INDIAN SCHOOL AL WADI AL KABIR		
Class: VI	**DEPARTMENT: SCIENCE 2023-24**	**DATE: 22-01-2024**
WORKSHEET NO: 15 WITH ANSWERS	**TOPIC: THE LIVING ORGANISMS: CHARACTERISTICS AND HABITATS/LIVING ORGANISMS AND THEIR SURROUNDINGS**	**NOTE: A4 FILE FORMAT**
NAME OF THE STUDENT:	**CLASS & SEC:**	**ROLL NO.**

I. OBJECTIVE-TYPE QUESTIONS

1. Which among the following features helps snow leopards to adapt to live in an extremely cold climate?

a) thick fur on its body, including feet and toes.
b) long ears, blunt claws, thin skin, paws.
c) white body, paws for swimming, gills for respiration.
d) thin skin, large eyes, and white fur.

2. The image shows a plant before and after it was left near a sunny window unattended for a few weeks. What can be concluded based on the observation?

a) Plants can absorb water from the atmosphere.
b) The presence of water makes the leaf green.
c) Plants grow stronger in the absence of water.
d) Water is essential for plants to survive.

3. When a person from the plains visits the mountains for the first time, he experiences shortness of breath. This changes over the next few days as the person gets adapted. What happens in this process of adaptation?

a) The body undergoes an allergic reaction which later subsides.
b) The body adjusts its breathing according to the air of the new habitat.
c)The person gets used to the different flora and fauna of the mountain habitat.
d)The person feels homesick but later gets used to being away from home.

4. In an aquatic habitat, fish have streamlined bodies and respire underwater through their gills. However, mammals such as dolphins and whales also live in such habitats, but they do not have gills. How can they survive in aquatic habitats alongside fish?

a) They respire through their skin.
b) They absorb the gases dissolved in the water they consume.

c) They absorb gases through the membranes present in their fins.
d) They hold their breath underwater and come up to breathe air.

5. A child has trouble understanding that all plants are living organisms, just like humans. Since they cannot move around like humans, other animals, birds and fish, what can be told to the child, that would make him consider that plants are also living things, like humans?

a) Plants can absorb water from the soil.
b) Plants are present in large numbers and variety.
c) Plants can reproduce and create other young plants.
d) Plants are found in both, terrestrial and aquatic habitats.

6. Following are some features of plants. Which of the combination of the features is typical of desert plants?

i. They lose a lot of water through transpiration.
ii. Their leaves are always broad and flat.
iii. They lose very little water through transpiration.
iv. Their roots grow very deep into the soil.

a) i and ii b) ii and iv c) ii and iii **d) iii and iv**

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): The process of getting rid of waste materials by living organisms is known as excretion.
Reason (R): Some plants remove waste products as secretions.
ii) Both A and R are true but R is not the correct explanation of the assertion.

8. Assertion (A): The habitat provides food, water, air, shelter and other needs to organisms.
Reason (R): Several kinds of plants and animals live in the same habitat.
ii) Both A and R are true but R is not the correct explanation of the assertion.

9. Assertion (A): Living things produce more of their kind through reproduction.
Reason (R): It takes place in the same way in all living organisms.
iii) A is true but R is false.

10. Assertion (A): Respiration is necessary for all living organisms.
Reason (R): It is through respiration that the body finally obtains energy from the food it takes.
i) Both A and R are true and R is the correct explanation of the assertion.

II. SHORT ANSWER TYPE QUESTIONS (2M):

1. Define the lifespan of an organism.

   [Hint: The time period for which living things remain alive is called its life span.]

2. Like many living organisms, a car also moves. Yet it cannot be considered to be a living organism. Give two reasons.

   [Hint: Living Organisms can move on their own, whereas a car moves by burning fuels like petrol and diesel. Cars do not show other characteristics of living organisms such as respiration, growth, excretion, reproduction, etc.]

3. Define stimulus. Give an example of the response of a plant towards changes in its surroundings.

   [Hint: Changes in our surroundings that make us respond to them are called stimuli.

   In Touch-me-not plant, leaves close or fold when someone touches them.]

4. How is adaptation beneficial to living organisms?

   [Hint: The specific features and habits enable the organisms to survive successfully in a particular habitat.]

5. Why are leaves in desert plants reduced to spines?

   [Hint: The leaves are reduced to spines to minimise loss of water through transpiration.]

III. SHORT ANSWER TYPE QUESTIONS: (3M)

1. What is acclimatisation? How is it different from adaptation?

   [Hint: Acclimatisation is the occurrence of small changes in the body of an organism over short periods, to adjust to changes in the surroundings, whereas adaptation is the presence of specific features and habits in organisms that take place over thousands of years which enable the organisms to live in a particular habitat.]

2. Differentiate terrestrial and aquatic habitats.

   [Hint: Plants and Animals that grow on land are said to live in terrestrial habitats. Forests, grasslands, deserts and mountain regions are some examples of terrestrial habitats. Plants and Animals that grow in water are said to live in aquatic habitats. Oceans, ponds and lakes are examples of aquatic habitat.]

3. How are desert plants adapted to their surroundings?

   [Hint: i) Leaves are absent/reduced or modified into spines to reduce water loss by transpiration.
   ii) Stem is green and performs photosynthesis.
   iii) Stem stores water, so it is thick and fleshy.
   iv) Deep root system to collect maximum water from deep soil.
   v) A thick waxy layer on the stem prevents water loss.]

4. What kind of movement do we see in plants?

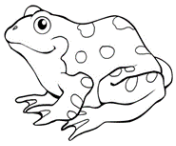
   [Hint: Plants are generally anchored in soil, so they do not move from one place to

another. But as living things, plants too exhibit some kind of movement.
i) Opening and closing of flowers.
ii) Growth of stem and leaves.
iii) Movement of water, minerals and food from one part of the plant to another.]

5. How do aquatic animals use the oxygen dissolved in water?
[Hint: Most aquatic animals have gills that help them use oxygen dissolved in water. Whales and dolphins have blowholes located on the upper part of their head which allows them to breathe when they come near the water surface. They can stay in water without breathing for a long time.]

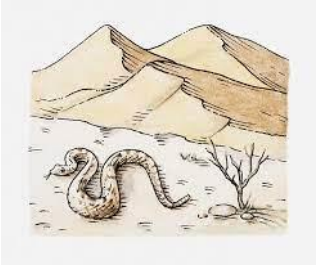
IV. LONG ANSWER TYPE QUESTIONS. (5M)

1. Identify the habitat of the animals given below and mention one adaptation each.

i) 

ii) 

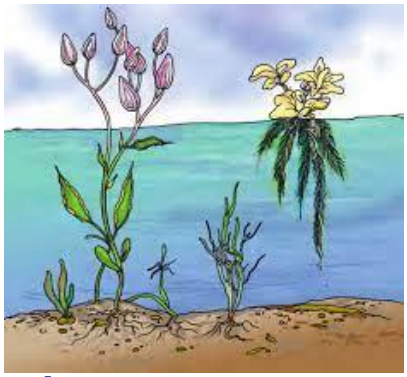
iii) 

iv) 

v) 

[Hint: i) Frogs live in Pond and Terrestrial habitats – They have webbed feet to help them swim in water. They have strong back legs that help them in leaping and catching their prey.
ii) Yaks are found in Mountain habitats – They have long hair to keep them warm.
iii) Squids live in Ocean habitat – They have gills to help them use oxygen dissolved in water.
iv) Desert snakes are found in Desert habitat - They stay in burrows deep in the sand to escape from the intense heat during the day.
v) Mountain goats are found in Mountain habitat – They have strong hooves to climb the rocky slopes of the mountains.]

2. Mention the major adaptations in different kinds of aquatic plants.



[Hint: A. FLOATING PLANTS

i) Stems have air spaces to enable the plant to float.

ii) They have waxy upper surfaces that make them waterproof.

iii) They have stomata on the upper surfaces which are exposed to air. E.g., water lettuce and water hyacinth.

B.PARTLY SUBMERGED PLANTS

i) The roots are fixed in the soil below water, at the bottom of the pond.

ii) Stems are long, hollow and light.

iii) The stems grow up to the surface of the water, while the leaves and flowers float on the surface of the water. E.g., water lily and lotus.

C.TOTALLY SUBMERGED PLANTS

i) The roots of these plants are fixed in the soil below water.

ii)These plants have narrow and ribbon-like leaves.

iii) In some plants, leaves are highly divided through which water can easily flow without damaging them. E.g., Hydrilla and Vallisneria.]

V. SOURCE-BASED/ CASE STUDY-BASED QUESTIONS

1. Read the given passage and answer the following questions.

A lion lives in a forest or grassland and is a strong animal that can hunt and kill animals like deer. It is light brown. Lions have long claws in their front legs that can be withdrawn inside the toes. The eyes in front of the face allow it to have a correct idea about the location of its prey. The deer needs to know about the presence of predators to run away from them and not become their prey. It has long ears to hear the movement of predators. The eyes on the side of its head allow it to look in all directions for danger. The speed of the deer helps them to run away from the predators. It has strong teeth for chewing hard plant stems in the forest.

i. Features of a lion in a grassland help it to survive. How?

[Hint: The light brown colour helps the lion to hide in dry grasslands when it hunts. The eyes in the front of the face allow it to have the correct location of the prey.]

ii. Define predator and prey.

[Hint: The animals which hunt other animals for their food are called predators. The animals which are hunted by predators for their food are called prey.]

iii. Speed is very important for the survival of animals like deer in a grassland habitat. Give reason.

[Hint: It helps them to run away from predators like lions.]

PREPARED BY Ms NEENA ALEX	CHECKED BY HoD SCIENCE