

# NCERT solution for Weather, Climate and Adaptations of Animals to Climate

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## Question 1

Name the elements that determine the weather of a place.

### Answer

The elements that determine the weather of a place are

a)	Wind speed
b)	Temperature
c)	Humidity
d)	Rainfall

## Question 2

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

### Answer

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

## Question 3

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) climate.
- (ii) hot and dry.
- (iii) desert.

### Question 4

Indicate the type of climate of the following areas:

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

### Answer

S.no	Area	Climate
a)	Jammu and Kashmir	Moderately hot and wet
b)	Kerala	Hot and wet
c)	Rajasthan	Hot and dry
d)	North-east India	wet

### Question 5

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Which of the two changes frequently, weather or climate?

**Answer**

Weather changes frequently.

**Question 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 pads on feet
- (vi) Layer of fat under skin
- (vii) Wide and large paws
- (viii) Bright colors
- (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 colors	Tropical rainforests
ix)	Strong tails	Tropical rainforests
x)	Long and large beak	Tropical rainforests

No, these characteristics can't be adapted for both regions as they are specific.

### Question 7

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

### Answer

The tropical rainforest has a large population of animals due to many reasons

- 1) Climate is hot and gets plenty of rainfall. Because of continuous warmth and rain, this region supports wide variety of plants and animals.
- 2) The region being near to equator, receives more solar energy available. It contributes to higher productivity in terms of food and population.
- 3) Tropical rainforest remained less disturbed for millions of years, thus giving longer time to evolution. It resulted in wide variety of species.

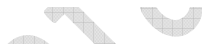
### Question 8

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

#### Answer

We find animals of certain kind living in particular climatic conditions because every living organism are adapted to live in the particular habitat. Every living thing develop their feature according to the adaption area.

For example, penguins have thick skin to protect themselves from cold and webbed feet to swim in water. It can't able to survive the hot climate of tropical regions as they developed thick skin for the protection from cold not from the hot and humid temperature. Another example would be of Monkeys. They have long tails for grasping branches adapted to live in tropical rain forests. It cannot survive in polar regions.



### Question 9

How do elephant living in the tropical rainforest adapt itself?

#### Answer

Elephant living in the tropical rainforest are well adapted itself to this region.

- (i) They have strong sense of smell and uses its trunk for smell. And to hold food.
- (ii) They also use their trunk to hold food.
- (iii) They have long ears which help them in keeping cool in hot and humid climate.
- (iv) Long ears help them in hearing very soft sound.
- (v) They have thick padded feet which help them in moving silently.

### Question 10

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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

**Question 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.

**Answer**

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

Question 12 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