of energy through an ecosystem via food chains or webs?
Student Answer: Energy transfer

Question 10: What is the term for the process of restoring damaged ecosystems?
Student Answer: Sustainability

Question 11: What is an ecosystem?
Student Answer: An ecosystem is different species and organisms interacting and depending on each other in specific area. Example: Sahara desert.

Question 12: How does energy flow through ecosystems?
Student Answer: The energy flows through the ecosystem with food chains and food webs animals depend on each other for food. Example: zebras feeding on grass
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Question 13: What are the key differences between an individual and a population in ecology?

Student Answer: An individual consists of only one organism whereas a population consist of a group of organisms.

Question 14: How do human activities impact biodiversity?
Student Answer: Deforestation cutting of trees and habitat destruction can cause animal death and starvation. Urbanisation is a threat for animal welfare.

Question 15: What is the role of decomposers in an ecosystem?
Student Answer: The decomposers feed on dead and decaying matter and release behind minerals in the soil which that are absorbed by plants on to which the herbivores feed.

Question 16: What are trophic levels in an ecosystem?
Student Answer: Each level in the food chain is known as the trophic level. example plants are producers.

Question 17: Primary Productivity is significant as it disrupts the helth functioning of carnivores and decomposers and
Student Answer: primary productivity is significant as it disrupts the herbivore and the carnivore and the carnivore and decomposes malfunctioning of ecosystem.

Question 18: What is mutualism in ecological interactions?
Student Answer: Mutualism is an advantage for both organisms. it is a long term process that requires both organism to be associated example: Bees pollinating flowers.

Question 19: What is habitat fragmentation?
Student Answer: Habitat fragmentation is when it is destroyed due to human encroachment and organisms living there are homeless
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Question 20: Explain the 10% rule in energy transfer.
Student Answer: The 10% rule is when only 10% of the energy is transferred to the next trophic level as the 90% Energy is lost as heat, respiration & biological processes.

Question 21: What is the role of species diversity in ecosystem functioning?
Student Answer: Vast and different number of species are required to maintain ecological balance and equilibrium in ecosystem. example lion feeding on zebra in African Savanna a vast number of species can help in mutasism, predation, competition and diverse living.

Question 22: Explain the importance of conservation biology and the strategies used to conserve biodiversity.
Student Answer: Antipoaching Law enhancement. Supporting local employment and Eco-tourism. A & detecting cameras for surveillance of the animals. Increasing Security levels of reserves for protecting keeping the animals safe.
