

NCERT Solutions for Class 7 Science Chapter 7

Weather, Climate and Adaptations of Animals to Climate Class 7

Chapter 7 Weather, Climate and Adaptations of Animals to Climate Exercise Solutions

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Q1 :

Name the elements that determine the weather of a place.

Answer :

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

Q2 :

When are the maximum and minimum temperatures likely to occur during the day?

Answer :

The maximum temperature of the day occurs in the afternoon while the minimum temperature occurs early in the morning.

Q3 :

Fill in the blanks:

- (i) The average weather taken over a long time is called _____.
- (ii) A place receives very little rainfall and the temperature is high throughout the year, the climate of that place will be _____ and _____.
- (iii) The two regions of the earth with extreme climatic conditions are _____ and _____.

Answer :

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

Q4 :

Indicate the type of climate of the following areas:

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

Answer :

- (a) Jammu and Kashmir: Moderately hot and wet
(b) Kerala: Hot and wet
(c) Rajasthan: Hot and dry
(d) North-east India: Wet

Q5 :

Which of the two changes frequently, weather or climate?

Answer :

Weather changes frequently.

Q6 :

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 pads on feet (vi) Layer of fat under skin
(vii) Wide and large paws (viii) Bright colours
(ix) Strong tails (x) Long and large beak

For each characteristic indicate whether it is adaptation for tropical rainforests or polar regions. Do you think that some of these characteristics can be adapted for both regions?

Answer :

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

No, none of the above characteristics can be adapted for both regions.

Q7 :

The tropical rainforest has a large population of animals. Explain why it is so.

Answer :

The climate of tropical rainforests is generally hot and humid with continuous rain. These hospitable climatic conditions support huge populations of plants and animals.

Q8 :

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

Answer :

Certain kind of animals can be found in particular climatic conditions as they can adapt well to those conditions. For example, a polar bear is adapted for polar regions. It has a thick skin and a layer of fat to keep it warm in cold conditions. However, with these adaptations, it will not be possible for it to survive in tropical region where it is hot. Similarly, a monkey is adapted to live in the forests with features such as long and sturdy tail, loud voice, etc. These features are of no importance in polar regions where vegetation is very less. Therefore, certain types of animals live only in certain climatic conditions.

Q9 :

How do elephant living in the tropical rainforest adapt itself.

Answer :

An important and widely found animal of Indian tropical rainforests is the elephant. It has adapted remarkably to the conditions of this region. Some of the adaptations are as follows.

- (i) It uses its trunk as nose so that it has a strong sense of smell.
- (ii) Its trunk is also used for picking up food.
- (iii) Its tusks are used to tear bark of trees. It can eat barks of trees.
- (iv) The soles of their feet are covered with thick pads. These pads can handle their enormous weight. They also prevent sound so that the elephants can move silently.
- (v) Its large ears have strong sense of hearing.

Q10 :

Choose the correct option which answers the following question:

A carnivore with stripes 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**

Answer :

(iv) tropical rainforests

Q11 :

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.

Answer :

- (i) A white fur, fat below skin, keen sense of smell

Q12 :

Which option best describes a tropical region?

- (i) hot and humid
- (ii) moderate temperature, heavy rainfall
- (iii) cold and humid
- (iv) hot and dry

Answer :

- (i) hot and humid