

INDIAN SCHOOL AL WADI AL KABIR



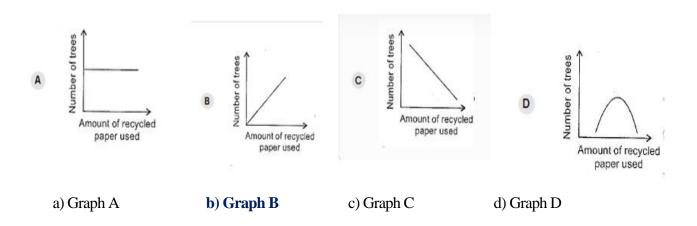
CLASS: VIII	DEPARTMENT: SCIENCE 2023-2024	DATE OF SUBMISSION:
WORKSHEET NO. 6 with answers	TOPIC: CONSERVATION OF PLANTS AND ANIMALS	11 /08/2023 NOTE: A4 FILE FORMAT
NAME OF THE STUDENT	CLASS & SEC:	ROLL NO.

I. OBJECTIVE-TYPE QUESTIONS

- 1) A place in the environment where an organism lives is:
 - a) Home
 - b) Resort
 - c) Habitat
 - d) Reservoir
- 2) 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.
- 3) Deforestation takes place by:
 - a) Human activities
 - b) By natural causes
 - c) Both a and b
 - d) None of these
- 4) Restocking of the destroyed forests by planting new trees is called:
 - a) Deforestation
 - b)Afforestation
 - c)Reforestation
 - d) desertification.
 - 5) Some villagers were unhappy that their herds of goats were steadily decreasing in numbers. A boy said that he had seen a tiger near their village one day. So, the villagers headed out to hunt and kill as many tigers as they could find. After having killed several tigers for over a year, the villagers found that the number of goats was still decreasing. There was also a sudden increase in the number of monkeys that entered their village. The villagers had killed the wrong animal. Which of the following

shows the impact of the villagers' action?

- (i) The population of the unknown predator increased.
- (ii) The tiger population went down and became endangered.
- (iii) The monkey population increased to unmanageable levels.
- a) (i) only b) (ii) only c) (iii) only d) (i), (ii) and (iii)
- 6) Trees take many years to reach maturity. Paper is made from wood pulp. As more people are using recycled paper, fewer trees will be cut down. Which of these graphs shows the result that would be obtained after few years of carrying out this act of conservation?



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):** We need to conserve our forest and wildlife.

Reason(R): Rapid decline in wildlife population and forestry has been observed.

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

8. **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 the correct explanation of the assertion.

9. 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.

- 10. **Assertion(A):** IUCN works toward assessing the global conservation status of different plants and animal species and publishes a catalogue called Red Data Book.
 - **Reason(R):** The main aim of IUCN Red list is to focus the attention of the conservationists towards species that are under threat of becoming extinct.
 - Ans: i) Both A and R are true and R is correct explanation of the assertion.

II. VERY SHORT QUESTIONS (2M):

- 1. What is Red Data Book and state its importance?
 - (HINT – It is the sourcebook 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((plants, animals and microorganisms, etc.) existing on the earth, their interrelationships and their relationship with the environment.
 - Threats 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 communities that may exist in the forest area. Eg: Pachmarhi biosphere reserve)
- 4. Define (i) **endemic species** and (ii) **vulnerable species**, Give examples.
 - (HINT (i) Species of plants and animals that are exclusively found in a particular area.

 E.g. sal and wild mango are two examples of the endemic flora of the Pachmarhi biosphere reserve. Bison and Indian giant squirrels are examples of endemic fauna of this area
 - (ii) The species of plants and animals which have high chance of becoming endangered unless the circumstances threatening its survival and reproduction improve.E.g. Giant panda)
- 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.]
- v) National park.[Hint: These are relatively large areas of scenic beauty protected and maintained by the government to preserve flora and fauna, landscape, historic objects of the area and places of scientific interest. In addition to protection, wild animals are kept for the recreation, enjoyment and educative interests of the public. In these areas foresting, grazing, cultivation and free entry of people are prohibited.]
 - 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:

- > Limit factors that lead to the reduction of tiger habitats and mitigate them by suitable management.
- > It strives to maintain the tiger population in the natural environment.
- > To ensure the population of tigers for economic, scientific, cultural, aesthetic and ecological values.
- **7.** What are flora and fauna?

(Hint: The plant species found in a particular area are called flora.Eg Sal, teak, mango, Jamun, silver ferns, etc. of Pachmarhi biosphere

The animal species found in a particular area are called fauna.

Eg. Chinkara, blue bull, barking deer, cheetal, leopard, wild dog, wolf, etc. of Pachmarhi biosphere]

III. SHORT ANSWER TYPE QUESTIONS: (3M)

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 etc.]

- 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 the 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 rainwater from deforested soil rushes into the river quickly, causing floods.
 - b) Deforestation leads to higher levels of carbon dioxide in the atmosphere which causes global warming. Plants are the main agents to maintain the water cycle in the environment. If plants will not absorb water from the soil, they will not evaporate it in the environment to form clouds. If clouds will not form then no rainfall takes place leading to droughts.)
- 3. Why are wildlife sanctuaries important for the 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 a natural environment protected from any interference. This is why, sanctuaries are important.)
- 4. a) Why is deforestation done?

(HINT - Deforestation is the 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)
- b) What are the various consequences of deforestation?

(HINT - The level of carbon dioxide goes up which results in an 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 the water-holding capacity of soil.

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.)

5) a) What are the aims of the Forest Conservation Act in India?

[Hint: This act is aimed at the preservation and conservation of natural forests and meeting

the basic needs of the people living in or near the forests]

b) Some tribes depend on the jungle. How?

[Hint: Some tribes depend on the jungle as they live in the deep forest as 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, the meat of hunted wild animals for themselves, fodder for their animals, wood fuel for heating and cooking, and even clothing using natural fibres, leaves and animal skins.]

IV. 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 the 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 the 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 in 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 the 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 trees leads to the accumulation of carbon dioxide in the atmosphere. Carbon dioxide traps heat rays from the sun which are reflected by the earth. This results in an increase in temperature on earth.]

b) Why are endemic species more vulnerable to extinction?

[Hint- Endemic species are confined to limited geographical areas. 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 areas, which are restricted for human activities that are against the protection of wildlife. Cutting trees, hunting, and poaching are strictly banned there. Many of these areas are national parks and wildlife sanctuaries.]

V. SOURCE-BASED/ CASE STUDY-BASED QUESTIONS

Read the passage and answer the following questions:

1. A student collects plant waste, animal waste and some old newspapers from the home. Later, the student adds all the materials in a container and mixes all the materials. The material was then added to the soil as compost to observe the plant growth. What can be concluded from this activity?

[HINT-Reusing newspaper in compost adds nutrients 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.

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

What is the likely reason that class 7 and class 8 students did not observe the same plants in different locations?

[HINT-Both the plant species are exclusively found in a particular habitat

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