Forest and Wildlife Resources

Question 1.

Name four animals and two species of flora which are on the verge of extinction.

Answer:

Animals and plants on the verge of extinction:

Four animals: Cheetah, pink-headed duck, mountain quail, forest spotted owlet.

Two plants:

1 Wild mahua (madhuca insignis)

2 hubbardia heptaneuron (a species of grass).

Question 2.

Name six groups of flora and fauna under which they are classified by International Union for Conservation of Nature and Natural Resources (IUCN).

Answer:

1 Normal species

Species, whose population levels are considered to be normal for their survival.

2 Endangered species

Species, which are in danger of extinction because their population is declining. For example, Black buck, Indian rhino, lion-tailed macaque and Indian wild ass.

3 Vulnerable resources

These are the species whose population has declined so much that they are likely to move into endangered category in the near future, if negative factors continue to operate. For example, Blue sheep, Asiatic elephant, Gangetic dolphin.

4 Rare species

Species with small population. If care is not taken they may also become endangered species. For example, Himalayan Brown bear, desert fox, wild Asiatic buffalo, hornbill.

5 Endemic species

Species which are only found in particular areas usually isolated by natural or geographical barriers. For example, Andaman teal, Nicobar pigeon, Andaman wild pig.

6 Extinct species

These are species which are not found after searches of known or likely areas where they may occur, i.e., the species which were existing earlier, but are not seen today.

Question 4.

Name any four resources which are obtained from our biodiversity.

Answer:

The resources are: wood, rubber, medicines and dyes.

Question 5

Write four major reasons for the depletion of forest cover.

Answer:

1 Deforestation for agricultural purposes.

2 Shifting cultivation which is still practised in substantial parts of tribal belts.

3 Large-scale development of river valley projects.

4 Mining activities have also resulted in deforestation. For example, the tiger reserve in West Bengal is seriously threatened by the ongoing dolomite mining.

5 Environmental pollution and forest fires have also led to depletion of forests.

Question 6.

Write three adverse impacts of dolomite mining in the Buxar Tiger Reserve on the ecosystem.

Answer:

Adverse effects of dolomite mining in the Buxar Tiger Reserve:

1. It has caused ecological damage.
2. It has blocked the migration route of several species.
3. It has disturbed the natural habitat of many species.

Question 7.

List six factors which have led to the decline in India's biodiversity.

Answer:

1. Habitat destruction
2. Over-exploitation
3. Environmental pollution
4. Forest fires
5. Hunting and Poaching
6. Poisoning

Question 8.

Write four most important causes of environmental destruction/degradation.

Answer:

1. Unequal access to resources.
2. Inequitable consumption of resources.
3. Differential sharing of responsibility for environmental well being.
4. Over-population.

Question 9.

"The destruction of biodiversity is highly correlated with the loss of cultural diversity." Give four facts to support this statement.

Answer:

Such losses have:

1. Increasingly marginalised and impoverished many forest dependent communities.
2. Among the poor, women are affected more than men, for women bear the major responsibility of basic subsistence needs. With the depletion of these resources, the drudgery of women increased for they had to walk for more than 10 km to collect these resources which, in turn, affected their health and negligence of home and children.
3. The indirect impact of degradation, eg. drought or floods etc. also hits the poor the hardest.
4. Poverty is a direct outcome of environmental destruction.

Question 10.

Why do we need to conserve our biodiversity?

Answer:

Conservation of biodiversity is necessary because it:

1. Preserves the ecological diversity.
2. Preserves our life support systems, i.e., water, air and soil.
3. Preserves the genetic diversity of plants and animals for better growth and breeding of species.
4. Fisheries too are heavily dependent on the maintenance of aquatic biodiversity.

Question 11.

List various provisions made by "The Indian Wildlife (Protection) Act 1972" for protecting habitats.

Answer:

1. An All India list of protected species was published.
2. The thrust was on protecting the remaining population of certain endangered species by-
   - banning hunting;
   - giving legal protection to their habitats and
   - restricting trade in wildlife.

Question 12.

Write four steps taken by the Government for conservation of wildlife.

Answer:

Five steps that have been taken to protect the wildlife in India:

1 Under the Indian Wildlife Protection Act 1972, an All India list of protected species was published. The thrust was on protecting the remaining population of certain endangered species by –

- banning hunting,
- giving legal protection to their habitats and
- restricting trade in wildlife.

2 Many wildlife sanctuaries have been developed and National Parks have been set up.

3 Many projects have been started for protecting specific animals which were gravely threatened, eg. Project Tiger, One-horned Rhino, the Kashmir Stag (hangul), three types of crocodiles —the fresh water, salt-water and Gharials, the Asiatic Lion, etc.

4 Most recently, some animals have been given full or partial legal protection against hunting and trading throughout India, eg., Indian elephant, black buck, great Indian bustard and the snow leopard, etc.

5 Setting up of biosphere reserves for conserving flora and fauna in their natural surroundings and protection of wetland ecosystems is another step taken in this direction.

Question 13.

Which agency manages forests in India? Name three broad categories in which the forests are classified.

Answer:

The forests in India are owned and managed by the Government through the Forest Department.

They are classified under the following categories:

1 Reserved Forests

2 Protected Forests

3 Unclassed Forests

Question 14.

What are 'Permanent Forest Estates' and why? Which state has maximum forest cover falling under this category? Write its percentage share in the total forest area of this state.

Answer:

Reserved and protected forests are referred to as the Permanent Forest Estates maintained for the purpose of producing timber and other forest produce.

Madhya Pradesh has the largest area under permanent forests, constituting 75% of its total forest area.

Question 17.

What are unclassed forests? Name two areas which have high percentages of their forests as unclassed forests.

Answer:

Unclassed forests are the other forests and waste lands belonging to both Government and private individuals as well as local communities.

Two areas with high percentage of unclassed forests are: North-Eastern states and parts of Gujarat.

Question 18.

Write three examples of conservation of biodiversity at community level. (2025)

Answer:

Three examples of community participation:

1 In 'Sariska Tiger Reserve', Rajasthan, villagers have fought against mining by citing the Wildlife Protection Act. In many areas, villagers themselves, are protecting habitats and explicitly rejecting Government involvement.

2 The inhabitants of five villages in the Alwar District of Rajasthan have declared 1200 hectares of forest as the 'Bhairodev Dakav Sonchuri', declaring their own set of rules and regulations, which do not allow hunting, and are protecting the wildlife against any outside encroachments.

3 The famous Chipko Movement in the Himalayas has successfully resisted deforestation and has also shown that community afforestation with indigenous species can be a great success.

Question 21.

What is biodiversity? Why is biodiversity important for human lives? Give three points.

Answer:

Biodiversity denotes variety of living beings, including all types of organisms, plants and wildlife, diverse in form and functions but closely integrated in a system through multiple network of interdependencies. Its importance: We humans along with all living organisms form a complex web of ecological systems in which we are only a part and are dependent on this system for our own existence. For example, the plants, animals and micro-organisms recreate—

- the quality of the air we breathe,
- the water we drink and
- the soil that produces our food without which we cannot survive. Forests play a key role in the ecological system as these are also the primary producers on which all other living beings depend not only for food but indirectly for many other forest produces which are used for varied purposes. So this biodiversity maintains an ecological balance and our life support systems (air, water and soil).

Question 22.

Write a brief note on 'Project Tiger'.

Answer:

'Project Tiger' was one of the well-published wildlife campaigns in the world, launched in 1973. Initially it had shown an increase in tiger population till 1989 but in 1993 the tiger population dropped. There are 27 tiger reserves in India covering an area of 37,761 sq km.

Tiger conservation has been viewed not only as an effort to save the endangered species but with equal importance as a means of preserving biotypes of sizeable magnitude. Corbett National Park, (Uttarakhand), Sundarbans National Park (West Bengal), Bandhavgarh National Park (Madhya Pradesh), Sariska Wildlife Sanctuary (Rajasthan) Manas Tiger Reserve (Assam) and Periyar Tiger Reserve (Kerala) are some of the reserves in India.

Question 24.

Give an account of the Himalayan Yew highlighting its importance.

Answer:

The Himalayan Yew is in trouble. The Himalayan Yew (Taxuswallachiana) is a medicinal plant found in various parts of Himachal Pradesh and Arunachal Pradesh. A chemical compound called 'taxol' is extracted from the bark, needles, twigs and roots of this tree, and it has been successfully used to treat some cancers-the drug is now the biggest selling anti-cancer drug in the world.

The species is under great threat due to over-exploitation. In the last one decade, thousands of yew trees have dried up in various parts of Himachal Pradesh and Arunachal Pradesh.

Question 25.

Give the main characteristics of the Asiatic Cheetah. Where has it gone?

Answer:

The world's fastest land mammal, the cheetah (Acinonyxjubantus), is a unique and specialised member of the cat family and can move at the speed of 112 km./hr. The cheetah is often mistaken for a leopard. Its distinguishing marks are the long teardrop shaped lines on each side of the nose from the comer of its eyes to its mouth. Prior to the 20th century, cheetahs were widely distributed throughout Africa and Asia. Today, the Asian cheetah is nearly extinct due to a decline of available habitat and prey. The species was declared extinct in India long back in 1952.

Question 26.

'33% of area should be under forests'. Justify the statement highlighting the environmental values of forests.

Answer:

Forest area in the country is far lower than the desired 33% of geographical area, as outlined in the National Forest Policy (1952). Forests are considered essential for maintenance of the ecological balance. The livelihood of millions of people who live on the fringes of these forests depend upon it.

Forests play a key role in the ecological system as these are also the primary producers on which all other living beings depend. The forest preserves the ecological diversity and our life support systems—water, air and soil. It also preserves the genetic diversity of plants and animals for better growth of species and breeding. The destruction of forests have marginalised and impoverished many indigenous forest dependent communities. The indirect impact of degradation is severe drought or induced floods. Poverty is a direct outcome of environmental destruction.

Question 27.

Assess the need for the conservation of forests and wildlife in India.

Answer:

There is a need to conserve the forests and wildlife in India:

- Conservation of biodiversity is necessary because it preserves the ecological diversity.
- Forests and wildlife preserve our life support systems, i.e., water, air and soil. For example, the plants, animals and micro-organisms recreate the quality of the air we breathe, the water we drink and the soil that produces our food without which we cannot survive.
- It also preserves the genetic diversity of plants and animals for better growth and breeding of species. For example, in agriculture we are still dependent on traditional crop varieties.
- Fisheries too are heavily dependent on the maintenance of aquatic biodiversity.
- Forests are primary producers on which all other living beings depend not only for food but indirectly for many other forest produces which are used for varied purposes.