

# 1.The Living World- Adaptations and Classifications

Q.1) Find my match:

1. Lotus- Adapted to live in water.
2. Aloe- Adapted to live in deserts.
3. Cuscuta- Haustorial roots for absorption of food.
4. Venus flytrap- Flowers and leaves attract insects.

Q.2). Who is lying:

1. Cockroach- I have five legs.

Ans: Lying- I have six legs

2. Hen- My toes are webbed.

Ans: Lying- My toes are not webbed.

3. Cactus- My fleshy, green part is a leaf

Ans: Lying- My fleshy, green part is a stem.

Q.3) Answer the following:

1. Why is my skin white and thick and why is there a thick layer of fat underneath? (Penguin)

Ans: 1)Penguins live in polar region which is covered with snow(ice)

2)Penguins have thick skin to protect them from cold.

3)Due to white colour skin I can match the surroundings and protect themselves from the predators.

2. Why do we live in flocks sticking close to each other?

Ans: 1) Penguins are protected from predators when they stay in flocks.

2) By sticking to each other their body gets warmth.

3. Which geographical region do I inhabit? Why?

**Ans:** 1) Penguins stay in polar region.

2) There is plenty of food available therefore they are seen in polar region.

4. Which adaptations should you have to enable you to live permanently in the polar region? Why?

**Ans:** 1) The body should be adapted to cold temperature.

2) There should be a thick layer of skin to protect them from cold

**Q.4) Read each of the following statements. Write a paragraph about adaptation with reference to each statement.**

1. There is extreme heat in deserts.

**Ans:** 1) The living organisms residing in extreme heat of deserts show appropriate adaptation in their body structure and in life.

2) Camels have modified legs, eyes, nose and a hump.

3) Rats, snakes, spiders and lizards escape from the heat of the sun by remaining deep inside the burrows.

4) Plants have modified body structure.

2. Grasslands are lush green.

**Ans:** 1) In grasslands, there is plenty of water available.

2) The fibrous roots of grasses hold the soil and prevent soil erosion.

3) Due to sunlight and plenty of water the grasslands look lush green.

3. Insects are found in large numbers.

**Ans:** 1) Some insects can fly because they are light and they have two pair of wings to fly.

2) Some insects are aquatic and stay near water bodies.

3) Some insects are found in deserts.

4) Chameleon can change the colour with the environment to protect themselves from the predators and they can also reproduce in large numbers.

4. We hide.

**Ans:** 1) To protect from predators.

2) Some of them hide for catching prey.

3) Chameleon can change colour rapidly and become unnoticeable.

5. We have long ears.

**Ans:** 1) Long ears are seen in herbivores animals, they have to be alert from the attack of predators.

2) They can move their ears so that they can receive sounds from long distance and locate their approaching prey.

Q.5) **Answer the following:**

1. Why is the camel called the 'ship of the desert'?

**Ans:** 1) The skin of the camel is thick.

2) The legs are long with cushioned soles.

3) There is a fold of skin for protection of nostrils.

4) The eyelashes are long and thick to protect the eyes.

5) Fat is stored in the hump so that it can survive without water for a long time.

6) It is used as a means of transport in the deserts.

2. How can the plants like cactus and acacia live in the deserts with scarce water?

**Ans:** 1) Cactus and acacia are desert plants. They show adaptations to survive in scarcity of water.

2) Cactus leaves are modified into thorns so that water is not lost due to evaporation.

3) The stem does the function of photosynthesis so they turn fleshy and green.

4) There is a thick layer of waxy substance on the stems.

5) Roots go deep into the soil in search of water.

3. What is the inter-relationship between adaptations of organisms and their surroundings?

**Ans:** 1) Adaptation are the changes that take place in the structure and the function of the body.

2) This modification helps the organisms to live, feed, reproduce and create new generation.

3) They also help for protection against the predators.

4. How are organisms classified?

**Ans:** 1) Animals and plants are classified according to their characteristics.

2) Based on similarities and differences the organisms are classified in groups and sub groups.

3) A hierarchy is formed depending upon these features.

Q.6) **Diagrams:**