

Lecture No.2

Branches of Biology

Microbiology

This division of biology deals with the study of microorganisms such as bacteria, viruses, fungi etc.

Hydrobiology

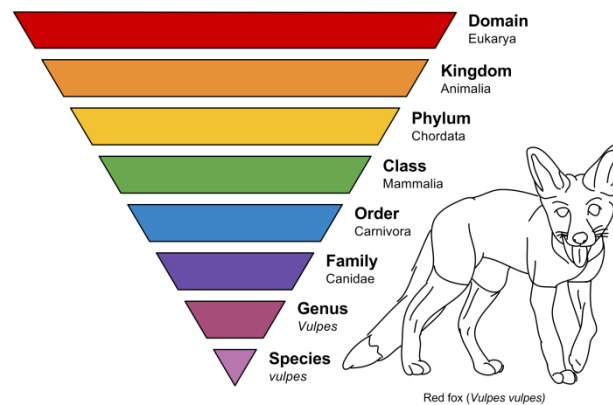
The study of life in water environment.

Cell Biology

The study of structures and functions of cells and cell organelles is called cell biology. This branch also deals with the study of cell division.

Taxonomy

Taxonomy is the science of naming, describing and classifying organisms and includes all plants, animals and microorganisms of the world.



Paleontology

It is the study of fossils, which are the remains of extinct organisms.



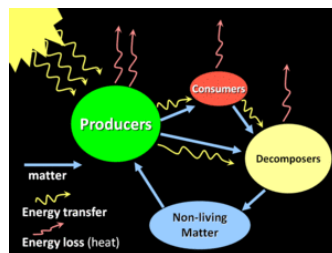
Botany

This division of biology deals with the study of plants. The study of plants is vital because they underpin almost all animal life on Earth. They generate a large proportion of the oxygen and food.



Ecology

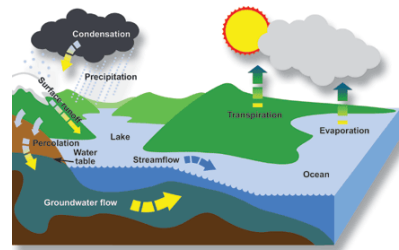
Ecology is the study of the relationships between living organisms, including humans, and their physical environment; it seeks to understand the vital connections between plants and animals and the world around them. Ecology also provides information about the benefits of ecosystems and how we can use Earth's resources in ways that leave the environment healthy for future generations.



Limnology

Limnology is the study of inland waters - lakes (both freshwater and saline), reservoirs, rivers, streams, wetlands, and groundwater - as ecological systems interacting with their drainage basins and the atmosphere. The limnological discipline integrates the functional relationships of growth, adaptation, nutrient cycles, and biological productivity with species

composition, and describes and evaluates how physical, chemical, and biological environments regulate these relationships.



Marine Biology

Marine biology is the scientific study of organisms in the *ocean* or other marine or brackish bodies of water.



Zoology

Zoology is basically the branch of biology that deals with the scientific study of animals.

Entomology

Entomology is the study of insects and their relationship to humans, the environment, and other organisms. Entomologists make great contributions to such diverse fields as agriculture, chemistry, biology, human/animal health, molecular science, criminology, and forensics.

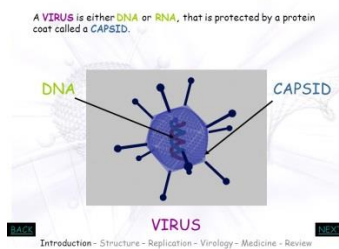
Bacteriology

The science and study of bacteria and their relation to medicine and to other areas such as agriculture (e.g., farm animals) and industry. Bacteria are single-celled microorganisms which can live as independent organisms or, dependently, as parasites.



Virology

Virology is a branch of the sciences which focuses on the study of viruses and organisms which behave like viruses, such as prions and viroids.



Mycology

Mycology is the branch of biology concerned with the study of fungi, including their genetic and biochemical properties, their taxonomy and their use to humans as a source for tinder, medicine, food, and entheogens, as well as their dangers, such as poisoning or infection.

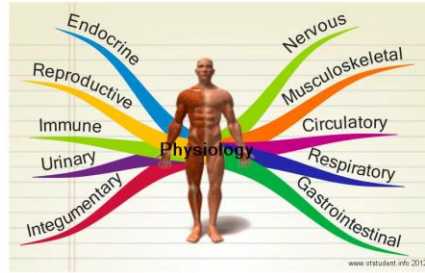
Parasitology

Parasitology is the study of parasites, their hosts, and the relationship between them.



Physiology

This branch deals with the study of the functions of different parts of living organisms.



Genetics

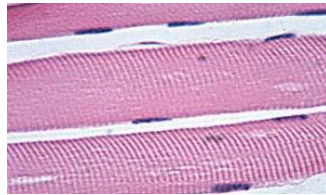
The study of genes and their roles in inheritance is called genetics. Inheritance means the transmission of characters from one generation to another.

Biotechnology

It deals with the practical application of living organisms for make substances for the welfare of mankind.

Histology

Histology is the study of the microscopic anatomy of Cells and tissues of plants and animals.



Pharmacology

It is the study of drugs and their effects on the systems of human body.

Immunology

It is the study of immune system of animals, which defend the body again invading organisms. It deals with the physiological functioning of the immune system in states of both health and diseases.

