

****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:**** Species

****Question 3:**** What is the term for a group of organisms of the same species in a specific area?

****Student Answer:**** Population

****Question 4:**** What is the term for the area where an organism lives and interacts with other organisms?

****Student Answer:**** Community

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

****Student Answer:**** Environment

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

****Student Answer:**** biodiversity

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

****Student Answer:**** Primary producer

****Question 8:**** What is the process by which plants make their own food using sunlight?

****Student Answer:**** Photosynthesis

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

****Student Answer:**** energy (flow)

****Question 10:**** What is the term for the process of restoring damaged ecosystems?

****Student Answer:**** Ecological distribution

****Question 11:**** What is an ecosystem?

****Student Answer:**** The system in which organism live and interact with other organism with physical and biological factor that influence organisms in a particular area is called ecosystem.

****Question 12:**** How does energy flow through ecosystems?

****Student Answer:**** The energy flow through ecosystem is the consumer only gets 10% of the producers energy rest of 90% goes in cheat, etc. Enery flow through food chain and food webs in one direction

****Question 13:**** What are the key differences between an individual and a population in ecology?

****Student Answer:**** Individual is a single organism while population is total count of individuals in a perticular area. Number of organisms in a given area.

****Question 14:**** How do human activities impact biodiversity?

****Student Answer:**** Human activities impact biodiversity, by pollution, air pollution, soil pollution, water pollution by which climate change also occurs So, they try addapt new habitite then the biodiversity occurs.

****Question 15:**** What is the role of decomposers in an ecosystem?

****Student Answer:**** In food Chain primary producers consumed by primary consumer than secondary consumer and than tersary consumer finally trisary consumer die & decompose & give its nutriants to soil.

****Question 16:**** What are trophic levels in an ecosystem?

****Student Answer:**** Primary Producer (Plant), Primary Consumer (rabbit), Secondary Consumer (hayna) trisary consumer (lion) there are four trophic lives in an ecosystem

****Question 17:**** Why is primary productivity important for ecosystem functioning?

****Student Answer:**** Primary productivity important for ecosystem functoining because without primary productivity the food chain wont continue the primary consumers are fully depended on primary productivity So as Secondary & tris.

****Question 18:**** What is mutualism in ecological interactions?

****Student Answer:**** Mutualism in ecological interactions are in which both the organisms gets benifit & they both depends on each other.

****Question 19:**** What is habitat fragmentation?

****Student Answer:**** habitat fragmentation in which species change there habitat based on the enveronment. Every organism in ecosystem has its own habitat fragmentation.

****Question 20:**** Explain the 10% rule in energy transfer.

****Student Answer:**** Energy transfer only in one direction in which consumers only gets 10% of the producer energy Rest 90% energy goes in heat, soil, decompose, etc.

****Question 21:**** What is the role of species diversity in ecosystem functioning?

****Student Answer:**** The diversity of species plays important role in ecosystem functioning if there was no diversity in species than food chain & food webs don't work for functioning ecosystem we need producers & consumers which is all depended on biodiversity. So, species diversity is really important for functioning ecosystem.

****Question 22:**** Explain the importance of conservation biology and the strategies used to conserve biodiversity.

****Student Answer:**** Conservation biology is important to save our ecosystem by pollution. The strategies we can use are, by lowering commercial building, employing others, by not using fertilizer & pesticides, lowering mining, less pollution. By conservation biology helps species to not extinct & food continuous. The ecosystem will be safe.