

17. Conservation

Answers to Exercises

- A.
- Plants and animals in their natural habitat are referred to as wildlife.
 - The five categories of threatened species listed in the *Red Data Book* are critical, endangered, vulnerable, rare and indeterminate.
 - Development, practising monoculture, introduction of exotic species, hunting and fishing, and pollution are some of the factors that cause loss or depletion of biodiversity.
 - Three international organisations involved in the conservation of biodiversity are the International Union for Conservation of Nature (IUCN), the World Wide Fund for Nature (WWF), and the United Nations Environment Programme (UNEP).
 - The UNESCO's Man and the Biosphere Programme is aimed at establishing and maintaining at least one biosphere reserve in the 193 bio-geographical zones of the world. The idea is to protect the plants and animals that characterise each bio-geographical zone in their natural setting.
 - The Joint Forest Management Programme launched by the government aims at regenerating and protecting degraded forests with people's participation.
 - Three special projects launched to protect endangered species in their natural habitat are Project Tiger, Project Elephant and Project Crocodile.
 - Sustainable utilisation of natural resources means making use of natural resources to meet the needs of the present generation, while ensuring that future generations are not deprived of the use of natural resources for their needs.

- B.
- A plant or an animal that no longer exists in the world or a country is said to be extinct. For example, the dodo has become extinct in the world, while the cheetah and the pink-headed duck have become extinct in India.
 - The practice of planting one type of plants in an area is called monoculture. Replacing natural forests, rich in biodiversity, with monoculture plantations leads to the loss of biodiversity. Not only are the plants endangered, but all the organisms dependent on the various types of plants in a forest are affected.
 - The Botanical Survey of India keeps track of the plant species in the country, while the Zoological Survey of India keeps track of animals. The Forest Survey of India conducts surveys of our forest resources. It uses satellite pictures and ground surveys, in which different parts of forests are surveyed and their condition studied.

- C.
- Biodiversity means the variety and variability of organisms in the world. Depletion or loss of biodiversity is extremely grave because we can never get back the species we have lost. In a short-term way, the wiping out of a species or a drastic decrease in its numbers can affect the livelihoods of people, for example, those directly dependent on forests. It can cause economic loss for an industry or a country.

In the long run, the loss or depletion of biodiversity can threaten our very existence. For example, most of the world's food comes from about 20 species of plants. If any one or more of these plants are affected by some killer disease, it would be necessary to develop new varieties with the help of their relatives in the wild.

- Animals and plants that do not belong to a place originally and are introduced from elsewhere are called exotic. An exotic plant or animal often proliferates (increases in number) at the cost of the native species. The eucalyptus, for example, is not native to India. It grows fast and spreads, depriving native species of space and nutrition. The spotted deer introduced in the Andaman and Nicobar Islands has proliferated because it does not have natural predators. The deer are not only harming forest plants, but also damaging crop plants.
- The Chipko Andolan, a people's movement to save trees, spread over the Himalayan region under the leadership of activists like Sunderlal Bahuguna and Chandi Prasad Bhat. It was started in 1973, in the village of Gopeshwar in Chamoli district (Uttarakhand). The villagers rebuffed the attempt of a contractor to cut down trees for a sports goods factory by hugging the trees. When the contractor arrived at Rani village in the Garhwal district, the women of the village, led by the 50-year-old Gauri Devi, forced the contractor and his men to leave. The resistance offered by the villagers to stop deforestation of their land inspired environmentalists all over the world.

- D. 1. *in-situ* 2. IUCN 3. Bishnoi 4. environment 5. national parks

- E. 1. (a) 2. (d) 3. (c) 4. (d) 5. (b)