



# BIOLOGY

## BOOKS - ICSE

### ADAPTATION

**Check Your Progress Answer The Following Questions**

**1. Define habitat.**



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2. What are hydrophytes?



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3. Name the terms used for

a. aquatic plants and

b. desert plants.



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4. Give any two examples of free-floating hydrophytes.



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5. Give any two examples of mesophytes.



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6. What is the habitat of a cactus plant?



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## Check Your Progress Answer These Questions

1. What are the respiratory organs in aquatic animals?



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2. Which types of bones are present in birds?



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3. What is the function of the tail fin of a fish?



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## Exercises Tick The Most Appropriate Answer

1. Air cavities are commonly found in these plants.

A. xerophytes

B. mesophytes

C. hydrophytes

D. none of the above

**Answer:**



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2. Which of the following features is seen in aquatic plants?

A. thick cuticle

B. well-developed root system

C. sunken stomata

D. aerenchyma tissue

**Answer:**



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**3. Roots and stems show optimum development in**

A. hydrophytes.

B. mesophytes.

C. xerophytes.

D. halophytes.

**Answer:**



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**4.** In xerophytes,

A. leaf surface is covered with thick cuticle.

B. both leaves and stems have a thick waxy coating.



C. stem surface is covered with thick cuticle.

D. none of the above

**Answer:**



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**5. Bones are without bone marrow in**

A. birds.

B. camel.

C. fish.

D. frog.

**Answer:**



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**6. Animals that live on land have**

A. pentadactyl (five digits) claws.

B. streamlined body.

C. forelimbs modified into wings.

D. gills for breathing.

**Answer:**



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7. The hump at the back of a camel contains

A. carbohydrates.

B. proteins.

C. fats.

D. minerals.

**Answer:**



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## Exercises Fill In The Blanks

1. The body of \_\_\_\_\_ are adapted to conserve water and to absorb maximum water available in the soil.



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2. The trees growing in the mountains are \_\_\_\_\_ with sloping branches.



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3. Some fish have \_\_\_\_\_ to help in buoyancy.



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4. Animals that live on land show \_\_\_\_\_ locomotion.



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5. \_\_\_\_\_ are present in birds to provide additional strength during flight.



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## Exercises True Or False

1. The habitat of an organism consists of both biotic and abiotic components.



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2. The ability of an organism to change for better adjustment with the environment is



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3. Adaptation includes changes only in the body structure of an animal.



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4. The desert plants that are adapted to cope with a dry and hot environment are called xerophytes.



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5. The body of mountain goat is covered with thick fur or thick skin to protect it from the cold.



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## Exercises Differentiate Between

1. Differentiate between hydrophytes and mesophytes.



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2. aquatic animals and aerial animals.



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3. plants growing in mountains and plants growing in desert.



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## Exercises Answer The Following In Short

1. Give one example of submerged and rooted hydrophytes.



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2. Write an adaptation in xerophytes.



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3. Which animal is called the ship of the desert? Why?



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4. What are aerial animals?



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5. How is the streamlined body of a bird helpful?



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## Exercises Answer The Following In Detail

1. Define hydrophytes, mesophytes and xerophytes.



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2. Name the different types of hydrophytes.

Give one example of each.



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3. List down adaptations in reference to

leaves

mechanical and conducting tissue

roots and stem in mesophytes



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4. How is the body of a fish adapted to live in water?



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5. Write about adaptations in plants growing in the mountains.



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**Exercises Group The Plants Under The Correct Column**

# 1. Fill the following options in correct column

water hyacinth    duckweed    *Utricularia*    *Typha*    gulmohar  
mustard    rosewood    *Acacia*    cactus    *Opuntia*

Hydrophytes	Mesophytes	Xerophytes

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## Think And Answer

1. The submerged leaves of aquatic plants are thin and ribbon-like. Why?

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2. The leaves of aquatic plants have a waxy coating. Why?



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3. State True or False.

The leaves of Opuntia are modified into spines.



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4. Stomata sunken in the substomatal cavities are called Sunken stomata which occur in



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5. The body of aquatic animals is streamlined.

Why?



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[Test Yourself Multiple Choice Questions](#)

1. Which of the following is not a habitat

- A. Plants in a forest
- B. Fish in the lake
- C. Chairs in a classroom
- D. Frog in water and on land

**Answer:**



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2. Hydrilla is a \_\_\_\_\_ aquatic plant.

A. Submerged

B. floating

C. free-floating

D. any of the above

**Answer:**



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**3.** Which of the following is a floating aquatic plant.

A. hydrilla

B. water lily

C. cactus

D. none of these

**Answer:**



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4. If tree are cone-shaped and have slopping branches, what does it indicate about the habitat in which the tree is found?

- A. Desert habitat
- B. Very cold habitat
- C. Mountain habitat
- D. Aquatic habitat

**Answer:**



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**5. Which feature helps birds to fly in air?**

- A. Presence of oil glands

B. Presence of wings and feathers

C.

D. All the above

**Answer:**



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**Test Yourself**

1. Select the odd one out, giving reason:

Cactus, agave, Acacia, Hydrilla



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2. Select the odd one out, giving reason:

Opuntia, pine, juniper, fir



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## Test Yourself Fill In The Blanks

1. The presence of special features which enable an organisms to live in a particular

habitat is called\_\_\_\_\_.



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2. Organisms living on land are called\_\_\_\_\_.



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3. Amphibious organisms are found in both\_\_\_\_\_and\_\_\_\_\_.



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4. Aquatic habitat refers to organisms found in \_\_\_\_\_.



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**Test Yourself Answer The Following Questions**

1. Define habitat.



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2. Define the term

Adaptation



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3. Why in floating aquatic plants. Stem is thin and flexible?



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4. Leaves in hydrilla are long and thin. Why?



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5. How water loss is prevented in desert plants?



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6. what are the adaptations found in a desert animal like camel?



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7. Name the adaptations found in penguins and polar bears,



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8. Name the adaptations found in trees found in mountain regions



**Watch Video Solution**

**9.** Name the adaptations found in  
aerial plants



**Watch Video Solution**

**10.** Name the adaptations found in  
birds



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**Theme Assignment**

1. Match the items in column A with those in

Column B :

**Column A**

1. Xerophytes
2. Habitat
3. Terrestrial habitat
4. Streamlined body
5. Webbed feet

**Column B**

- (a) Fish
- (b) Frog
- (c) Desert plants
- (d) Place of living of organisms
- (e) Plants that live on land



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2. Try to identify the following photographs/figures, and

Give the habitats of organisms shown:

1.



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3. Try to identify the following photographs/figures, and

Give the habitats of organisms shown:



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4. Try to identify the following photographs/figures, and

Give the habitats of organisms shown:



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5. Try to identify the following photographs/figures, and



Give the habitats of organisms shown:



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**Watch Video Solution**

6. Try to identify the following photographs/figures, and

Give the habitats of organisms shown:



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7. Explain how the following are adapted to survive in their habitat:

Fish



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8. Explain how the following are adapted to survive in their habitat:

Pine tree



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**9.** Explain how the following are adapted to survive in their habitat:

Desert plant



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**10.** Explain how the following are adapted to survive in their habitat:

Water lily



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