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NEW ERA PUBLIC SCHOOL, RAJBAGH

SUBJECT :- SCIENCE

Session :- (2021-22)

CLASS :- 4th

Solved Assignment of Unit-IInd

Topic :- Adaptation in plants Lesson no :- 04

Answer The Following Questions In Short

Q1 Name the two main types of plant habitats.

Ans The two main types of plant habitats are the terrestrial habitat and the Aquatic habitat.

Q2 Why are the trees growing in hills canopy shaped?

Ans The trees growing in hills are canopy shaped so that snow cannot accumulate on them during snowfall.

Q3 How do insectivorous plants attract insects?

Ans Insectivorous plants produce nectar and scent to attract their prey.

Q4 In what ways do non-green plants obtain nutrition?



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Ans Non-green plants obtain nutrition from the dead and decaying bodies of plants and animals.

Q5 Name some poisonous plants.

Ans Poison ivy, Foxglove and castor are some poisonous plants.

Answer The Following Questions In Detail.

Q1 Write about the adaptation in the plants growing in hills and mountains.

Ans Plants growing in hills and mountains are tall, straight and have sloping shape to make the snow fall off easily. The thick bark of stem and presence of seeds inside cones are adaptations to protect from the extreme cold. The evergreen nature of the trees helps them to prepare food throughout the year.

Q2 How are desert plants adapted to withstand the extremely hot and dry weather.

Ans Desert plants have long root systems, waxy coating, small leaves like spines to store water. The thick



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fleshy green stem carry out photosynthesis. These adaptation helps them to withstand hot and dry weather.

Q3 Explain the three types of aquatic plants. Give two examples of each.

Ans The Following are the three types of aquatic plants.

1. Floating plants:- They grow on the surface of water. Their bodies are like a sponge and have empty spaces filled with air. This makes the plants light enough to float. Duckweed and water hyacinth are the two examples of floating plants.

2. Fixed plants:- They have their roots fixed to the soil of the pond while their plate-like leaves float on the surface. The stems are hollow, light and flexible to withstand the water current. Lotus and water lily are examples of fixed aquatic plants.

3. Submerged plants:- They live underwater. They have narrow thin leaves with no stomata. They breathe through their body surface. The stems are flexible and have air spaces. Hydrilla and tape-grass are the two examples of submerged



plants.

Q4 What are the modifications in Venus flytrap and Pitcher plant to trap insects?

Ans In Venus fly trap, the leaves are modified into hinged traps. When an insect sits on the leaf, the trap closes and the trapped insect is then digested.

In pitcher plant, the leaves are modified into a deep vessel-like structure with a lid on top. Insects that fall into the container are trapped and digested.

Q5 Describe plant adaptations for defence from enemies.

Ans To protect themselves from being eaten by predators, some plants have sharp spines or thorns, while others have leaves that sting or are bitter to taste. Some plants close their leaves and droop down when touched and look dead.

'Book Exercise'

(A) Write 'T' for True and 'F' for False
Statements

Answers



Date _____

Page _____

1, J 2, J 3, J 4, J 5, J 6, J ^{Pg. 5}

7, J

(B) Fill In The Blanks.

Answers

1, deciduous 2, Sloping 3, Waxy 4, Coastal
5, Lotus 6, flat and ribbon like 7, hinged traps

(C) Match The Following.

Answers

1. C. Gulmohar
2. e. Sal
3. b. Cones
4. a. Aerial roots
5. d. Carnivores

Define The Following Terms.

1, Habitat:- A place where an organism makes its home.

2, Adaptation:- The process of change by which an organism becomes better suited to its environment.

3, Succulent plants:- Plants that store water in their swollen, fleshy parts.



4. Breathing roots:- The roots that grow above the soil to absorb air from the atmosphere is called breathing roots.

5. Parasitic plants:- Plants that derive nutrition from other plants.

Topic :- ANIMAL REPRODUCTION

Lesson no. :- 05

Answer The Following questions In Short.

Q1 How does a hen take care of its eggs?

Ans ~~THE~~ hen sits on the eggs and keeps them warm to provide the embryo the right temperature to develop.

Q2 Name the insects which undergo complete metamorphosis.

Ans Insects like butterfly, ant, mosquito and housefly undergo complete metamorphosis.

Q3 What is the difference between a tadpole and a frog?

Ans A tadpole has a tail and uses



gills for breathing in water whereas a frog is tailless and has lungs for breathing on land.

Q4 What are reptiles?

Ans Reptiles are a class of animals having very tough outer skin made up of scales or plates.

Q5 How do aquatic mammals breathe?

Ans Aquatic mammals breathe through their lungs. They have a blowhole on their head to help in the passage of air.

Answer The Following Questions In Detail:

Q1 Describe the structure of an egg with the help of a well labelled diagram.

Ans An egg consists of a hard protective outer covering called a shell. Within the shell is present a white & jelly like substance rich in protein called albumen. A round yellow liquid called yolk which is rich in fats is present within the albumen. The developing baby called the embryo grows within the yolk. The yolk contains food for the growing embryo.



Q2 Explain the life cycle of insects which undergo incomplete metamorphosis.

Ans The life cycle of insects that undergo incomplete metamorphosis takes place in three stages: egg, nymph and adult. The egg hatches to release a nymph which looks similar to a grown insect except that it does not have wings. It sheds its skin several times and changes into an adult.

Q3 Explain the life-cycle of a butterfly.

Ans The life-cycle of a butterfly goes through four stages before becoming an adult. The female butterfly lays eggs on the underside of a leaf. The eggs hatch and caterpillars rise from the egg. They then grow large by feeding on leaves and build a protective shell called Cocoon around themselves. This stage is known as pupa. Inside the shell, the caterpillar slowly change shape and an adult butterfly emerges.

Q4 Mention the major characteristics of mammals.

Ans Some of the major characteristics

are:

1. They have hair on skin for keeping their body warm.
2. They are warm-blooded animals.
3. They breathe through their lungs.

Define The Following TERMS.

1. Reproduction: It is the process of giving birth to young ones.
2. Moulting: The shedding of old skin is called moulting.
3. Metamorphosis: Process in which the body structure of developmental stages of an insect is different from the mature stage.
4. Oviparity: They are the animals that lay eggs.

Book Exercise

(A) Write 'T' for True and 'F' for False statements.

Answers

1. T 2. F 3. F 4. F 5. F



(B) Fill In The Blanks.

Answers

- 1, offsprings 2, Yolk 3, Cocoon 4, Spiny-anteater.

(C) Match The Following

1. d. Incubation
2. b. Insects
3. a. Gills
4. c. Viviparous

Topic:- The World of Animals
Lesson no :- 06

Answer The Following Questions In Short.

Q1 What is the purpose of backbone in vertebrate animals?

Ans The backbone helps in keeping the body upright and also protects the spinal cord.

Q2 Name the reptile which has no legs.

Ans Snake is the reptile which has no legs.



Q3 Name the groups into which animals can be classified on the basis of their habitat.

Ans On the basis of their habitat animals can be classified into terrestrial, aquatic, aerial, arboreal and amphibians.

Q4 What modification do arboreal animals have to live on trees?

Ans Their limbs are modified into feet with claws to climb upon the trees with a firm grip.

Q5 What are Scavengers?

Ans Scavengers are the animals which feed on the flesh of dead bodies of animals.

Q6 Mention two major causes of habitat destruction of animals.

Ans Deforestation and climate change are the two major causes of habitat destruction of animals.

Answer The Following Questions In Detail.

Q1 Differentiate between vertebrates and invertebrates.

Ans Vertebrates

- 1, They are the animals that have a backbone.
- 2, They have an internal skeleton
- 3, Examples of Vertebrates are humans, birds, snakes etc.

Invertebrates

- 2, They are the animals that do not have a backbone.
- 2, They have no internal skeleton.
- 3, Examples of Invertebrates are insects, roundworms, Jellyfish etc.

Q2 Write a short note on herbivores.

Ans Animals that eat plants are called herbivores. Their jaw is modified with sharp-edged teeth to cut grass and leaves. Their molars are broad and strong to chew and grind their food. cows, horses, goats and deer are herbivores.

Q3 Explain the parasitic mode of nutrition

Ans Parasites like mosquitoes, leech and lice live on the body surface of the host and suck blood with their modified mouth. Tapeworm and flukes are the parasites which live inside the digestive system of the animals.

Q4 Explain the different ways in which

animals protect themselves?

Ans The Following are the different ways in which animals protect themselves.

- 1, Some animals merge with their surroundings to hide from the predators.
- 2, Some animals have spines or shells on their bodies to protect themselves.
- 3, Some animals are also capable of producing toxins for defence.

Define The Following Terms.

- 1, Migration: Seasonal movement of animals from one region to another.
- 2, Omnivores: Animals that eat both plants and animals
- 3, Mimicry: The action of imitating or copying someone in terms of sound, appearance, smell, behaviour to protect itself or in order to entertain.
- 4, Extinction: Extinction is when all the members of species die out

'Book Exercise'



(A) Write 'T' for True and 'F' for False Pg. 14
statements

Answers

- 1, T 2, F 3, F 4, F 5, F 6, T 7, T
8, T

(B) Fill In The Blanks.

Answers

- 1, Spinal cord 2, long sleep 3, hollow
4, Insects 5, gills 6, Dodo bird 7, defence
8, burrows

(C) Match the Following.

Answers

1. e. Crocodile
2. d. octopus
3. f. Scales
4. b. Beaks
5. a. Bat
6. c. Hyena

PRACTICE THE CHAPTER WISE DIAGRAM
OF THE FOLLOWING



1. Terrestrial plants (Any two) — Page no. 37, 38
 2. Aquatic plants (Any two) — Page no. 39, 40
 3. Non-green plants (Any two) — Page no. 41
 4. Structure of an egg — Page no. 47
 5. Life-cycle of a butterfly — Page no. 49
 6. Life-cycle of a frog — Page no. 50
 7. Skeleton of any three types of vertebrates — Page no. 54
 8. Invertebrates (Any two) — Page no. 56
 9. Terrestrial animals (Any two) — Page no. 57
 10. Aquatic animals (Any two) — Page no. 57
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