

1. Choose the right answer from the four alternatives given below:

- (i) Which of these statements is not a valid reason for the depletion of flora and fauna?
- (a) Agricultural expansion
 - (b) Large scale development projects
 - (c) **Grazing and fuel-wood collection**✓
 - (d) Rapid industrialisation and urbanisation
- (ii) Which of the following conservation strategies do not directly involve community participation?
- (a) Join Forest Management
 - (b) Chipko Movement
 - (c) Beej Bajo Andolan
 - (d) **Demarcation of Wildlife Sanctuaries**✓
- (iii) Match the following animals with their category of existence.

Animals / Plants	Category of existence
a. Black buck	i. Extinct
b. Asiatic elephant	ii. Rare
c. Andaman wild pig	iii. Endangered
d. Himalayan brown bear	iv. Vulnerable
e. Pink-headed duck	v. Endemic

Answers

Animals / Plants	Category of existence
a. Black buck	iii. Endangered
b. Asiatic elephant	iv. Vulnerable
c. Andaman wild pig	v. Endemic
d. Himalayan brown bear	ii. Rare
e. Pink-headed duck	i. Extinct

(iv) Match the following:

a. Reserved Forests	i. other forests and wastelands belonging to both government and private individuals and communities.
b. Protected Forests	ii. forests are regarded as most valuable as far as conservation of forest and wild life resources.
c. Unclassed Forests	iii. forest land are protected from any further depletion.

Answers:

a. Reserved Forests	ii. Forests are regarded as most valuable as far as conservation of forest and wild life resources.
b. Protected Forests	iii. Forest land are protected from any further depletion.
c. Unclassed Forests	i. other forests and wastelands belonging to both government and private individuals and communities.

2. Answer the following questions briefly:

i. How have human activities affected the depletion of flora and fauna? Explain.

Several human activities have affected the depletion of flora and fauna and have led to decline in India's biodiversity. The main factors for the decline of India's biodiversity are:

- Habitat destruction, mainly due to overpopulation leading to expansion of agriculture, mining, industrialisation and urbanisation. This has led to loss of large forest areas.
- Hunting and poaching and illegal trade of animal skin, tusk, bones, teeth, horns, etc have led many species to the verge of extinction.
- Environmental pollution, poisoning of water bodies due to discharge of industrial effluents, chemicals, wastes, etc. leading to animal deaths.
- Forest fires often induced by shifting cultivation have led to loss of forests and wildlife.
- Large scale development projects and destruction of forests.
- Grazing and fuel wood collection.
- Over-exploitation of forest products and depletion of flora and fauna.
- Unequal access of forest resources
- Inequitable consumption of forest resources
- Differential sharing of responsibility for environmental protection.

ii. Define biodiversity.

Biodiversity or Biological Diversity means the diversity of living organisms (like bacteria, animals, birds, plants, crops, human beings etc.) having different forms and functions but they are closely integrated in a system and they are interdependent.

iii. Describe how communities have conserved and protected forests and wildlife in India.

Indian forests are home for some tribal communities. They depend on forests for their livelihood. In some forest areas, these communities along with government are struggling to conserve the forest. In some areas, the village communities themselves are protecting habitats without government involvement.

Examples:

In Sariska Tiger Reserve, Rajasthan, villagers have fought against mining and destruction of forest by citing the Wildlife Protection Act.

The villagers from 5 villages in Alwar District of Rajasthan have declared 1,200 hectares of forest protected the forest. They called it as 'Bhairodev Dakav Sonchuri'. The villagers set their own rules and regulations to save the forest area. They do not allow hunting and are protecting the wildlife against any outside encroachments.

Sacred Groves: Tribes worship nature. They believe that their God, Goddess and deities live in the forest area. Such forest areas are called Sacred Groves. They do not disturb sacred groves. So, virgin forests have been preserved in their pristine form as 'Sacred Groves'.

The Bishnois of Rajasthan protect black bucks (chinkara). People from this community do not harm herds of black buck, nilgai and peacocks. So, they are even today conserved.

Chipko movement: in the Himalays led by the local communities, especially, women, successfully resisted deforestation in several areas. They have protected and planted indigenous species of plants successfully.

Ecological Farming: The traditional conservation methods are revived by the community with the help of NGOs. For example, Beej Bachao Andolan and Navdanya promote ecological farming without use of chemical fertilizers and pesticides.

The Joint Forest Management programme is also an effort by community involvement with Government to manage and restore degraded forests. It was started in Orissa in 1988.

iv. Write a note on good practices towards conserving forest and wildlife.

Conservation of forest and wildlife

Individuals, Community and Government have worked for conserving forests and wildlife. Such good steps, practices are to be continued in all places for conserving our resources since it helps to preserve the biological diversity and our life support system. The National Forest Policy outlines the following steps, practices for conservation of forests:

- i. Maintenance of environmental stability through preservation and restoration of ecological balance.
- ii. Substantial increase in forest tree cover massive afforestation and social forestry programmes.

iii.. Steps to meet the requirements of fuel wood, and minor forest produces by increasing the productivity of forests.

iv. Encouragement of efficient utilization of forest produce and optimum substitutes of wood.

v. Steps to increase massive people's movement with involvement of women to achieve the conservation of our national heritage and minimize the pressure on existing forests.

Government steps: For conservation of wildlife the following steps are taken by the government in India:

- Development of 88 national parks, 490 wildlife sanctuaries and 13 biosphere reserves.
- Implementation of Wildlife Protection Act.
- Protecting the remaining endangered species by banning hunting, giving legal protection to their habitats and restricting trade in wild life.
- Project Tiger, Project Rhino, Project Elephant, etc, for protection of threatened species in their natural habitats. 27 tiger reserves have been set up under Project Tiger.
- Four coral reefs have been identified for conservation and management.
- Wet land conservation measures are taken up.