



INDIAN SCHOOL AL WADI AL KABIR



Class: VIII	Department: SCIENCE 2022 - 23	Date of submission: 10/08/2022
Worksheet No. 5 with answers	Topic: CONSERVATION OF PLANTS AND ANIMALS	Note: A4 FILE FORMAT
NAME OF THE STUDENT	CLASS & SEC:	ROLL NO.

I. VERY SHORT ANSWER (1M):

1) What is the purpose of biosphere reserve?

[The biosphere reserves help to maintain the biodiversity and culture of that area. A biosphere reserve may also contain other protected areas in it.]

2) Protected forests are also not completely safe for wild animals. Why? [Protected forests are not safe because people living in the neighbourhood encroach upon them and destroy them]

3) Define national park. [A national park is an area reserved for wildlife where they can freely use the habitats and natural resources.]

4) What are flora? [The plant species found in a particular area are called flora. Sal, teak, mango, jamun, silver ferns, etc.]

5) What are fauna? [The animal species found in a particular area are called fauna. Chinkara, blue-bull, barking deer, cheetah, leopard, wild dog, wolf, etc.]

6) What do you mean by species? [Species is a group of population which are capable of interbreeding.]

7) What is the purpose of making national parks, wildlife sanctuaries and biosphere reserves?

[The purpose of making national parks, wildlife sanctuaries and biosphere reserves is to protect our flora and fauna and their habitats]

8) What are the aims of the Forest Conservation Act in India? [This act is aimed at preservation and conservation of natural forests and meeting the basic needs of the people living in or near the forests.]

9) Some tribal depend on the jungle. How? [Some tribal's depend on the jungle as they live in the deep forest like primitive people had lived in ancient times. They are still away from the basic amenities of modern life. Forests provide them food like seed grains, fruits, raw vegetables and other products like honey, meat of hunted wild animals for themselves, fodder for their animals, wood fuel for heating and cooking, even clothing using natural fibers, leaves and animal skins.]

10) What do you mean by deforestation? Write two natural causes of deforestation. [The cutting of trees on a large scale is called deforestation. Severe droughts, Forest fires]

For question numbers 11 to 13, 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 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**

11 Assertion(A)- We need to conserve our forest and wildlife.

Reason(R) - Rapid decline in wild life population and forestry has been observed.

Ans: ii) Both A and R are true but R is not the correct explanation of the assertion.

12. Assertion(A)-- Project Tiger was launched by the government of India to save tigers.

Reason(R)- Tiger population is on the verge of extinction.

Ans: i) Both A and R are true and R is correct explanation of the assertion.

13. Assertion(A)- Red Data Book contains the record of botanical gardens.

Reason(R)- It is published by the International Union for Conservation of Nature and Natural resources.

Ans: iv) A is false but R is true.

II. PASSAGE BASED QUESTIONS:

A great variety of plants and animals exist on earth. They are essential for the well-being and survival of mankind. To preserve biodiversity, to prevent extinction of endangered species, and to maintain ecological balance in nature, wildlife and forests should be conserved. Habitat is a place in environment where an organism lives. Today, a major threat to survival of these organisms is deforestation. We know that deforestation means clearing of forests and using that land for other purposes. Trees in the forest are cut for many purposes . Some natural causes of deforestation are forest fires and severe droughts. The answer to deforestation is reforestation. Reforestation is restocking of the destroyed forests by planting new trees. The planted trees should generally be of the same species which were found in that forest. We should plant at least as many trees as we cut. Reforestation can take place naturally also.

- i) A place in environment where an organism lives is _____
 - a. Home
 - b. Resort
 - c. Habitat**
 - d. Reservoir

- ii) Wildlife and forests should be conserved:

- a) To preserve biodiversity.
- b) To prevent extinction of endangered species.
- c) Maintain ecological balance in nature.
- d) All of the above.

iii) Deforestation takes place by;

- a. Human activities
- b. By natural calamities
- c. Both a and b
- d. None of these

iv) Restocking of the destroyed forests by planting new trees is called ;

- a. Deforestation
- b. Afforestation
- c. Reforestation
- d. None of these

III.CASE STUDY BASED QUESTIONS

1) A student collects plant waste, animal waste and some old newspaper from home. Later, the student adds all the material in a container and mixed them. The material was then added to soil as a compost to observe the plant growth.

What can be concluded from this activity? [HINT Old newspaper in compost adds nutrient to the soil and contributes to afforestation.]

2) In a school, class 7 students went to a trip to Arunachal Pradesh while class 8 student went on a trip to Meghalaya. They observed different plants on these trips as shown.

Trip	Region	Plants
1	Arunachal Pradesh	<i>Sapria himalayana</i> (root parasite plant)
2	Khasi Hills of Meghalaya	<i>Nepenthes khasiana</i> (pitcher plant)

What is the likely reason that class 7 and class 8 students did not observe the same plants on different locations?[HINT-Both the plant species are exclusively found in a particular habitat]

IV a) SHORT ANSWER TYPE QUESTIONS (2 M):

1. What is Red Data Book and state its importance?

(HINT - - It is the source book which keeps a record of all the endangered animals and plants. This book is mainly created to identify and protect those species which are on the verge of extinction. It is published by the International Union for Conservation of Nature and Natural resources.)

2. What is biodiversity? Name the different threats to biodiversity.

(**HINT**- Biodiversity is the huge variety of organisms existing on the earth, their interrelationships and their relationship with the environment.

Threat to biodiversity are – deforestation, natural calamity and climatic changes)

3. What is a biosphere reserve? Give one example.

(**HINT** - A huge area that offers protection to plants, animals and tribal community that may exist in the forest area. Eg: Pachmarhi biosphere reserve)

4. Define endemic species.

(**HINT** - Species of plants and animals that are exclusively found in a particular area. E.g. sal and wild mango are two examples of endemic flora of Pachmarhi biosphere reserve; Bison, Indian giant squirrel are examples of endemic fauna of this area .)

5. Define the terms-

i) Migration : (**HINT**-Migration is the phenomenon of seasonal mass movement of a species from its own habitat to some other habitat for a particular time period every year for a specific purpose like breeding or to escape from extreme cold, or to find food E.g. Artic tern, Siberian Crane)

ii) Biosphere – (**HINT** - Biosphere is that part of the Earth in which living organisms exist or which supports life. Biosphere includes land surface of the earth, atmosphere of the earth as well as water bodies on the Earth.)

iii) Species – (**HINT** - A group of population which are capable of interbreeding. The members of a species can reproduce fertile offspring only with the members of their own species and not with the members of other species. Members of a species have common character)

iv) Zoo-[**Hint**- are the places where animals are protected in artificial habitats for public view.]

6. What is project tiger and state its objective? (**HINT** - Project Tiger was launched by the government of India in 1973, to save tigers from extinction due to poaching. The objective of this project was to ensure the survival and maintenance of the tiger population in the country. Various tiger reserves were created in the country. This project has helped in strengthening the habitat and thus the increase in tiger population.)

7. What is meant by desertification? (**HINT** - Fewer trees result in more soil erosion.

Removal of the top layer of the soil exposes the lower, hard and rocky layers. This soil has less humus and is less fertile. Gradually the fertile land gets converted into deserts. It is called **desertification**.)

8. What do you understand by vulnerable species? Give example.

(HINT - The species of plants and animals which have high chances of becoming endangered unless the circumstances threatening its survival and reproduction improve.

E.g. Giant panda)

IV.b) SHORT ANSWER TYPE QUESTIONS (3 M):

1. a) List the different ways to conserve biodiversity.

[**HINT:** Building of protected areas such as wildlife sanctuaries, national parks, biosphere reserves; reforestation; recycling paper.]

b) Why is the conservation of biodiversity important?

Because of the following reasons, the conservation of biodiversity is important:

- [Hint-It boosts tourism and thus, plays a significant role in enhancing the economy of the country.
- It maintains the fertility of soil.
- It helps in maintaining the ecological balance on the earth.
- Biodiversity is a rich source for the study of genetics and evolution.
- It helps in maintaining the weather by regulating climatic changes, rainfall, etc.]

2. How does deforestation lead to a) frequent floods b) droughts?

(HINT – a) Deforestation leads to a decrease in the water holding capacity of the soil. The movement of water from the soil surface into the ground (infiltration rate) is reduced. A lot of rain water from deforested soil rushes into the river quickly, causing floods. **b)** Deforestation leads to higher level of carbon dioxide in the atmosphere which causes global warming. Scarcity of trees disturbs the water cycle and may reduce rainfall leading to droughts.)

3. Why are wildlife sanctuaries important for conservation of plants and animals?

(HINT - In a wildlife sanctuary, killing and capturing of wild animals is strictly prohibited. Any human activity which disturbs the wild animals and plants or their habitat is not allowed. So, in these areas, animals live in natural environment protected from any interference. This is why, sanctuaries are important.)

4. Why is deforestation done?

(HINT - Deforestation is large scale cutting of trees for various purposes. It is the biggest threat to the existence and survival of wild animals and birds. This is done for:

- Procuring land for agricultural use
- Building industries and houses
- Making furniture or using wood as fuel)

5. What are the various consequences of deforestation?

(HINT - The level of carbon dioxide goes up which results in the increase in temperature and consequently leads to global warming.

Decreases rainfall which disturbs the water cycle and leads to drought.

Changes properties of soil like nutrient content and texture. Also, decreases water holding capacity of soil)

V. LONG ANSWER TYPE QUESTIONS (5M):

1. Differentiate between-

a) Wildlife sanctuary and biosphere reserve.

Wildlife Sanctuary	Biosphere Reserve
1. Areas where animals are protected from any disturbance to them and their habitat.	1. Large areas of protected land for conservation of wildlife, plant and animal resources and traditional life of the tribal's living in the area.
2. Example: Sultanpur Bird sanctuary	2. Example: Pachmarhi Biosphere Reserve

b) Endangered and extinct species

Endangered Species	Extinct Species
1. Endangered species are those which are facing the danger of extinction.	1. Extinct Species are those which no longer exist on earth.
2. Example: desert cat, tiger, snow leopard etc.	2. Example: dinosaur, dodo, cave lion etc.

c) Flora and fauna

Flora	Fauna
1. Plants that grow naturally in a particular area are called flora of that area.	1. Animals that live naturally in a particular area are called fauna of that area.
2. Example: sal, teak, mango, jamun, silver ferns, arjun, etc. are examples of the flora of the Pachmarhi Biosphere Reserve.	2. Example: chinkara, blue-bull, barking deer, cheetal, leopard, wild dog, wolf, etc. are examples of the fauna of the Pachmarhi Biosphere Reserve.

2. a) Why should paper be saved? Prepare a list of ways by which you can save paper.

[HINT: The wood pulps and the bark of trees are used in the manufacturing of paper. By saving paper, we can reduce the cutting of trees.]

Ways to save paper: recycling paper, writing fully on both sides of paper sheet, reuse paper]

b) Explain how deforestation leads to reduced rainfall. [HINT: Plants are the main agent to maintain the water cycle in the environment. If plants will not absorb water from soil, they will not evaporate it in the environment to form clouds. If clouds will not form then no rainfall takes place.]

c) How could we contribute to the maintenance and survival of green wealth of our society? [HINT: grow more and more plants in our locality, protect and provide water to them. residents should be taught about the benefits of trees and harms of cutting trees.]

3 a) How is deforestation associated with global warming?

[Hint: Plants absorb carbon dioxide from the atmosphere and release oxygen. Cutting of trees leads to accumulation of carbon-di-oxide in the atmosphere. Carbon-di-oxide traps heat rays from sun which are reflected by earth. This results in increase of temperature on earth.]

b) Why are endemic species more vulnerable to extinction?

[Hint- Endemic species are confined to limited geographical area. They cannot adapt or live outside their natural habitat. Any disturbance in their habitat will adversely affect them. Thus, they are in great danger of becoming extinct.]

c) Name some forest products.

[Paper, wood, timber, vegetables, fruits, rubber, etc]

d) How can we protect wildlife?

[Hint-Wildlife plays a significant role in maintaining a balance in the environment. They can be protected by establishing secured and protected area, which are restricted for human activities that are against the protection of wildlife. Cutting of trees, hunting, poaching are strictly banned there. Many of these areas are national parks and wildlife sanctuaries.]

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