

# Weather, Climate and Adaptations of Animals to Climate

## Q.1 Name the elements that determine the weather of a place.

**Sol:** The temperature, wind speed, rainfall and humidity are the elements that determine the weather of place.

## Q.2 When are the maximum and minimum temperatures likely to occur during day?

**Sol:** The maximum temperature of the day happens generally in the afternoon and minimum temperature happen generally in early morning.

## Q.3 Fill in the blanks:

- (a) The average weather taken over a long time is called \_\_\_\_\_.
- (b) The place receives very little rainfall and the temperature is high throughout the year, the climate of that place will be \_\_\_\_\_ and \_\_\_\_\_.
- (c) The region two regions of the earth with extreme climatic conditions are \_\_\_\_\_ and \_\_\_\_\_.

**Sol:** Fill in the blanks:

- (a) The average weather taken over a long time is called climate.
- (b) The place receives very little rainfall and the temperature is high throughout the year, the climate of that place will be hot and dry.
- (c) The region two regions of the earth with extreme climatic conditions are Polar and Tropical region.

## Q.4 Indicate the type of climate of the following areas;

- (a) Jammu and Kashmir: \_\_\_\_\_.
- (b) Kerala: \_\_\_\_\_.
- (c) Rajasthan: \_\_\_\_\_.
- (d) North-east India: \_\_\_\_\_.

**Sol:**

- (a) Jammu and Kashmir: Cold and wet.
- (b) Kerala: Hot and wet
- (c) Rajasthan: Hot and dry
- (d) North-east India: Hot and wet.

## Q.5 Which of the two changes frequently, weather or climate?

**Sol:** Weather changes frequently.

## Q.6 Following are some of the characteristics of animals:

- |                            |                              |
|----------------------------|------------------------------|
| (i) Diets heavy on fruits. | (ii) White fur               |
| (iii) Need to migrate      | (iv) Loud voice              |
| (v) Sticky pad on feet.    | (vi) Layer of fat under skin |
| (vii) Wide and large paws. | (viii) Bright colour         |
| (ix) Strong tails          | (x) Long and large beak.     |

For each of the following indicate whether it is adaptation for tropical rainforest or polar region.

**Sol:**

- (i) Diets heavy on fruits: Tropical rainforest
- (ii) White fur: Polar
- (iii) Need to migrate: Both Tropical rainforest and Polar
- (iv) Loud voice: Both Tropical rainforest and Polar
- (v) Sticky pad on feet: Polar
- (vi) Layer of fat under skin: Polar
- (vii) Wide and large paws: Polar
- (viii) Bright colour: Tropical rainforest
- (ix) Strong tails: Tropical rainforest
- (x) Long and large beak: Tropical rainforest

**Q.7 The tropical rain forest has large population of animals. Explain why it is so.**

**Sol:** The climatic condition of tropical rain forest is warmth and periodic rains. These situations are very favorable for enormous number of plants and animals, so that this region supports wide variety of plants and animals.

**Q.8 Explain, with examples, why we find animals of certain kind living in particular climatic conditions.**

**Sol:** The organism or animals are adapted for living in a particular climatic condition and interact with the environment for survival. To survive in a particular type of climate the animals must have certain adapted features. This is the reason we find animals of certain kind living in particular climatic conditions. For example, Polar bears live in the ice-cold region cannot survive in the terrestrial forests. Their skin is padded with extra layer of fat, white fur, strong sense of smell, wide and large paws for swimming and walking on snow. So that it can survive extreme cold condition.

**Q.9 How do elephant living in the tropical rainforest adapt itself?**

**Sol:** Elephants live in the rain forests with various adaptation strategies. They have trunk as nose with strong sense of smell. Trunk also acts as a hand to pick up food. Their tusks are modified teeth, which can tear a bark of the tree for their food. Large ears help it to hear even soft sounds. They also help to keep their body cool in humid climate of rainforest.

**Choose the correct option which answers the following question:**

**Q.10 A carnivore with strips on its body moves very fast while catching its prey. It is likely to be found in**

- (i) Polar regions
- (ii) deserts
- (iii) Oceans
- (iv) tropical rainforests

**Sol:** (iv) tropical rainforests

**Q.11 Which features adapt polar bears to live in extremely cold climate?**

- (i) A white fur, fat below skin, keen sense of smell.
- (ii) Thin skin, large eyes, a white fur.
- (iii) A long tail, strong claws, white large paws.
- (iv) White body, Paws for swimming, gills for respiration.

**Sol:** (iv) White body, Paws for swimming, gills for respiration.

**Q.12 Which option best describe a tropical region?**

- (i) Hot and humid.
- (ii) Moderate temperature, heavy rainfall.
- (iii) Cold and humid.
- (iv) Hot and dry

**Sol:** (i) Hot and humid.