



INDIAN SCHOOL AL WADI AL KABIR



CLASS: VII	DEPARTMENT OF SCIENCE 2023-24	DATE: 16/01/2024
Worksheet No.:15	Topic: WEATHER, CLIMATE AND ADAPTATIONS OF ANIMALS TO CLIMATE	Note: A4 FILE FORMAT
NAME OF THE STUDENT:	CLASS & SEC:	ROLL NO:

EVERY SHORT ANSWER (1M):

1. The table shows the weather over four days in a week for a city. Find out the maximum and minimum temperature from the following.

	Maximum Temperature	Minimum Temperature	Humidity	Rainfall
DAY 1	33°C	27°C	65%	2mm
DAY 2	28°C	24°C	80%	6mm
DAY 3	30°C	22°C	70%	4mm
DAY 4	33 °C	27°C	55%	2mm

- a. 28°C and 24 °C
b. **33°C and 22°C**
c. 30°C and 27°C
d. 27°C and 24°C
2. Humidity refers to
a. **Amount of water vapour in the atmosphere**
b. Amount of ice crystals in the atmosphere
c. Amount of dust in the atmosphere
d. Amount of nitrogen in the atmosphere
3. Which of the following is not an element of weather?
a. Wind
b. Precipitation
c. Temperature
d. **Phase of moon**
4. The instrument used for measuring humidity is called
a. Barometer
b. Thermometer
c. **Hygrometer**
d. Calorimeter
5. The adjustment or changes in behavior, and structure of an organism to suit to an environment is called
a. **Adaptation**
b. Acclimatization
c. Habitat
d. None of these
6. Which of the following statements is correct about the poles?
a. **At poles, the daytime is of 6 months and night-time is also of 6 months.**

- b. At poles, the day is 12 hours and the night is 12 hours.
- c. At poles, the daytime is of 8 months and night-time is of 4 months.
- d. At poles, the day is 20 hours and the night is 4 hours.

For the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below-

- i) Both A and R are true and R is the correct explanation of the assertion.*
- ii) Both A and R are true but R is not the correct explanation of the assertion.*
- iii) A is true but R is false.*
- iv) A is false but R is true.*

7. **Assertion (A):** Penguins are good swimmers.

Reason (R): Penguins have webbed feet and streamlined body.

(i) Both A and R are true and R is the correct explanation of the assertion.

8. **Assertion (A):** A leaf insect looks like leaves and polar bears have white fur.

Reason (R): They use their bodies to attack enemies.

(iii) A is true but R is false.

9. **Assertion (A):** The lion-tailed macaque lives on trees in tropical rain forests.

Reason (R): Lion-tailed macaques have silver – white manes.

(ii) Both A and R are true but R is not the correct explanation of the assertion.

10. **Assertion(A):** The red-eyed frog has a sticky pad on its feet that helps it to climb on trees.

Reason(R): The red-eyed frog is an amphibian.

(iii) A is true but R is false.

II. SHORT ANSWER TYPE QUESTIONS (2 M):

1. What is adaptation? **[Hint special feature displayed by an organism to live and reproduce successfully in a particular environment is called adaptation.]**
2. a) What is hibernation? **[Hint-Certain animals go into a deep sleep during the extreme cold conditions. This is called hibernation]**
 b) Name some organisms which can hibernate. **[Hint-Bears/ Snakes/ Bats/ Skunks /Hedgehogs.]**
3. The polar bear has big paws. What might be the advantage of this? **[The wide and large paws of polar bears help them to swim and walk with ease in snow.]**
4. Some animals can match their surroundings. Name the property of such animals. **[The property of an animal to blend with its surroundings is called camouflage.]**
5. What do you mean by nocturnal animal? **[Hint-Animals that remain active during the night]**

and sleep during the day are called nocturnal animals, for example, Owls, Bats, Hedgehogs, and Foxes.]

III.SHORT ANSWER TYPE QUESTIONS (3 M):

1. What is blubber? What is its importance for polar bears? [**Hint-The thick layer of fat present under the skin of a polar bear is called blubber. It acts like an insulator and helps the animal to keep warm.**]
2. What do you understand by migration? [**Hint-Birds undergo seasonal journeys from colder to warmer places to cope with cold and shortage of food supply during winter months. This seasonal journey is called migration.**]
3. Which feature helps a penguin to block cold Antarctic water from reaching its skin? [**The penguin has thick layers of stiff and densely packed feathers that block the cold Antarctic waters from reaching its skin.**]
4. What is camouflage? How it is useful to animals? [**The colour and pattern on the bodies of certain animals blend with their surroundings. Such property is called camouflage. It protects them from their predators and also helps them in catching their prey. Example: Polar bears have white fur so that they are not easily visible in the snowy white background.**]
5. How is the lion-tailed macaque adapted to live on trees? [**Hint-Lion-tailed macaque is an arboreal animal and is adapted to grasp the branches with its long muscular tail and hold on to the branches with its hands and feet.**]
6. A Toucan has a long and sharp beak. How does this adaptation help the bird in its survival on trees? [**Hint-The Toucan has a big, strong and sharp beak to squash many kinds of nuts and berries found on trees. It also feeds on small birds and lizards using its beak and narrow leather-like tongue.**]

IV. LONG ANSWER TYPE QUESTIONS (5M):

1. An elephant has a long trunk and large ears. How do these adaptations help the elephant to live and survive in its habitat? [**Hint-Elephants have large ears with a keen sense of hearing. The large ears also help them to lose heat from the body, thus maintaining the body temperature. The elephant's upper lip is fused with the nose and is modified in the form of a long trunk, which is used for breathing, smelling, feeding, drinking, lifting load, grasping and defence.**]

V. CASE STUDY/PASSAGE-BASED QUESTIONS:

1. Science that deals with the study of weather is called Meteorology. Meteorologists record the weather every day. The records of the weather have been preserved for the past several decades. These help us to determine the weather pattern at a place. The average weather pattern taken over a long time, say 25 years, is called the climate of the place. If we find that the temperature at a place is high most of the time, then we say that the climate of that place is hot. If there is also heavy rainfall on most of the days in the same place, then we can say that the climate of that place is hot and wet. The mean temperature for a given month is found in two steps: first, we find the average of the temperatures recorded during the month. Second, we calculate the average of such average temperatures over many years.
 - a. Who are meteorologists? **[Hint- The scientist who prepares the weather reports is called a meteorologist and the science is called meteorology.]**
 - b. Define Climate. **[Hint- The average weather pattern taken over a long time, say 25 years, is called the climate of the place.]**
 - c. How would you say that the climate is hot and wet? **[Hint- If the climate of a place is hot and also there is heavy rainfall in the same place for a few days then we say that the climate of that place is hot and wet.]**

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