Class 11

Geography

DATE- 22.01.22

1) What is meant by “Homosapien”?

Ans. Homo’ means ‘man’ and ‘sapient’ means ‘wise’. Homosapien is one of the species of the animal kingdom to which human beings belong. Because of their unique characteristic of wisdom’, human beings are separated from other animal species.

2) Define ‘ecosystem’ with examples.

Ans. The biotic community, along with the physical environment forms an interacting system called the ecosystem. An ecosystem can be natural or artificial, temporary or permanent. A large grassland or a forest, a small 1 tract in a forest or a single log, an edge of a pond, a village, an aquarium, or a manned spaceship can all be regarded as an ecosystem.

3) Describe various structural components of an ecosystem.

Ans. Various structural components of an ecosystem are classified into two main groups:

Biotic or living, and

Abiotic or non-living.

The biotic component of an ecosystem comprises the kinds, numbers, and distribution of living organisms. The abiotic component consists of the kinds, quantity, and distribution of living organisms. The abiotic component consists of the kinds, quantity, and distribution of physical and chemical factors such as light, temperature, water, oxygen, carbon, nitrogen, and minerals.

4) How does the background of the habitat determine the distribution of animals?

Ans. The background of the habitat determines the distribution of animals by enabling them to camouflage against the color, general texture, and pattern. Desert animals like the lion and the camel are sand-colored. Most of the jellyfish, sea cucumbers are lassy. The chameleon changes its color according to its background.

5) How are plants important to human beings?

Ans. Plants produce substantial volumes of food for human beings. Besides producing varieties of food crops for man, plants also provide food to their domesticated animals. They also supply timber to serve various requirements of human beings.

6) What are different types of biodiversity?

Ans. Biodiversity exists at three levels, viz.,

Species diversity, which is reflected by morphological, physiological, and genetic features,

Genetic diversity, which comprises genetic or other variations within a species, and

Ecosystem diversity, which is reflected in diverse bio-geographic zones such as lakes, deserts, coasts, estuaries,

Etc.

7) What is meant by eutrophication?

Ans. Eutrophication is a process that leads to the destruction of the biotic life of water bodies due to the flow of rich effluents into the nutrient water bodies. This destroys or kills the animal and plant life by the deprivation of oxygen.

8) Give examples of few sanctuaries of the country.

Ans. Some important sanctuaries of the countries are:

Annalia Sanctuary (Tamil Nadu)

Jaldapara Sanctuary (West Bengal)

Keoladeo Ghana Bird Sanctuary (Rajasthan)

Sultanpur Lake Bird Sanctuary (Haryana)

Nagarjun Sagar Sanctuary (Andhra Pradesh)

Chilka Lake Bird Sanctuary (Orissa).

9) What kind of people the early humans were from an ecological point of view?

Ans. The early humans were hunters and gatherers. They may be called primitive. But they were not backward from the ecological point of view. Because their lifestyle was a successful adaptation to the call of nature given the knowledge and technology of life.

10) When and why did the mammals go extinct from the earth?

Ans. The prehistoric overkill by early humans in association with deterioration in climate has been recognized as the principal causes for the mammal extinction during the geological period of the Pleistocene, some 2 million years ago.

11) What purpose was behind the Wild Life (Protection) Act?

Ans. The Wild Life Act was passed by the Government of India in 1972. The purpose was to protect, preserve and propagate varied natural bounty. Therefore, several national parks and sanctuaries were established to serve this purpose. There are 66 national parks and 368 sanctuaries in India today.

12) What is the conservation of biodiversity?

Ans. Conservation means ‘preservation’ of bio-diversity. The goal of conservation strategy is to ensure that evolution continues allowing natural forces to maintain and evolve species. It will maintain gene pools and retain genetic traits that may prove valuable in the future. Conservation also includes future efforts to protect species and to prevent rare ones from extinction.

13) What is meant by ‘Green Revolution’?

Ans. Green Revolution is related to agricultural development in India. It came in the 1970s when due to the planned efforts of the government of India, new varieties of seeds, fertilizers, insecticides, and pesticides were introduced to the farmers. This resulted in surplus agricultural production, particularly of foodgrains like wheat and rice.

14) What are the different types of biodiversity?

Ans. The green revolution is the outcome of a new variety of seeds and fertilizers. It is also the source of air, water, and land pollution.

15) Describe the flora and fauna of deciduous forests.

Ans. The flora (vegetation) of deciduous forests comprises broad-leaved, hardwood trees such as oak, elm, birch, maple, and hickory.

The fauna includes frogs, salamanders, turtles, snakes, lizards, squirrels, rabbits, deer, bears, raccoons, foxes, and songbirds.

16) Discuss the human developments that led to a negative impact on the biotic resources of the earth in the modern period.

Ans. The modem period is the age of industry and urbanization. The population is growing enabled with more lands being cleared of their forests, more soils being filled to grow crops, and more areas being used to erect homes, construct roads, build parking lots, and all the activities that channel resources toward urban locations. The loss of soil, movement of nutrients, and contamination of the environment with tonic materials are syrup to make of the excessive use of energy and unchecked outputs. Virtually every urban and industrial activity has a negative impact on water quality. Industrial and urban sewerage contain hazardous substances and cause eutrophication, diminishing the quality of the freshwater system. Human manipulation of nature has resulted in fragmented and incomplete systems. All these developments have a negative impact on the biotic resources of the earth.

17) Distinguish between exploitation and conservation of forest.

Ans. Both the acts are related to human usage of forests as a resource and are contradictory to each other. Exploitation means the usage of forests by human beings in an unfair and selfish manner for one's own advantage or profit. On the contrary, conservation means the protection of forests. Here also man exploits the forest resources, but with a cautious effort, i.e. in such a manner that the evolution of species continues, preventing rare ones from extinction.

There are two levels of biodiversity. Genetic diversity comprises the genetic and related variations within the plant or animal species. It is concerned with their origin and evolution. On the other hand, species diversity is reflected by morphological and physiological features of the plant and animal species. It is related to the form and structure.

18) Distinguish between a National Park and a Sanctuary.

Ans. National Parks: A national park is an area that is strictly reserved for the betterment of the wildlife and where activities like presenting, grazing, or cultivation are not permitted. In these parks, ' even the private ownership rights are not allowed. There are 66 national parks in India. Some important national parks are Kaziranga National Park (Assam), Sunderbans (West Bengal), Hazaribagh National Park (Jharkhand), Corbett National Park (Uttaranchal).

Sanctuary: Some important sanctuaries of the countries are:

Annalia Sanctuary (Tamil Nadu)

Jaldapara Sanctuary (West Bengal)

Keoladeo Ghana Bird Sanctuary (Rajasthan)

Sultanpur Lake Bird Sanctuary (Haryana)

Nagarjun Sagar Sanctuary (Andhra Pradesh)

Chilka Lake Bird Sanctuary (Orissa).

19) Write a short note on the man-made ecosystems.

Ans. Humans have changed the environment to a far greater .p extent than any other species. In some instances, the modification is so profound that we call them man-made or artificial ecosystems. These are of variable stability and duration. Villages and cities, orchards and plantations, gardens and parks with their plants and animals are familiar; examples of the man-made terrestrial ecosystem. Large dams

and reservoirs, lakes, canals, small fishery, tanks, and aquarium are examples of the man-made aquatic ecosystem.

The most important man-made modifications in the biotic community came with the use of fire, cultivation of plants, and domestication of animals.

All man-made ecosystems including agro ecosystems are simpler and highly efficient. They lack the diversity of natural ecosystems. The consequence of diversity is stability. A simple system, on the other hand, is more vulnerable to sudden changes. A single crop agro system, for example, may be totally destroyed by drought, floods, diseases, pests, etc. A diversified system, on the other hand, has scope for many adjustments and substitutions.