

Exercises

(A) Fill in the blanks :

1. Meteorology
2. Cyclone
3. deciduous
4. nocturnal
5. Polar
6. body colour

(B) Choose the correct option from each of the following :

1. The plants that belong to polar areas

Ans. both (i) and (iii)

2. Desert plants show

Ans. all the above

3. Camel, a desert animal

Ans. drinks large volumes of water at a time

4. One of the statements is correct regarding penguin :

Ans. both (ii) and (iii)

5. Layer of fat under the skin of polar bear is called

Ans. blubb 6. Winter sleep of the animals is known as

Ans. hibernation

(C) Define the following:

1. Nocturnal - Some animals and birds awake and active at night and asleep during the day.
2. Climate - The average weather condition over a long period of time.
3. Camouflage - The way in which on animals colour or shape matches it's surrounding.
4. Humidity - It is the concentration of water vapour present in the air.
5. Migration - The seasonal movement of a complete population of animals from one area to another.

(D) Distinguish between:

1. hibernation and aestivation

Ans. hibernation - The state of inactivity and a low metabolic process performed by the animals during the winters is known as hibernation.

. It is also known as winter sleep.

Aestivation- when animals take rest in shady and moist place during summer, it is called aestivation.

. It is also known as summer sleep.

2. equatorial regions and deserts

. The region around the equator is the equatorial regions.

. It is very hot ,& always wet because of rains.

Deserts region:

. A desert is an area with very little precipitation.

. It is very hot,& dry having very little or rain fall with very few plants and animals.

3. Weather and climate

. It is a condition in the atmosphere with regards to heat or cold, wind rain snow etc.

Climate - It is the weather patterns that are observed in a region over a long period of time.

4. Tropical region and polar region

. North and South of the equator is the tropical region.

. The average temperature decreases from the equator towards the poles and from plains to mountain tops.

Polar region :

. At the poles of the earth , called the polar regions ,the region is covered with snow for the entire year.

. Very few plants and animals are seen here.

(E) Answer in short :

1. What are epizoic plants ?

Ans. Epizoic organisms (such as plants and animals) are those that live non- parasitically on the surface of animals.

Examples of epizoic species include mosses, algae ,and fungi etc.

2. Why are penguins always found in groups?

Ans. They are always seen in group and remain huddled together. This keeps them warm and prevents the heat loss.

3. What is camouflage? How is it helpful to animals ?

Ans. Organisms use camouflage to mask their location identify and movement.

This allows prey to avoid predators and for predators to sneak up on prey.

4. Why are desert animals nocturnal?

Ans. In desert many animals are active at night because it is a good way to avoid the extreme day time temperatures.

5. Name any migratory birds and give the reason for it's migrations.

Ans. Arctic tern and siberian cranes to avoid unfavorable conditions.

(F) Answer in detail:

1. Explain the adaptations of polar bears that make them survive near poles.

Ans. The adaptations of polar bear are:

1. Polar bear is a warm blooded mammals and it can maintain it's body temperature by having to layers of thick fur that keeps the body warm even in extreme cold conditions.
2. It accumulates fat under the skin called blubber which acts as an insulator and checks the heat loss.
3. It is a swimmer. It's wide and large paws helps it to walk on the snow and to swim.
4. The fur is white in colour as of snow, which helps them to camouflage and escape from hunters.
5. Polar bears cannot migrate so they have to go into hibernation, by burying themselves in the snow.

(2) List the features of penguin that make them adapt in harsh winters.

Ans. Adaptations of penguin:

1. The penguins have a thick layer of densely packed white feathers that block the cold from affecting them.
2. They have a thick layer of fat under the skin which acts like an insulator to protect them from extreme cold.
3. They are good swimmers. The flippers and streamlined body help them in swimming.
4. They are always seen in groups and remain huddled together.
5. Their body parts like the head, wings and legs are short to avoid heat loss.

(3) what adaptations does camel show to survive in desert?

Ans. Adaptations of camel:

1. Camels can drink 200 liters of water at a time and store it in between its tissue. It can go without water for several days.
2. It stores its food in the form of fat in its hump.
3. Very few sweat glands help the animals to minimise the water loss.
4. Their dung contain very little water and they excrete concentrated urine to conserve body water.
5. The feet of the camel are wide with thick soles which help them to walk easily in the sandy soil.

(4) How are the body parts of elephant suited well for its survival?

Ans. Elephant is adapted to lead forest life:

1. The elephant uses its trunk to pick up food.
2. The tusks are used to uproot the plants with underground tubers.
3. Their large ears help in keen sense of hearing and also help them to lose heat and keep their body cool.
4. Their pillar like legs balance the bulky body and the padding under the foot easily even on an uneven surface.

HOTS:

Ans.(1) polar bear in the wild are confronted with numerous challenges which they don't face in zoos, including a rough climate lack of food rivals and diseases. These elements are lacking in a zoo.

Ans.(2) 'Today the weather is hot.'

Weather is the state of the atmosphere describing for example, the degree to which it is hot or cold wet or dry, clear or cloudy. It refers to day to day temperatures and precipitation activity.

