

Conservation of Plants and Animals

Check point 1

Q. 1. If we cut all the trees in place, will it affect land? How?

Answer: Yes, it will definitely affect land by the following ways:

- **Soil erosion:** Trees hold the soil and prevent their erosion from various sources like wind, water etc. But due to cutting of trees soil erosion takes place and top layer of soil is removed. Due to this the lower, rocky and hard surface is exposed which due to less humus content is less fertile in nature.

Therefore, cutting of trees by causing soil erosion affects the fertility of land.

- **Water holding capacity:** Due to cutting of trees water holding capacity of soil is also decreased. The movement of water from the soil surface to the ground is decreased and due to this flood are there as water is not absorbed or moved to the inner ground and level of ground water is also decreased.

Q. 2. Animal life is also affected by deforestation. How? List the points.

Answer: Animal life is affected by deforestation by the following ways:

Habitat loss: Forests provide habitat to the entire wildlife. Cutting of the forests will led to the destruction of the habitats of many wild animals.

Loss of food: Many of the animals depend on products of trees for their food. Deforestation led to loss of the food and ultimately many of the wild animals die due to hunger and we suffer from wildlife loss.

The following picture depicts how wildlife is suffering from deforestation:



Q. 3. The temperature of the earth is rising due to CO₂. What is the phenomenon called?

Answer: This phenomenon is called Global Warming. CO₂ traps the heat rays which earth surface reflects and due to this trapping of heat rays the temperature of earth keeps on increasing and due to this earth is becoming warmer day by day. Therefore this phenomenon is called Global warming.

Q. 4. Some activities are prohibited in protected areas. Mention a few.

Answer: Following are the activities that are prohibited in protected areas:

- Plantation
- Cultivation
- Felling trees
- Grazing
- Hunting and poaching

Q. 5. Name the most important factor that threatens wildlife.

Answer: Deforestation, as it has various adverse effects on wildlife it is the most important factor that threatens wildlife.

Check point 2

Q. 1. Various plants of Pachmarhi reserve enhance its beauty. Name a few of them.

Answer: Sal, teak, mango, jamun, silver ferns, arjun are the plants which enhances the beauty of Pachmarhi reserve.

Q. 2. India has two biodiversity hot spots. Give their names.

Answer: Western ghats and Eastern Himalayas are the two biodiversity hotspots of India.

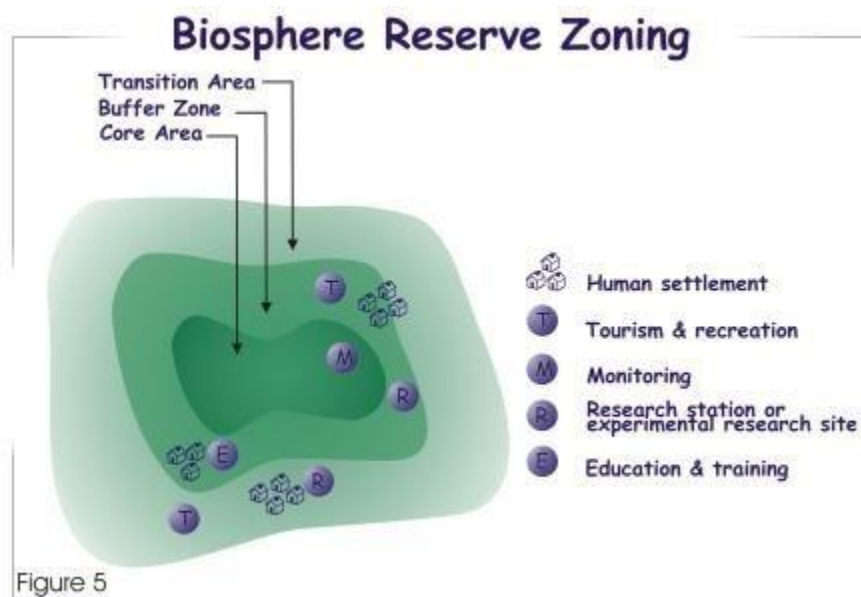
Q. 3. A zone of biosphere reserve allows human activities. Mention it along with other zones.

Answer: Biosphere reserve is divided into three zones which are as follows:

- i. **Core zone:** It is the innermost zone of biosphere reserve in which human intervention is allowed and is highly protected. It is strictly regulated.
- ii. **Buffer zone:** This zone is between the innermost and the outermost zone. Human activities except research are not allowed here. Human intervention only for research is permitted here.

iii. **Transition zone:** It is the outermost zone of the biosphere reserve in which human activities are permitted.

Following picture depicts the different zones of Biosphere:



Check point 3

Q. 1. The Satpura national park is renowned for its wildlife. Name some organisms that contribute to its fauna.

Answer: Following organisms contribute to Satpura National Park for its wildlife:

Chinkara, Blue bull, Barking deer, Cheetal, Leopard, Wild dog, Wolf etc.

Q. 2. Many tiger reserves are governed under Project Tiger. Can you give the number?

Answer: There are 50 tiger reserves in India which are governed under Project Tiger.

Q. 3. Mention few animals that are in danger of becoming extinct.

Answer: Following are some of the animals which are in danger of extinction:

Black buck, White eyed buck, White elephant, Golden cat, Pink headed duck, Gharial, Marsh crocodile, Python, Rhinoceros etc.

Check point 4

Q. 1. Migratory birds are also found in India, one of them visits India during winter every year. Give its name.

Answer: Siberian crane is the bird which visits India during winter every year.

Following is a picture of Siberian crane:



Q. 2. To make two tonne of paper, how many trees are needed?

Answer: 17 fully grown trees are required to make tonnes of paper.

Q. 3. Give the meaning of green wealth.

Answer: Green wealth refers to the forests, vegetation that we have in our nature. It is wealthy because trees provide many advantages to us and had made our life easy. We can't imagine our life without them. So, they are very wealthy to us and therefore, we call forests, vegetation as green wealth.

Chapter Test

Q. 1. Give the reason for the drafting of Red Data Book.

Answer: Reason behind drafting Red Data Book is to know about the endangered species (those species which are on verge of extinction). It keeps a record of endangered species. From this book it is known that which species are endangered so that efforts can be made for their protection and they can be saved from getting extinct.

Q. 2. Is there any permanent solution to the problem of deforestation?

Answer: Reforestation is the solution to the problem of deforestation. In this the new plants of the same species are grown. Most of the time if a deforested area is left undisturbed, reforestation occurs by itself in that area. The only thing that is required is to prohibit the human intervention in particular area and this process is called Natural reforestation.

So, reforestation is the solution of deforestation. Following picture depicts reforestation:



Q. 3. State one way in which can reuse paper.

Answer: By recycling the used paper we can reuse paper. We can recycle a paper five to seven times and can reuse it.

Q. 4. Mention a function of wildlife sanctuary.

Answer: Function of wildlife sanctuary- It provides protection and suitable living environment to the wild animals.

Q. 5. Write a statement to differentiate flora and fauna.

Answer: The plants found in a particular area are its flora whereas animals found in that particular area is termed as fauna of that area.

Q. 6. How many protected areas are there in India?

Answer: There are 668 protected areas in India.

National parks- 102

Wildlife sanctuaries- 515

Conservation reserves- 47

Community reserves- 4

Q. 7. Write the name of a area which is reserved for the protection of wildlife.

Answer: Wildlife sanctuaries are reserved for the protection of wildlife.

Q. 8. In which book, different species are classified into different threat categories?

Answer: Red Data Book is the book in which different species are classified into different threat categories.

Q. 9. 'Deforestation can lead to desertification.' How?

Answer: Yes the given statement is very true that 'Deforestation can lead to desertification' because deforestation affects the properties of soil. When there is no vegetation left due to deforestation soil erosion occurs at a very high rate. Due to this the lower, hard and rocky surface is exposed which contains no humus and is less fertile. With time due to deforestation this fertile lands get converted into deserts and this process is called desertification. So, ultimately deforestation gives rise to desertification.

Q. 10. Explain extinction of animals with examples.

Answer: Extinction of animals is due to two major factors:

- If some disturbances occur in their natural habitat due to which their survival is affected.
- Killing of the animals by human for several reasons.

We had observed that Dinosaurs get extinct many years ago due to the changes in their natural habitat. Due to the changes in their habitat they were not able to survive.

But if we have a look on the entire wildlife we will found that smaller animals have more threat of extinction as compared to bigger animals. These small animals include snakes, lizards, frogs, insects, owls and many more. They are more threatened as compared to large animals because they are more extensively killed by the humans without giving a second thought. We never thought of their role, results of their extinction and kill them.

Whereas killing of large animals is not as frequent as small animals so they are a bit safe.

Q. 11. Forests are called rich spots of biodiversity. Do you agree? Give reasons.

Answer: Yes, I agree that forests are rich spots of biodiversity. Following are the reasons to support my statement:

- Forests provide habitat to a large number of animals or we must say most of the wildlife. By providing habitat to different group of animals they become a rich source of biodiversity.
- Area covered by forests is 6% of the total but 90% of the wildlife resides in them. Therefore, they are a rich source of biodiversity.
- Forests include a variety of plants, vegetation and thus provide great diversity in fauna and hence are a rich source of the biodiversity.

Q. 12. In what ways, wildlife conservation and forest conservation are related?

Answer: Wildlife conservation and forest conservation are interrelated because conservation of forests will itself led to conservation of wildlife.

The main reason of extinction of the wildlife is their habitat destruction. Forests provide habitat to the complete wildlife and food also. They provide all the suitable conditions required by wildlife for their survival. So, if we will try to conserve forests we will conserve the habitat of wildlife and hence also conserve it.

Q. 13. How can you say that deforestation cause droughts?

Answer: Deforestation is the clearing of forests due to which no trees are left. As we know trees utilise CO_2 during the process of photosynthesis so a balance remains between O_2 and CO_2 level and temperature of also earth remains regulated. But as no trees left due to deforestation there is no consumption of CO_2 and it keeps on increasing in environment. Increased level of CO_2 traps the heat rays and due to this temperature of earth keeps on increasing. Due to this increment in temperature water cycle gets affected and no rain takes place and as a result drought occurs.

Q. 14. Conservation of forests is necessary. Why?

Answer: Forests are very important to us and their conservation is necessary due to following reasons:

- Forests take CO_2 and give oxygen to us and thus are very much important for our survival.
- Forests are one of the largest sources of carbon.
- Forests provide habitat to complete wildlife. In order to conserve our wildlife we need to conserve forests.
- Deforestation leads to natural calamities like flood, drought, and desertification. In order to avoid these disastrous conditions we need to conserve the forests.
- All forest products are very much valuable to us commercially. For example- wood from the trees is used for making furniture; their products have medicinal uses etc.
- Deforestation will lead to complete unbalancing of the ecosystem as forests are major contributor in maintaining balance of ecosystem.
- Survival of many organisms entirely depends on forests. So, if we won't conserve them lives of many will get affected.

Due to above mentioned reasons conservation of forests is quite necessary.

Q. 15. Write the objectives of 'Project Tiger'.

Answer: Following are the objectives of 'Project Tiger':

- To protect the tigers from hunting and poaching practices.
- To ensure the survival of tiger population.
- To maintain the tiger population in country so that they do not get extinct.

Q. 16. Distinguish between deforestation and reforestation.

Answer:

Deforestation	Reforestation
This process refers to the clearing of forests.	This process refers to planting of trees in order to conserve forests.
This process leads to drought, floods, desertification and soil erosion.	Reforestation prevents drought, floods, desertification and soil erosion.
This process can cause various harm to us.	This process is beneficial for us.

Q. 17. Discuss the steps which are necessary for wildlife.

Answer: Following are the steps which are necessary for wildlife:

- Firstly, we should try our best to protect the habitats of the animals. Destruction of the habitats like deforestation for our own benefits deprives many of the animals from their habitat. So, we should not cause any harm to their habitats for our own benefit.
- Practices like hunting and poaching needs to be banned and strict regulations need to be implement in order to save the lives of animals.
- Various projects for different animals which aim for saving and maintain the population of endangered species needs to be implement.
- Number of wildlife sanctuaries, biosphere reserves, and national parks needs to be increased so that we can protect them by providing them their natural habitat.
- Human intervention in their habitats needs to be in balance form which do not cause any harm to them.
- Government needs to implement strict laws against crimes related to wildlife and needs to make people aware about the importance of wildlife and how they can contribute in their conservation.

Q. 18. Animals are protected in a zoo also. Is there any difference between a zoo and wildlife sanctuary?

Answer: Yes there are differences between the protection given to animals in zoo and wildlife sanctuaries. These differences are listed below:

- In zoo animals are not protected in their natural environment or habitat whereas in wildlife sanctuaries they are protected in their natural environment.
- Wildlife sanctuaries mostly aim for the protection of some particular species whereas in zoos animals are bought and they rear them but not look for protection of particular species.

- Zoos are mostly trade sought of which mostly aims for money whereas the primary goal of wildlife sanctuaries is the protection of animals and not to use them for trade related aspects.
- There are strict rules and regulations in wildlife sanctuary regarding entry of every person but the case is not same with the zoos.

Q. 19. We need to save papers. Explain the sentence with reasons.

Answer: We need to save papers due to following reasons:

- Making of tons of paper requires 17 fully grown trees and as we keep on wasting paper more trees would be cut down for making papers.

If we will save them and minimize their wastage then it will help in conservation of trees which are very essential for us.

- Also making of papers require lot of money, labor and energy. Saving of paper will also save these things and thus help us commercially also.
- There are certain harmful chemicals which are used in the paper industry. Saving of paper will also minimize the usage of harmful chemicals.

Q. 20. The vultures are important to maintain ecological balance. How?

Answer: Yes, vultures are important in maintaining ecological balance. Each organism on this earth plays its role and is important for maintaining ecological balance.

Vultures act like scavengers as they feed upon dead bodies of various animals, cattle. They feed upon them and thus prevent different diseases which can take place due to presence of dead bodies. More broadly we can say that they help in keeping environment clean.

But as they are very few in number now, degradation of dead bodies of animal is a huge problem and is creating various problems in the environment. Causing of diseases and increase in infections are the main problems.

If the vultures were good in number we won't be suffering from the same problem and the balance of the environment remains maintained.

