

Very Short Answer Questions

Q.1. How many plant and animal species are approximately found in India?

Ans. Around 47,000 plant species and 89,000 of animal species are found in India.

Q.2. What does 'Natural Vegetation' mean?

Ans. Natural vegetation refers to a plant community which has grown naturally without human aid.

Q.3. What is 'Virgin Vegetation'?

Ans. The natural vegetation which has been left undisturbed by the humans for a long time is called Virgin Vegetation.

Q.4. What do you know about 'Flora' and 'Fauna'?

Ans. Flora: is the term used to denote plants of a particular region or period.

Fauna: The species of animals found in a particular region is reflected as fauna.

Q.5. What kind of land is suitable for natural vegetation?

Ans. The undulating and rough terrains are areas where grasslands and woodlands develop and give shelter to a variety of wild life.

Q.6. What kinds of soils are needed for natural vegetation?

Ans. The sandy soils of deserts support cactus and thorny bushes while wet, marshy deltaic regions support mangroves and deltaic vegetation and hill slopes with some depth soil have conical trees.

Q.7. Why are the western slopes of the western Ghats concerned with thick forests and not the eastern slopes?

Ans. On the western rainy slopes of the western Ghats, forests really appear as wet evergreen forests and thick as compared to eastern Ghats because eastern Ghats remain in rain shadow.

Q.8. Which factors are responsible for changes in India's natural vegetation?

Ans. Growing demand for cultivated land, development of industries and mining, urbanization and for grazing of pasture.

Q.9. How is an ecosystem formed?

Ans. All the plants and animals in an area are interdependent and interrelated to each other in their physical environment thus form an ecosystem.

Q.10. What are biomes?

Ans. A very large ecosystem on land having distinct types of vegetation and animal life is called a biome. The biomes are identified on the basis of plants.

Q.11. Which animals are found in Tropical Rain Forests?

Ans. Common animals found in these forests are elephants, monkeys, lemur and deer and One-horned rhinoceros.

Q.12. Name the commercially important trees of Tropical Rain Forests.

Ans. Ebony, mahogany, rosewood, rubber and cinchona are some of the commercially important trees of tropical rain forests.

Q.13. Give one important characteristic of Tropical deciduous forests.

Ans. Trees of these forest type shed their leaves for about six to eight weeks in dry summers.

Q.14. In which regions are moist deciduous forests found?

Ans. They are found in north eastern states, along the foothills of the Himalayas, Jharkhand, West Odisha, Chhattisgarh and on the eastern slopes of Western Ghats.

Q.15. What are the important species of moist deciduous forests?

Ans. Teak, bamboo, sal, shisham, sandalwood, khair, kusum, arjun and mulberry are some of the important species of moist deciduous forests.

Q.16. In which regions are dry deciduous forests found?

Ans. They are found in the rainy parts of the peninsular plateau and plains of Bihar and Uttar Pradesh.

Q.17. Name the important dry deciduous species.

Ans. Teak, sal, peepal, neem, are some important dry deciduous species.

Q.18. Name the important coniferous trees of temperate forests.

Ans. In temperate forests, coniferous trees like pine, deodar, silver tree, spruce and cedar are found.

Q.19. In which regions are Mangrove forests found?

Ans. They are found in the deltas of the Ganga, the Mahanadi, the Krishna, the Godavari and the Kaveri.

Q.20. What is the chief characteristic of Mangrove trees?

Ans. The chief characteristic is that Mangrove trees can survive both in salt water as well as fresh river water.

Q.21. What are the natural habitats of lion and tiger in India?

Ans. Gir Forests are the habitat of Indian lion and tigers which are existing in Madhya Pradesh, Sunderbans of West Bengal and the Himalayan Regions.

Q.22. Name some important birds found in India.

Ans. Some of the important birds of India are peacocks, pheasants, ducks, parakeets, cranes and pigeons.

Q.23. How many National Parks and Wild Life Sanctuaries are there in India?

Ans. There are 89 National Parks and 49 wild life sanctuaries in India.

Q.24. Which wild life projects are set up to save endangered species?

Ans. 'Project Tiger', 'Project Rhino' and 'Project Great Indian Bustard' are set up to save these endangered species.

Short Answer Questions

Q.1. Distinguish between Moist Deciduous and Dry Deciduous Forests.

Ans.

S.No.	Moist Deciduous Forests	Dry Deciduous Forests
(i)	They are found in areas where rainfall is between 100 to 200 cm.	They are found in areas of lower rainfall, i.e., 70 to 100 cm.
(ii)	They cover the eastern slopes of the Western Ghats, Shiwaliks, Chotanagpur plateau, etc.	They cover rainier parts of the Deccan plateau and the western Ganga plains.
(iii)	They provide better and more valuable timber.	They are less important for commercial exploitation.
	Examples: Teak and sal trees and bamboo, shisham and sandalwood	Examples: Sal is the most important tree and others are peepal and neem.

Q.2. State the main causes which are a threat to the ecosystem.

Ans. (i) Hunting and poaching by greedy hunters for commercial purpose and their profits.

(ii) Pollution due to chemical and industrial waste and acid deposits.

(iii) Introduction of alien species and reckless cutting of forests to bring land under cultivation.

(iv) People have inhabited the areas by clearing the forests. They are also responsible for the imbalance.

Q.3. How is India one of the twelve mega biodiversity countries of the world?

Ans. (i) With about 47,000 plant species, India occupies the tenth place in the world and fourth place in Asia in plant diversity.

(ii) There are about 15,000 flowering plants in India which account for 6 per cent of the world's total number of flowering plants.

(iii) India also has 89,000 species of animals and a rich variety of fish in its fresh and marine waters.

Q.4. How does soil factor affect the type of vegetation of a region?

Ans. (i) Soils also vary over space. Different types of soil provide basis for different types of vegetation.

(ii) The sandy soils of the desert support cactus and thorny bushes while wet, marshy, deltaic soils support mangroves and deltaic vegetation.

(iii) The hill slopes with some depth of soil have conical trees.

Q.5. What type of flora and fauna do we have in Tropical Rain forests?

Ans. (i) Some of the commercially important trees of this forest are ebony, mahogany, rosewood, rubber and cinchona.

(ii) The common animals found in these forests are elephants, monkey, lemur and deer.

(iii) The one-horned rhinoceroses are found in the jungles of Assam and West Bengal.

(iv) Besides these animals, plenty of birds, bats, sloth, scorpions and snails are also found in these jungles.

Q.6. Where are elephants and one-horned rhinoceros mainly found and why?

Ans. (i) The elephants are the most majestic animals among the mammals. They are found in the hot wet forests of Assam, Karnataka and Kerala. They prefer forested hilly areas, providing plenty of food and water for them throughout the year.

(ii) One-horned rhinoceroses live in swampy and marshy lands of Assam and West Bengal.

Q.7. Name any two endangered species of Indian wildlife and write one point each on Project Tiger and Project Rhino.

Ans. (i) Two endangered species are tiger and rhino.

(ii) Project Tiger has been a great success and is observed in Jim Corbett Park and West Bengal. With the help of this project, Indian wildlife department is able to save the number of tigers in India.

(iii) Project Rhino reserves are at Kaziranga and Manas National Park respectively. This one-horned rhino prefers to live in marshy lands of Assam and North-West Bengal.

Q.8. Which are the most widespread forests of India? Mention any two characteristic features of these forests.

Ans. The Tropical Deciduous forests are the most widespread forests in India—found in areas receiving 70 to 200 cms of rainfall.

(i) Trees of this type of forests shed their leaves for about six to eight weeks during the dry season.

(ii) The forests are further subdivided into moist and dry deciduous depending on the availability of water.

Long Answer Questions

Q.1. Why are forests important for human beings?

Ans. (i) Forests are renewable resources and play a major role in enhancing the quality of the environment.

(ii) They modify the local climate and control soil erosion.

(iii) They regulate the flow of streams and support a variety of industries like the rubber industry.

(iv) Forests also provide a livelihood for many communities.

(v) They also offer panoramic or scenic view for recreation.

(vi) They control the wind force and temperature and cause rainfall.

(vii) They provide humus to the soil and shelter to wildlife.

Q.2. What is an ecosystem? How do human beings influence the ecology of a region?

Ans. All plants and animals in an area are interdependent and interrelated to each other and their dependence on the environment is called an ecosystem.

Human beings influence the ecology of a region in the following ways:

(i) They utilise the vegetation and wildlife.

(ii) The greed of human beings leads to overutilisation of these resources.

(iii) They cut trees and kill animals, thereby creating an ecological imbalance.

(iv) As a result, some of the plants and animals have reached on the verge of extinction.

Q.3. What are the main characteristics of the Thorn Forests and Scrubs?

Ans. (i) In regions which receive less than 70 cm of rainfall, the natural vegetation consists of thorny trees.

(ii) This type of vegetation is found in the north-western part of the country including semi-arid areas of Gujarat, Rajasthan, Madhya Pradesh, Chhattisgarh, UP and Haryana.

(iii) Acacia, palms, euphorbias and cacti are the main plant species.

(iv) Trees are scattered and have long roots penetrating deep into the soil in order to get moisture.

(v) Leaves are mostly thick and small to minimise evaporation.

(vi) These forests give way to thorn forests and scrubs in arid areas.

(vii) In these forests, the common animals are rats, mice, rabbits, fox, wolf, tiger, lion, wild ass, horses and camels.

Q.4. Give a brief description of the Mangrove Forests.

Ans. (i) The mangrove tidal forests are found in the areas of coasts influenced by tides.

(ii) Dense mangroves are the common varieties with roots of plants submerged under water.

(iii) The deltas of the Ganga, the Mahanadi, the Kaveri and the Krishna are covered with such vegetation.

(iv) In the Ganga-Brahmaputra delta, Sundari trees are found which provide durable hard timber.

(v) Palm, coconut, keora, agar also grow in some parts of the delta.

(vi) The Royal Bengal Tiger is the most famous animal in these forests. Turtles, crocodiles, gharials and snakes are also found here.

Q.5. Give description of any five medicinal plants.

Ans. (i) Jamun: The juice from ripe fruit is used to prepare vinegar and it also has digestive properties. The powder of the seed is used for controlling diabetes.

(ii) Arjun: The fresh juice of leaves is a cure for ear-ache. It is also used to regulate blood pressure.

(iii) Babool: Its leaves are used as a cure for eyesores. Its gum is used as a tonic.

(iv) Neem: It has high antibiotic and anti-bacterial properties.

(v) Tulsi Plant: It is used to cure cough and cold.

Q.6. What steps have been taken by the government to protect the flora and fauna of the country?

Ans. Steps taken by the government to protect the flora and fauna are as follows:

(i) About fourteen biosphere reserves have been set up in the country to protect both flora and fauna. Four out of these—the Sunderbans (West Bengal), Nanda Devi (Uttarakhand), Gulf of Mannar (Tamil Nadu) and Nilgiris (Kerala, Karnataka and Tamil Nadu) have been included in the world network of Biosphere Reserves.

(ii) Since 1992, financial and technical assistance is being provided to many botanical gardens by the government.

(iii) Project Tiger, Project Rhino, Project Great Indian Bustard and many other eco-developmental projects have been introduced.

(iv) About 89 national parks, 49 wildlife sanctuaries and zoological gardens have been set up to take care of the natural heritage.

Q.7. What is the importance of various species in the ecosystem?

Ans. (i) We have selected various crops from the reserve of edible plants from a bio diverse environment.

(ii) We have also experimented and selected many medicinal plants.

(iii) There are animals who are milch animals. They provide us milk along with other milk products prepared by us.

(iv) They also provide us help during drought-prone season in cultivating and ploughing the fields.

(v) The fish is nutritive and provides rich proteins.

(vi) Many insects help in pollination of crops and fruit trees. So, every species has a role to play in the ecosystem.

HOTS (Higher Order Thinking Skills)

Q.1. Give an account of the distribution of Tropical Rain forests in India. Why are they commonly found in the Southern part of India?

Ans. (i) These forests are restricted to heavy rainfall.

(ii) They are at their best in areas having more than 200 cms rainfall with a short dry season.

(iii) Since the region is warm and wet throughout the year, it has luxuriant vegetation of all kinds— trees, shrubs and creepers giving it a multilayered structure.

(iv) The trees reach great heights upto 60 mts. or even above.

(v) There is no definite time for trees to shed their leaves.

(vi) As such, these forests appear green all the year round.

(vii) Some of the commercially important trees of these forests are ebony, Mohogany, rosewood, rubber and cinchona.

(viii) Common animals found in these forests are elephants, monkeys, lemur and deer.

Q.2. Our national bird is being pushed to the brink of extinction. What could be the cause for this major threat to our national bird?

Ans. (i) Our national bird is peacock and it is also being pushed to the brink of extinction.

(ii) One of the main cause for endangered bird peacock is poaching and hunting of the bird for the requirement of its beautiful multi-coloured feathers.

(iii) Due to the use of excessive fertilisers and pesticides, their food gets contaminated.

(iv) Indian govt. is unable to keep a check on the hunters as Wild Life Protection Act is not properly implemented.

Q.3. Suggest some ways that can put an end to the indiscriminate destruction of our wild life.

Ans. (i) It becomes foremost duty of the govt. to make Wild Life Protection Act more effective.

(ii) Indian govt. have set up about fourteen bioreserves to protect both flora and fauna.

(iii) Financial and Technical assistance is provided to many Botanical gardens by the govt. since 1992.

(iv) Project Tiger, Project Rhino, Project Great Indian Bustard and many other eco-developmental projects have been introduced.

(v) 89 National Parks, 490 Wildlife Sanctuaries and Zoological Gardens are set up.

(vi) Besides that all of us must realise the importance of the natural ecosystem for our own survival.

Q.4. When was the Wildlife Protection Act implemented in India? Name any four protected species of animals found in India.

Ans. First Wildlife Protection Act was passed and implemented in 1972.

Four protected species are:

(i) Lion

(ii) Tiger

(iii) One-horned Rhinoceros

(iv) Great Indian Bustard.