

LEARNING OBJECTIVES

1. *Tropical Rainforest*
2. *Adaptations in red-eyed frog*
3. *Adaptations in Monkeys and Toucan*

Tropical Rainforest-

The tropical region lies near both the sides of equator line on the earth. These regions are hot but get plenty of rainfall. Therefore, this region is humid. Even in coldest month, the temperature is generally higher than about 15°C.

During hot summers, the temperature may cross 40°C. Days and nights are almosts equal in length throughout the year. Tropical rainforest is the important feature of tropical region. These regions are rich in vegetation and large diversity in animals is also seen in this region.

Because of continuous warmth and rain, this region supports wide variety of plants and animals.

Climatic conditions in rainforests are highly suitable for supporting large variety of plants and animals.

Due to large number of animals, there is intense competition for food and shelter.

In India, tropical rainforests are found in Western Ghats and Assam, other countries of the world like South-East Asia, Central America, Malaysia, Indonesia, Brazil, Republic of Congo, Kenya, Uganda, Nigeria and Central Africa also have tropical rainforest.

The major type of animals living in the rainforest are monkeys, apes, gorillas, tigers, elephants, leopards, lizards, snakes, birds and insects. Since, there are large number of animals found in these regions. There is an intense competition for food and shelter among these animals.

So, the animals are adapted in such a way that they eat different kinds of food and live in different kinds of places to overcome competition for food and shelter respectively. The adaptations in different animals living in tropical rainforests can be discussed as follows:

Adaptations in Red-eyed Frog -

The red-eyed frog lives on trees in tropical rainforest. They have sticky pads on their feet that help them to climb trees. It does not live in water and has a green back and a creamy underside.

It has big and bulging bright-red eyes and it is a nocturnal as It sleeps during the day and becomes active during night and feeds on the insects present on the tree. The bulging eye of frog protects it from its predator.

The sudden opening of big and bright-red eyes frightens the predator for a while and in the meantime the frog gets time to jump to a safe place. The green colour of the frog helps it to hide within the green leaves of the tree and helps it to protect from predators.

Adaptations in Monkey -

The monkeys living in tropical rainforests have long tails for grasping branches. Their hands and feet are adapted in such a way that they can easily hold the branches of trees.

The eyesight of monkeys is very good which helps them in leaping between the branches to escape from their predators. Monkeys eat fruits, seeds, leaves, root and insects as their food which is present in abundance in tropical rainforest.

Adaptations in Lion-Tailed Macaque -

It is also called as beard ape and lives in the rainforest of Western Ghats in India. It has silver-white mane which surrounds the head from the cheeks down to its chin which is the specific characteristic of this animal.

It is called lion-tailed because its tail is like that of lion having bunch or tuft of hair at the end.

They spend most of their time feeding in the upper canopy of trees (i.e. arboreal animal). It mainly feeds on fruits, seeds, young leaves, stems, flowers and buds.

They also can eat insects present under the bark of the tree. Since, it is able to get sufficient food on trees, it rarely comes down on the ground and spends a major part of its life on the tree. It is a good climber with its hand and feet adapted to hold the branches of trees firmly.



Pic shows Lion-tailed macaque

Adaptation in Toucan -

Toucan is a bird, which is found in tropical rainforest and which possesses a long strong and large beak. This bird is adapted for tropical rainforest in several ways. It is a colourful bird which possesses a strange beak. It lives most of the time in the holes of big trees.

The long and large beak helps Toucan to reach the fruits attached to the ends of even thin branches of tree that are weak enough to support its weight. It is an adaptation of this bird to get the unreachable fruits. Its large beak also helps in temporary storage of fruits which is collected by Toucan.

These possess feet that are adapted for grasping the branches of trees firmly. Toucan can change the colour of its feather, so as to get mixed up with the surrounding and they are not easily noticed by predators and remain safe.

PLENARY -

Q. The animals living in rainforest adapt themselves to the climate present there. How are they adapted to their climatic conditions?

A. The animals that live in tropical rainforests are herbivorous that are able to eat the vegetation, rich in rainforest.

Most of the tropical rainforest animals walk on the land or are adapted to live on trees. The animals living in rainforest have good eyesight and hearing capacity to catch their prey as well as to protect themselves from predators.

Q. Discuss adaptations of a Red-eyed Frog.

A. Adaptation in Toucan: Toucan is a bird, which is found in tropical rainforest and which possesses a long strong and large beak. This bird is adapted for tropical rainforest in several ways. It is colourful bird which possesses a strange beak. It lives most of the time in the holes of big trees.

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ASSESSMENT / EVALUATION -

Q. Discuss adaptations of a Monkey and Toucan.

A. Adaptations in Monkey: The monkeys living in tropical rainforests have long tails for grasping branches. Their hands and feet are adapted in such a way that they can easily hold the branches of trees. The eyesight of monkeys is very good which helps them in leaping between the branches to escape from their predators. Monkeys eat fruits, seeds, leaves, root and insects as their food which is present in abundance in tropical rainforest.

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