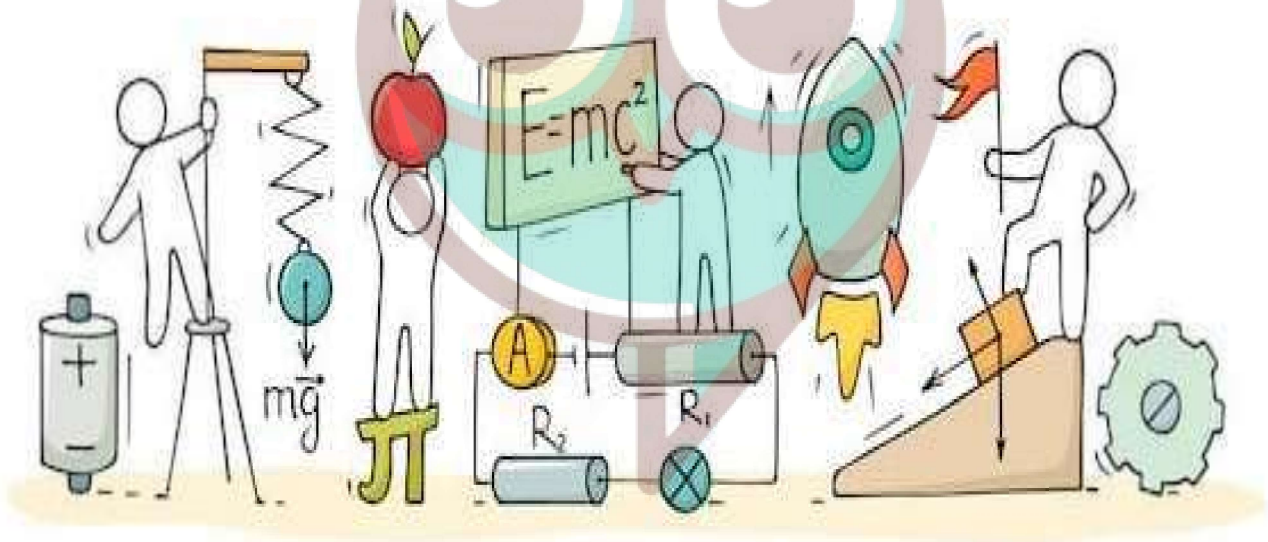


SCIENCE

CHAPTER 7: WEATHER CLIMATE AND ADAPTATIONS OF ANIMALS TO CLIMATE



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Question 1. Which of the following is the climate found in Kerala?

- (a) Very hot and wet
- (b) Wet
- (c) Hot and dry
- (d) Moderately hot and moderately dry

Question 2. Maximum temperature of the day occurs generally

- (a) in the afternoon
- (b) when the sun rises
- (c) when the sun sets
- (d) in the evening

Question 3. Nights in deserts are much cooler because

- (a) humidity becomes high
- (b) sand cools down faster
- (c) wind blows vigorously
- (d) it rains at night

Question 4. The annual record of long-term average temperature and rainfall at a particular place is known as

- (a) climate
- (b) climate chart
- (c) weather
- (d) weather forecasting

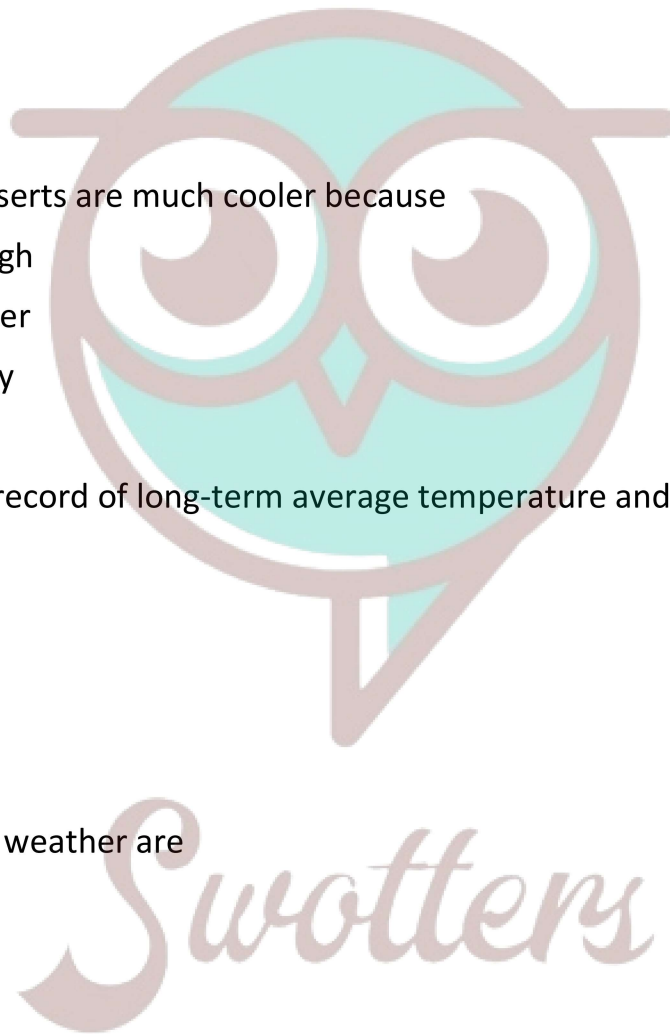
Question 5. Elements of weather are

- (a) temperature
- (b) humidity
- (c) rainfall
- (d) all of these

Question 6. Weather forecasting helps in

- (a) preparing for bad weather
- (b) planning of daily activities
- (c) planning for farming
- (d) all of these

Question 7. The humidity of a place refers to



- (a) the rainfall
- (b) the amount of water vapour in the air
- (c) the snowfall
- (d) all of the above

Question 8. Penguins are adapted to live in

- (a) desert climate
- (b) equatorial region
- (c) polar region
- (d) rainforests

Question 9. Which of the following part of India has hot and dry climate?

- (a) Kashmir
- (b) Rajasthan
- (c) Kerala
- (d) North-east region

Question 10. Which of the following statement is incorrect for penguins?

- (a) They huddle together
- (b) They cannot swim
- (c) They have webbed feet
- (d) They have streamlined body

Question 11. Generally nocturnal, large padded feet, less sweating, mechanism to conserve water, etc. are adaptive features of animals living in

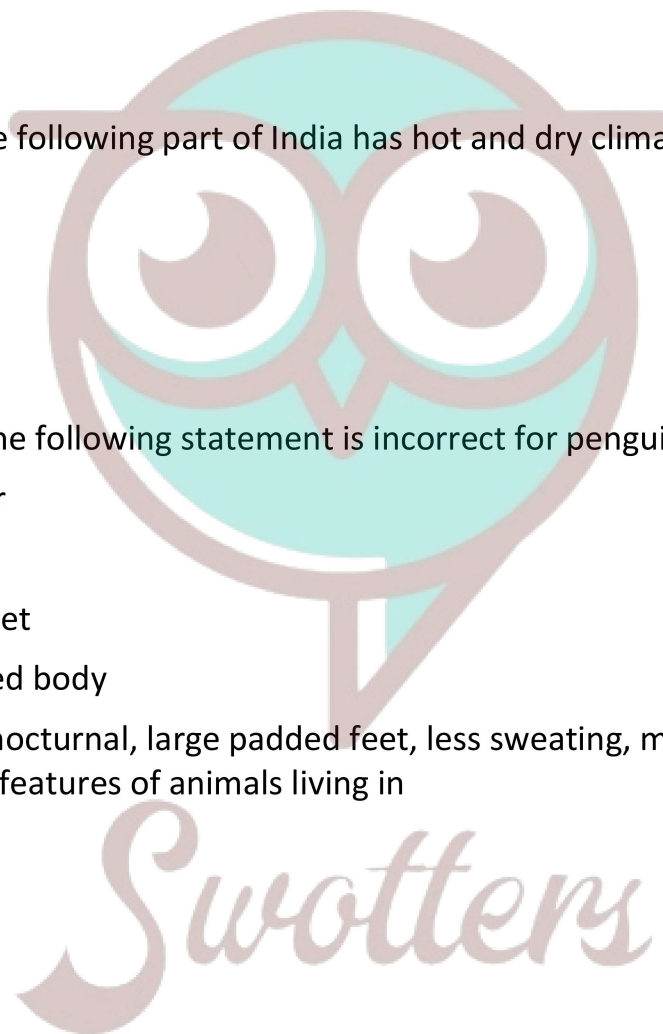
- (a) polar regions
- (b) tropical regions
- (c) desert regions
- (d) equatorial region

Question 12. The average weather pattern taken over a long time, say 25 years is known as

- (a) climate
- (b) adaptation
- (c) humidity
- (d) weather

Question 13. The coldest region on the earth is the

- (a) polar region



- (b) tropical region
- (c) temperate region
- (d) coastal region

Question 14. The hump of the camel is a reservoir of

- (a) fatty tissue
- (b) water
- (c) milk
- (d) all of the above

Question 15. Which one of the following is not the part of daily weather report?

- (a) Pressure
- (b) Temperature
- (c) Rainfall
- (d) Humidity

➤ **Fill In the Blanks:**

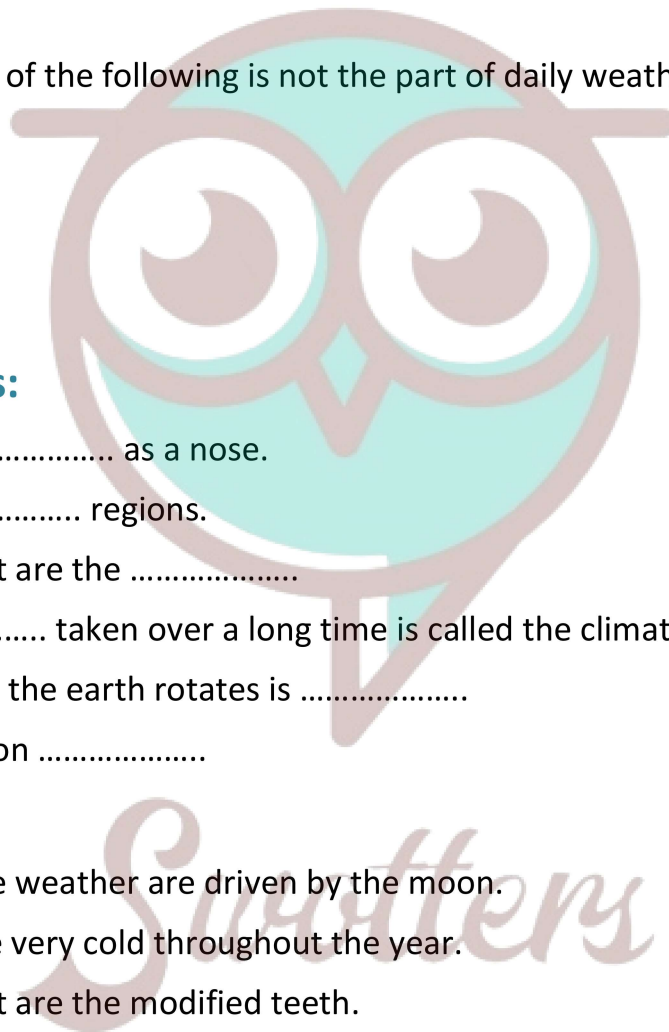
1. Elephant uses its as a nose.
2. Penguin live in regions.
3. Tusks of the elephant are the
4. The average taken over a long time is called the climate of the place.
5. The axis about which the earth rotates is
6. Red eyed frogs lives on

➤ **True or False:**

1. All the changes in the weather are driven by the moon.
2. The polar regions are very cold throughout the year.
3. Tusks of the elephant are the modified teeth.
4. Migration is only shown by the birds living in cold places.
5. Typical desert climate is found in Rajasthan.
6. Maximum and minimum temperature in a day are recorded by special thermometers called maximum and minimum thermometers.

➤ **Very Short Question:**

1. Name the two elements of weather.
2. What is humidity?
3. Who prepares daily weather report?



4. Name an instrument used to measure rainfall.
5. Do all the seven days have same maximum and minimum temperatures, humidity and rainfall?
6. What is the use of maximum and minimum thermometer?
7. Days are shorter in winter or in summer?
8. What kind of places experiences hot and dry climate?
9. Name the place in India having wet climate.
10. Name some countries having tropical rain forest.

➤ **Short Questions:**

1. What do you mean by climate of a place?
2. Name the elements determining weather of a place.
3. Differentiate between meteorology and meteorologists.
4. Explain how latitude affects Indian climate.
5. Explain how altitude affects Indian climate.
6. Explain how climate of a place is affected by distance from the sea.
7. Explain how climate of a place is affected by ocean current.
8. How wind affect climate of a place?

➤ **Long Questions:**

1. Explain weather of a place.
2. How does an elephant living in tropical rain forest adapt itself?
3. Write a short note on the characteristics of Beard ape?
4. How polar bear is adopted in the polar climatic condition.
5. What is the advantage of having a long sense of smell of polar bear?

✓ **Answer Key-**

➤ **Multiple Choice Answers:**

1. (a) Very hot and wet
2. (a) in the afternoon
3. (b) sand cools down faster
4. (b) climate chart
5. (d) all of these
6. (d) all of these

7. (b) the amount of water vapour in the air
8. (c) polar region
9. (b) Rajasthan
10. (b) They cannot swim
11. (c) desert regions
12. (a) climate
13. (a) polar region
14. (a) fatty tissue
15. (a) Pressure

➤ **Fill In the Blanks:**

1. trunk
2. polar
3. modified teeth
4. weather
5. tilted
6. trees

➤ **True or False:**

1. False
2. True
3. True
4. False
5. True
6. True

➤ **Very Short Answers:**

1. Answer: Temperature, humidity etc.
2. Answer: Humidity is the measure of the moisture in air.
3. Answer: Meteorological department of the government.
4. Answer: Rain gauge.
5. Answer: No
6. Answer: To measure weather temperature.
7. Answer: Winter



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8. Answer: Places that receive very little rainfall like desert regions.
9. Answer: North eastern part of India has wet climate.
10. Answer: India, Malaysia, Indonesia, Brazil etc.

➤ Short Answer:

1. Answer: Climate is the average weather conditions – temperature, pressure, precipitation and humidity – expected for a certain place. Climate is based on the average weather experienced over 30 years or more.
2. Answer: Temperature, air pressure, wind speed, humidity and rainfall are the essential elements determining weather of a place.
3. Answer: Meteorology is the science of monitoring and studying the atmosphere and predicting its weather and climate whereas Meteorologists are the People who study the weather and climate
4. Answer: Due to the curvature of the Earth, the amount of solar energy received is different according to the latitudes and thus it affects India's climatic condition.
5. Answer: As we go higher, temperature generally decreases (From equator to poles) as the atmosphere becomes less dense, and thus it affects India's climatic condition.
6. Answer: The sea has a moderating effect on the climate. As distance from sea increases, this effect decreases and places experience extreme weather conditions and thus it affects India's climatic condition.
7. Answer: Ocean currents affect the climate of the coastal areas with the onshore winds.
8. Answer: If the temperature of the wind is cold/hot coming from a particular place the place it should go to could have the opposite temperature of the place that the wind is coming from.

➤ Long Answer:

1. Answer: Weather describes the condition of the atmosphere. It might be sunny, hot, windy or cloudy, raining or snowing. The weather depends on the temperature, precipitation, humidity and atmospheric pressure of the part of atmosphere (air) closest to the surface of the earth. The weather is constantly changing as temperature and humidity change in the atmosphere.
2. Answer: It has adapted to the conditions of rainforests in many remarkable ways. It uses its trunk as a nose because of which it has a strong sense of smell. The trunk is also used by it for picking up food. Moreover, its tusks are modified teeth. These can tear the bark of trees that elephant loves to eat. So, the elephant is able to handle the competition for food rather well. Large ears of the elephant help it to hear even very soft sounds. They also help the elephant to keep cool in the hot and humid climate of the rainforest.
3. Answer: The lion-tailed macaque (also called Beard ape) lives in the rainforests of Western Ghats. Its most outstanding feature is the silver-white mane, which surrounds the head from

the cheeks down to its chin. It is a good climber and spends a major part of its life on the tree. It feeds mainly on fruits. It also eats seeds, young leaves, stems, flowers and buds. This beard ape also searches for insects under the bark of the trees. Since it is able to get sufficient food on the trees, it rarely comes down on the ground.

4. Answer: A polar bear has following adaptation features:

- They have white fur so that they are not easily visible in the snowy white background which helps it to protect them from their predators. It also helps them in catching their prey.
- They have two thick layers of fur to protect them from extreme cold.
- They also have layer of fat under their skin.
- The polar bear goes for swimming for physical activities on warm days necessary for cooling.
- Its paws are wide and large, which help it not only to swim well but also to walk with ease in the snow.
- Polar bears can remain under water for long durations.
- It has a strong sense of smell so that it can catch its prey for food.

5. Answer: The major types of animals living in the rainforests are monkeys, apes, gorillas, lions, tigers, elephants, leopards, lizards, snakes, birds and insects. The climatic conditions in rainforests are highly suitable for supporting an enormous number and variety of animals. As there is competition for food, some animals are adapted to get food, which is not easily reachable.



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