Organismal ecology is the study of an individual organism's behaviour, morphology, physiology, etc. in response to environmental challenges. Ecologists research how organisms are adapted to these non-living and living components of their surroundings. Individual species are related to various adaptations like physiological adaptation, morphological adaptation, and behavioural adaptation.

Population Ecology:

It deals with factors that alter and impact the genetic composition and the size of the population of same species. Population ecology examines the population distribution and density. Population density is the number of individuals in a given volume or area. This helps in determining whether a particular species is in endanger or its number is to be controlled and resources to be replenished.

Community Ecology :

It deals with how community structure is modified by interactions among living organisms. Ecology community is made up to be or more populations of different species living in a particular goographic area 201

Ecosystem Ecologo

It dears with the entire ecosystem, including the study of living and non-living components and their relationship with the environment. This science researches how ecosystems work, their interactions, etc.

Landscape Ecology

It deals with the exchange of energy, materials, organisms and other products of ecosystems. Landscape Ecology study the habitat fragmentation (such as deforestation) or the migration of organisms between ecosystems, etc.

Biosphere

It deals with interactions among earth's ecosystems, land, atmosphere and oceans. It helps to understand the large-scale interactions and their influence on the planet, the role of greenhouse gases, the effects of climate change on ecosystems and organisms, etc.