

# **LIVING WORLD OF ANIMALS**

- The living things form biotic community and non-living things form abiotic community.
- ❖ Living or dwelling place of an organism is known as habitat.
- ❖ In Jurong Birds Park, Singapore, Penguins are kept in a big glass case with ice bergs and temperature is maintained at 0° C and below.
- Living things are made of small units called cells.
- \* single cell and these are called unicellular organisms, organisms that are made of many cells are called multicellular organisms.
- Amoeba, Paramecium and Euglena fish, frog, lizard, bird and man are multicellular.

### **UNICELLULAR ORGANISM:**

- ❖ Aquatic, simplest and most primitive of all animals.
- \* Physiological activities by the special structures present organelles.
- ❖ Amoeba is an unicellular organism
- ❖ food is digested in the food vacuole. Contractile vacuoles help in excretion.
- \* Respiration is by simple diffusion through the body surface.
- ❖ They have finger-like structures called Pseudopodia, help in movement or locomotion.
- ❖ Paramecium is also a unicellular organism lives in water move with the help of cilia.
- Euglena is an unicellular animal which moves with a flagellum.

#### **EUGLENA:**

❖ Multicellular organisms: different functions

Unicellular Organisms

Multicellular Organisms

- They are made up of single cell.
- The single cell of the organism can perform all the functions of life.
- These organisms are generally very small (microscopic) in size.
- They lack tissues, organs and organ systems.
- Growth occurs by an increase in the size of the cell. eg. Amoeba, Paramecium and Euglena.

- They are organisms are made up of many cells.
- Division of labour exists among cells.
- Different cells are specialized to perform different functions.
- They are mostly large in size.
- They are composed of tissues, organs and organ systems.
- Growth occurs by an increase in the number of cells by cell division. eg. Earthworms, Fish, Frogs, Lizard and human beings.
- ❖ by different groups of cells or organs in their body. E.g. Jelly fish, Earth worm, snails, fish, frog, snakes, pigeon, tiger, monkey and man.
- \* specific body features for certain habits which enable a plant or an animal to live in a particular habitat is called adaptation.

#### FISH:

- ❖ a streamlined shape.
- "Gills" which is a respiratory organ
- slippery scales all over the body
- fins for swimming.
- \* strong tail which acts as rudder to change direction and keep its body balance in water.

#### LIZARD:

- \* scaly-skinned reptiles the possession of legs, movable eyelids, and external ear openings.
- Inhabit warm regions. Most lizards are quadripedal (walk with four legs) and have a powerful limb.
- Some lizards have the capacity to rotate the head around the head joint.
- breathe through lungs. Some lizards are able to run bipedally with two legs.
- tail is held out backward and upward and acts as a counterweight.
- \* sharp, tricuspid, teeth adapted for grabbing and holding

❖ Some lizards (Dinosaurs) have web in the toes, and few lizards are able to glide or parachute the air and make soft landings.

#### **BIRDS:**

- \* streamlined body covered with feathers.
- \* minimum resistance to air.
- beak instead of mouth.
- **A** Breathe through lungs.
- ❖ Apair of wings that are modified forelimbs.
- ❖ Hollow and light bones.
- ❖ Perch well on the branches of tree with the help of a pair of clawed feet.
- ❖ The tail of the bird helps it to control the direction of the movements.
- \* strong chest muscles which help them withstand the pressure of the air while flapping their wings during flight.
- \* birds can see one object with one eye and another object with the other eye. (Binocular vision)
- ❖ When an animal moves its location as the season changes it is said to be **Migration**. In Tamil Nadu Bird Sanctuaries
- ❖ Located at Vedanthangal, Kodiyakkarai and Koondhankulam.
- ❖ Many birds from foreign countries like Siberia and Russia migrate to our Vedanthaangal.
- ❖ Likewise during summer and drought conditions birds from our country migrate to foreign countries.
- \* These birds are called Migratory Birds.
- Camel lives in hot desert body structure helps it to survive in desert because of its following special features has long legs
- \* keep its body away from the hot sand in the desert.
- ❖ A camel can drink large amount of water (when it is available) and store it in the body.
- ❖ A Camel passes small amount of urine; its dung is dry and it does not sweat.
- ❖ can live for many days without drinking water.
- hump has fat stored in it.
- ❖ large and flat padded feet
- \* "The ship of the desert".
- ❖ long eye lashes and hairs to protect its eyes and ears from the blowing dust.
- \* nostrils closed to avoid dust.
- ❖ Spending winters in a dormant condition is called Hibernation. eg. Turtle

- ❖ On the other hand, spending the hot and dry period in an inactive state is known as Aestivation. eg. Snail
- \* Kangaroo rat does not drink water at all. Whatever food it eats and oxygen it gets from air combine together to form water inside the body.

## **Adaptive Features of Animals from different Habitats**

Sl.No.	Name of the Animal	Habitat	Adaptive features
1.	Polar Bear	Polar region	Thick skin for protection, white fur
2.	Penguin	Polar region	Paddle to swim, walk with two legs
3.	Mountain Goat	Mountains	Strong hooves for running, long hair to protect from cold
4.	Lion	Forest	Strong and fast runner has sharp claws to catch prey.

The mountain goat namely Nilgri Tahr can find small spaces on rock to climb with ease and keep its balance as it feeds.