Very Short Answer Questions

Q.1. Using the following words, write the habitat of each animal given in the figures (a) to (d).

Grassland, Mountain, Desert, Pond, River

a. 

b. 

c. 

d. 

[*NCERT Exemplar*]

Ans.

a. Grassland
b. Pond
c. Mountain
d. Desert

Q.2. Classify the following habitats into terrestrial and aquatic types.

Grassland, Pond, Ocean, Rice field [*NCERT Exemplar*]

Ans. Terrestrial habitats – grassland, rice field

Aquatic habitats – pond, ocean

Q.3. Why is reproduction important for organisms? [*NCERT Exemplar*]

Ans. Reproduction leads to the production of more individuals of an organism.

Q.4. Explain the term ‘respiration’.

Ans. The process of breathing in oxygen and breathing out carbon dioxide accompanied with oxidation of food and energy release is termed as respiration.

Q.5. Name any two plants which can reproduce through cuttings.

Ans. Rose and cactus.

Q.6. Define reproduction.

Ans. The process of production of new individuals of their own kind is termed as reproduction.

Q.7. What do you mean by excretion?

Ans. The process of removal of unwanted substances from the body in called as excretion.

Short Answer Questions

Q.1. Paheli has a rose plant in her garden. How can she increase the number of rose plants in the garden? [*NCERT Exemplar*]

Ans. She can increase the number of rose plants in the garden by planting stem-cutting of the rose plant which grows into a new rose plant.

Q.2. Why do desert snakes burrow deep into the sand during the day? *[NCERT Exemplar*]

Ans. As the deeper layers of sand are cooler, they burrow deep into the sand to stay away from heat of the desert during day time.

Q.3. Write the adaptation in aquatic plants due to which. [*NCERT Exemplar*]

(i) submerged leaves can bend in the flowing water

Ans. Leaves are narrow and ribbon-like.

(ii) leaves can float on the surface of water.

Ans. Stems/stalks of leaves are long, hollow and light.

Q.4. Mention one adaptation present in the following animals:

(i) In camels to keep their bodies away from the heat of sand.

Ans. Long legs

(ii) In frogs to enable them to swim.

Ans. Webbed feet

(iii) In dolphins and whales to breathe in air when they swim near the surface of water. [*NCERT Exemplar*]

Ans. Blowholes

Q.5. Some desert plants have very small leaves whereas some others have only spines. How does this benefit the plants? [*NCERT Exemplar*]

Ans. These are adaptations to dry conditions. As a result of these modifications the surface of lamina is reduced thereby reducing water loss by transpiration.

Q.6. What are the specific features present in a deer that helps it to detect the presence of predators like lion? [*NCERT Exemplar*]

Ans.

i. Long ears to hear movement of predators.
ii. Eyes on the sides of its head which allow it to look in all directions.

Q.7. Read the features of plants given below:

Choose the type of plant for every feature given in (a), (b), (c), (d), (e) and (f) from the list given below:

Aquatic plant, Desert plant, Mountainous plant [*NCERT Exemplar*]

(i) Thick waxy stem

Ans. Desert plant

(ii) Short roots

Ans. Aquatic plant

(iii) Cone shaped plant

Ans. Mountainous plant

(iv) Sloping branches

Ans. Sloping branches

(v) Small or spine-like leaves

Ans. Desert plant

(vi) Hollow stem

Ans. Aquatic plant

Q.8. How is a fish adapted to live in water?

Ans. They have streamlined body to move easily in water and have gills to breathe and fins to move.

Q.9. Why do submerged aquatic plants have narrow, thin, ribbon-like leaves?

Ans. This adaptation is to provide less resistance to the flowing water.

Q.10. How does a squid move in water?

Ans. Squids do not have streamlined body but when they move in water, they make their body streamlined.

Q.11. How is a lion adapted to live in the grassland?

Ans. The light brown colour of the lion helps it to hide in dry grasslands.

Q.12. How is the balance of carbon dioxide and oxygen maintained in nature?

Ans. Animals respire by taking in oxygen and giving out carbon dioxide and the plants take in this carbon dioxide to give out oxygen. Thus, balance is maintained in nature.

Long Answer Questions

Q.1. Like many animals although a car also moves but it is not considered as a living organism. Give 2-3 reasons. [*NCERT Exemplar*]

Ans.

i. Living organisms move on their own while car moves by the burning of fuels like diesel and petrol.
ii. Car does not show any other living characteristics like respiration, digestion, reproduction, growth.

Q.2. What are the adaptive features of a lion that help it in hunting? [*NCERT Exemplar*]

Ans.

i. Brown body colour helps it to hide in dry land avoiding detection by its prey.
ii. Eyes placed in front allow it to know the exact location and movements of its prey.
iii. Powerful paws and long claws help it to catch and kill the prey.

Q.3. Distinguish between the following.

(i) Living things and Non-living things (Growth, Reproduction, Respiration, Excretion)

Ans.

	Living things	**Non-living things**
Growth	They grow.	They do not grow.
Reproduction	They produce offsprings.	They do not reproduce.
Respiration	They respire.	They do not respire.
Excretion	They excrete wastes.	They do not excrete.

(ii) Biotic components and Abiotic components

Ans.

S. No.	**Biotic components**	**Abiotic components**

(i) (ii)	These are the living organisms in an area. For example, animals and plants present in an area.	These are non-living things in an area. For example, rainfall and temperature in an area.

(iii) Adaptation and Acclimatisation

Ans.

Adaptation	Acclimatisation
The changes made by an individual by which it adjusts to varying conditions.	The small changes that take place in the body of an individual due to changes in the surrounding.

(iv) Predator and Prey

Ans.

S. No.	Predator	Prey
(i) (ii)	They kill other animals for food. For example, lion.	They are killed by other animals for food. For example, deer.

HOTS (Higher Order Thinking Skills)

Q.1. Why does a fish die when kept outside of water?

Ans. Fishes breathe through gills which take up oxygen dissolved in water. When kept out of the water, they are not able to respire due to difference in pressure. Hence, they die.

Q.2. Explain why many mountian trees are cone-shaped having sloping branches.

Ans. This is due to prevention of branches and leaves from damaging by rain water and snow. Due to sloping branches rain water and snow slides off easily.