

Forest and Wildlife Resources

- Facts at Your Fingertips
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- Subjective Topicwise Question Bank
- Competency Based Questions



FACTS AT YOUR FINGERTIPS

- ➔ **Natural vegetation:** It refers to a Plant Community which has grown naturally. Forests (woodlands), grasslands etc. are its kind. It is also known as **virgin vegetation**.
- ➔ **Biodiversity or biological diversity:** It means diverse form of plants and animals which are closely integrated and are interdependent.
- ➔ **Factors responsible for decline in India's biodiversity:**
 - Habitat destruction
 - Hunting
 - Poaching
 - Environmental pollution
 - Poisoning
- ➔ **Flora and fauna:** Flora and Fauna are the plants and animals that are found within a certain area.
 - **Flora:** Plants of a particular region or period.
 - **Fauna:** The species of animals.
- ➔ **Flora and fauna in India:**
 - India is one of the world's richest countries in terms of vast array of biological diversity, and has nearly twice or thrice the number yet to be discovered.
 - At least 10 per cent of India's recorded wild flora and 20 per cent of its mammals are on the threatened list.
- Many are categorised as 'critical', that is on the verge of extinction like the Cheetah, Pink headed duck etc.
- ➔ **Factors that cause depletion of the flora and fauna are:**
 - Large-scale development projects
 - Shifting cultivation
 - Mining
 - Grazing and fuel-wood collection
 - Over-population
- ➔ **Causes of depletion of the flora and fauna:**
 - Human beings transformed nature into a resource obtaining directly and indirectly from the forests and wildlife, which depleted our forests and wildlife.
For example: wood, barks, leaves, rubber, medicines, dyes, food, fuel, fodder, manure, etc.
- ➔ **Ecosystem:** All the plants and animals in an area interdependent and interrelated to each other in their physical environment, thus forming an ecosystem. Human beings are also an integral part of the ecosystem.
- ➔ **Wildlife:** Wild animals living in the natural environment.

➔ **Conservation of Forest and Wildlife Resources in India:**

- (i) In the 1960s and 1970s, conservationists demanded a National Wildlife Protection Programme.
- (ii) The Indian Wildlife (Protection) Act was implemented in 1972, with various provisions for protecting habitats and later in 1980, 1986 and 1991 some other provisions were added.
- (iii) An all-India list of protected species was also published.
- (iv) The thrust of the programme was towards protecting the remaining population of certain endangered species by banning hunting, giving legal protection to their habitats, and restricting trade in wildlife.
- (v) Central and many State Governments established national parks and wildlife sanctuaries.
- (vi) The Central Government also announced several projects for protecting specific animals, which were gravely threatened, including the tiger, the onehorned rhinoceros, the Kashmir stag or hangul, three types of crocodiles—fresh water crocodile, saltwater crocodile and the *Gharial*, the Asiatic lion, and others. Most recently, the Indian elephant, black buck (*chinkara*), the great Indian bustard (*godawan*) and the snow leopard, etc. have been given full or partial legal protection against hunting and trade throughout India.

➔ **Wildlife Sanctuaries:** Natural forests where hunting and poaching of wild animals and birds is prohibited.

➔ **Distribution of forest and wildlife resources:** In India, much of its forest and wildlife resources are either owned or managed by the government through the Forest Department or other government departments.

➔ **Classification of Forest and Wildlife resources:**

- **Reserved forests:** These forests are regarded as the most valuable as far as the conservation of forests and wildlife resources is concerned. It covers half of the total forest land.
- **Protected forests:** These forest lands are protected from any further depletion. Almost one-third of the total forest area is covered by protected forests.
- **Unclassed forests:** These are the other forests and wastelands belonging to both government and private individuals and communities.

➔ **Communities and conservation:**

- The forests are also home to some of the traditional communities.
- Local communities are struggling to conserve these habitats along with government officials to secure their long-term livelihood.
- In Sariska Tiger Reserve, Rajasthan, villagers have fought against mining by citing the Wildlife Protection Act.
- The famous **Chipko Movement** in the Himalayas has successfully resisted deforestation in several areas.
- **Beej Bachao Andolan:** Farmers and citizens' groups like *Beej Bachao Andolan* in Tehri and *Navdanya* have shown that adequate levels of diversified crop production without the use of synthetic chemicals is possible and is economically viable.
- **Joint Forest Management (JFM):** This programme introduced in 1988 in the state of Odisha has shown good example for involving local communities in the management and restoration of degraded forests.



NCERT Exercise

GEOGRAPHY

1. Multiple choice questions:

(i) Which of the following conservation strategies do not directly involve community participation?

- (a) Joint Forest Management
- (b) *Beej Bachao Andolan*
- (c) Chipko Movement
- (d) Demarcation of Wildlife Sanctuaries

Ans. (i) (d) Demarcation of Wildlife Sanctuaries

2. Match the terms in column A with the correct terms in column B:

Column-A	Column-B
(a) Reserved forests	(i) Other forests and wasteland belonging to both government and private individuals and communities.
(b) Protected forests	(ii) Forests are regarded as most valuable as far as the conservation of forests and wildlife resources are concerned.
(c) Unclassed forests	(iii) Forest lands are protected from any further depletion.

Ans. (a)—(ii), (b)—(iii), (c)—(i)

3. Answer the following questions in about 30 words.

- (i) What is biodiversity? Why is biodiversity important for human lives?
- (ii) Write four major reasons for the depletion of *flora and fauna*.

Ans. (i) **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—(a) the quality of the air we breathe, (b) the water we drink and (c) 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 products which are used for varied purposes. So this biodiversity maintains an ecological balance and our life support systems (air, water and soil).

(ii) **Major reasons for the depletion of flora & fauna:**

- (a) Deforestation for agricultural purposes.

(b) Shifting cultivation which is still practiced in substantial parts of tribal belts.

(c) Large-scale development of river valley projects.

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

4. Answer the following questions in about 120 words.

(i) Describe how communities have conserved and protected forests and wildlife in India.

(ii) Write a note on good practices towards conserving forest and wildlife.

Ans. (i) **Three examples of community participation:**

(a) 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.

(b) The inhabitants of five villages in the Alwar District of Rajasthan have declared 1200 hectares of forests 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.

(c) 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.

(ii) **Good Practices/Steps taken for conservation of wildlife:**

(a) Setting up of National Parks.

(b) Many wildlife sanctuaries have been developed.

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

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

(e) Setting up of biosphere reserves for conserving flora and fauna in their natural surroundings.

(f) Protection of wetland ecosystems.



SUBJECTIVE TOPIC-1 Flora & Fauna in India

Short Answer Type Questions (SA-I) (Easy) (1 Mark)

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

Ans. **Animals and plants on the verge of extinction:**
Four animals. Cheetah, pink-headed duck, mountain quail, forest spotted owl.
Two plants. Wild mahua (*madhuca insignis*) and *hubbardia heptaneuron* (a species of grass).

2. When was the National Forest Policy introduced? What was its aim?

Ans. The National Forest Policy was introduced in 1988. Its main aim was to maintain ecological balance.

3. Name any *four* resources which are obtained from our biodiversity.

Ans. Wood, rubber, medicines and dyes.

Short Answer Type Questions (SA-II) (Average) (2-3 Marks)

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

Ans. (i) Habitat destruction
(ii) Over-exploitation
(iii) Environmental pollution
(iv) Forest fires
(v) Hunting and Poaching
(vi) Poisoning

5. Write *four* most important causes of environmental destruction/degradation.

Ans. (i) Unequal access to resources.
(ii) Inequitable consumption of resources.
(iii) Differential sharing of responsibility for environmental well being.
(vi) Over-population.

6. Why do we need to conserve our biodiversity?

Ans. Conservation of biodiversity is necessary because it preserves the ecological diversity and our life support systems, *i.e.*, water, air and soil. It also preserves the genetic diversity of plants and animals for better growth and breeding of species. Fisheries too are heavily dependent on the maintenance of aquatic biodiversity.

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

Ans. *Such losses have:*

- (i) Increasingly marginalised and impoverished many forest dependent communities.
- (ii) 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.
- (iii) The indirect impact of degradation, *for example*, drought or floods etc. also hits the poor the hardest.
- (iv) Poverty is a direct outcome of environmental destruction.

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

- Ans. (i) An All India list of protected species was published.
(ii) The thrust was on protecting the remaining population of certain endangered species by—(a) banning hunting; (b) giving legal protection to their habitats and (c) restricting trade in wildlife.

GEOGRAPHY



SUBJECTIVE TOPIC-2 Conservation of Forest and Wildlife in India

Long Answer Type Questions (LA) (Difficult) (5 Marks)

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

Ans. 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—(i) the quality of the air we breathe, (ii) the water we drink and (iii) 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).

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

- Ans. (i) 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—(a) banning hunting, (b) giving legal protection to their habitats and (c) restricting trade in wildlife.
- (ii) Many wildlife sanctuaries have been developed and National Parks have been set up.
- (iii) Many projects have been started for protecting specific animals which were gravely threatened, *For example*, Project Tiger, One-horned Rhino, the Kashmir Stag (*hangul*), three types of crocodiles—the fresh water, salt-water and *Gharials*, the Asiatic Lion, etc.
- (iv) Most recently, some animals have been given full or partial legal protection against hunting and trading throughout India, *For example*, Indian elephant, black buck, great Indian bustard and the snow leopard, etc.
- (v) 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.

11. Write a brief note on 'Project Tiger'.

- Ans. '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.

Related Concept

Project Tiger has been successful in increasing the population of the tigers. The number has increased from 1200 to around 5000.

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

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

- (i) Conservation of biodiversity is necessary because it preserves the ecological diversity.
- (ii) 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.
- (iii) 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.
- (iv) Fisheries too are heavily dependent on the maintenance of aquatic biodiversity.
- (v) 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.



SUBJECTIVE TOPIC-3

Types and Distribution of Forest & Wildlife Resources

Short Answer Type Questions (SA-II) (Average) (2-3 Marks)

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

Ans. 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

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.

Ans. 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.



SUBJECTIVE TOPIC-4

Community & Conservation

Short Answer Type Questions (SA-II) (Average) (2-3 Marks)

15. Name five states which have large reserved and protected forests respectively.

Ans. Five states having large percentages of reserved forests are: Jammu and Kashmir, Andhra Pradesh, Uttarakhand, Kerala, Tamil Nadu, West Bengal and Maharashtra.

Protected forests: Bihar, Haryana, Punjab, Himachal Pradesh, Orissa and Rajasthan.

16. Write the major differences between reserved and protected forests.

Ans. Difference between Reserved and Protected forests:

Reserved forests	Protected forests
(i) They cover more than half of the total forest area.	(i) Almost 1/3 of the total forest area is protected forest.
(ii) They are most valuable from the point of view of forest and wildlife conservation.	(ii) These forest lands are protected from any further depletion.

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

Ans. Unclassified 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 unclassified forests are: North-Eastern states and parts of Gujarat.

18. '33% of area should be under forests.' Justify the statement highlighting the environmental values of forests.

Ans. 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.

19. Explain the 'Beej Bachao Andolan' and 'Navdanya' concept.

Ans. Farmers and Citizens' groups like the *Beej Bachao Andolan* in Tehri and *Navdanya* have shown that adequate levels of diversified crop production without the use of synthetic chemicals are possible and economically viable.

20. Write three examples of conservation of biodiversity at community level. (2015)

Ans. Three examples of community participation:

(i) 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.

(ii) 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..

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

21. Write two characteristics of Joint Forest Management Programme and its two benefits for the community. Which Indian state started this programme first of all and when?

Ans. Joint Forest Management Programme involves local communities in the management and restoration of degraded forests. It was first started in Odisha in 1988.

Two characteristics: It depends on—(i) the formation of local (village) institutions that undertake protection activities mostly on degraded forest land managed by the Forest Department and (ii) the local communities also work towards restoration of such degraded forests.

Two benefits:

(i) The members of these communities are entitled to intermediary benefits like non-timber forest products.

(ii) They are also entitled to share in the timber harvested by 'successful protection'.





2024 CBSE BOARD EXAMINATION

Questions

GEOGRAPHY

— 2024 (Series: AB3CD/1) Set-I —

- Q.22. (a) Suggest any **two** measures for the conservation of forests. **2**
 Or, (b) Suggest any **two** measures for the conservation of wildlife. **2**

— 2024 (Series: AAB1/3) Set-I —

- Q.34. Read the following source and answer the questions that follow: **4**

Sacred Groves—A wealth of diverse and rare species

Nature worship is an age old tribal belief based on the premise that all creations of nature have to be protected. Such beliefs have preserved several virgin forests in pristine form called Sacred Groves (the forests of Gods and Goddesses). These patches of forests or parts of large forests have been left untouched by the local people and any interference with them is banned.

Certain societies revere a particular tree which they have preserved from time immemorial. The Mundas and the Santhal of Chota Nagpur region

worship mahua (*Bassia latifolia*) and kadamba (*Anthocaphalus cadamba*) trees, and the tribals of Odisha and Bihar worship the tamarind (*Tamarindus indica*) and mango (*Mangifera indica*) trees during weddings. To many of us, peepal and banyan trees are considered sacred.

Indian society comprises several cultures, each with its own set of traditional methods of conserving nature and its creations. Sacred qualities are often ascribed to springs, mountain peaks, plants and animals which are closely protected. You will find troops of macaques and langurs around many temples. They are fed daily and treated as a part of temple devotees. In and around Bishnoi villages in Rajasthan, herds of blackbuck, (chinkara), nilgai and peacocks can be seen as an integral part of the community and nobody harms them.

- 35.1 'How does sacred groves relate to the belief in nature worship? **1**
 35.2 How do communities incorporate trees into their cultural practices? Explain with example. **1**
 35.3 Explain the cultural values that contribute to the coexistence of nature. **2**



SCAN ME!
FOR ANSWERS



Competency Based Questions

Stand Alone Multiple Choice Questions

1
mark

- Which one of the following is not considered a sacred tree in India?
(a) Peepal (b) Neem
(c) Banyan (d) Mango
- What was the aim of Chipko Movement?
(a) Human rights (b) Forest conservation
(c) Political rights (d) Agricultural expansion
- The Mundas and Santhals of Chhotanagpur region worship which one of the following trees?
(a) Mahua (b) Mango
(c) Peepal (d) Tamarind
- Project Tiger was launched in
(a) 1970 (b) 1972
(c) 1971 (d) 1973
- Teak monoculture has damaged the natural forests in:
(a) Ganga Plain (b) South India
(c) Brahmaputra Plain (d) None of the above
- How many tiger reserves are there in India?
(a) 10 (b) 15 (c) 27 (d) 29
- India has nearly percent of total number of species in the world
(a) 5 (b) 10 (c) 8 (d) 2
- How many species of flora are found in India?
(a) 81000 (b) 47000
(c) 15000 (d) 41000
- Sariska wildlife sanctuary is located in:
(a) Rajasthan (b) Uttar Pradesh
(c) Gujarat (d) West Bengal
- Which one of the following states has the largest area under permanent forests?
(a) Bihar (b) Kerala
(c) Madhya Pradesh (d) Uttar Pradesh
- Forests and wastelands belonging to both private individuals and government are known as:
(a) Sacred groves (b) Reserved forest
(c) Protected forests (d) Unclassed forests
- In which of the following states, a very high percentage of its forests is managed by local communities?
(a) Andhra Pradesh (b) Arunachal Pradesh
(c) Himachal Pradesh (d) Jammu and Kashmir
- Cleaning of forests is still continuing in Madhya Pradesh mainly due to which of the following reasons?

- (a) Dolomite mining
(b) Commercial plantations
(c) Industrialisation and urbanisation
(d) Narmada Sagar (River Valley) Project

- The mangrove forest of Gangetic delta is called
(a) Sholan (b) Evergreen forest
(c) Sunderbans forest (d) Kalibans
- The Indian Wildlife (Protection) Act was informed in—
(a) 1971 (b) 1972 (c) 1982 (d) 1981

Assertion-Reason Questions

1
mark

DIRECTION: There are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option:

- (a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
(b) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
(c) Assertion is true but Reason is false.
(d) Both Assertion and Reason are false.
1. Assertion. Forests play a key role in the ecological system.
Reason. Forests are the primary producers on which all other living beings depend.
2. Assertion. Negligence of our environment has led to the destruction and extinction of many species of animals and plant life.
Reason. Decreasing forest cover area is a major reason of destruction of species.
3. Assertion. Depletion of forests causes a lot of danger.
Reason. Forests are vital for the quality of life and environment.
4. Assertion. Large-scale development projects have also contributed significantly to the loss of forests.
Reason. Large scale development projects doesn't inundate hectares of forest.
5. Assertion. We need to conserve our forests and wildlife.
Reason. Rapid decline in wildlife population and forestry has been observed.
6. Assertion. Tiger population is not on the verge of extinction.
Reason. Tiger population in forests is increasing rapidly day by day.

GEOGRAPHY

7. **Assertion.** Destruction of forests and wildlife resulted into the loss of cultural diversity.
Reason. The conservation of forests and wildlife is essential to provide a better quality of life.
8. **Assertion.** The tree is a peculiar organism of unlimited kindness.
Reason. Trees are living organisms which makes no demands for its sustenance, and extends generously the products of its life activity.

Match the Columns

1 mark

1.	Column-A	Column-B
	(a) Jim Corbett National Park	(i) Madhya Pradesh
	(b) Sunderban National Park	(ii) Kerala
	(c) Bandhavgarh National Park	(iii) West Bengal
	(d) Periyar Tiger Reserve	(iv) Rajasthan
	(e) Sariska Wildlife Sanctuary	(v) Uttarakhand

2.	Column-A	Column-B
	(a) Reserved forests	(i) These 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 the conservation of forests and wildlife resources are concerned.
	(c) Unclassed forests	(iii) Forests lands are protected from any further depletion.

Case/Source Based Questions

4-5 marks

I. Conservation in the background of rapid decline in wildlife population and forestry has become essential. Conservation 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. *For example*, in agriculture, we are still dependent on traditional crop varieties. Fisheries too are heavily dependent on the maintenance of aquatic biodiversity. In the 1960s and 1970s, conservationists demanded a national wildlife protection programme. The Indian Wildlife (Protection) Act was implemented in 1972, with various provisions for protecting habitats.

Answer the following MCQs by choosing the most appropriate options:

- Which of the following provision was made by "The Indian Wildlife (Protection) Act 1972" for protecting habitats?
 - Banning hunting
 - Giving legal protection to the habitat
 - Restricting trade in wildlife
 - All of the above

- We need to conserve our forests and wildlife:
 - to preserve the ecological diversity
 - to preserve the genetic diversity
 - for maintenance of aquatic biodiversity
 - Both (a) & (b)

- Government has started various projects for protecting specific animals. These are:
 - Tiger and Asiatic lion
 - One-horned rhino and the Kashmir stag (*hangul*)
 - Three types of crocodiles—fresh-water, salt-water and *Gharial*
 - All the above

II. Even if we want to conserve our vast forest and wildlife resources, it is rather difficult to manage, control and regulate them. In India, much of its forest and wildlife resources are either owned or managed by the government through the Forest Department or other government departments.

Answer the following MCQs by choosing the most appropriate options:

- Which agency manages forests in India?
 - Private sector
 - Public sector
 - Government through the Forest Department
 - Both Public and Private Sector
- Reserve and protected forests are also known as

- (a) Unclassed forest (b) Open forest
 (c) Mangrove forest (d) Permanent forest Estate
6. Which state has maximum forest cover falling under permanent forest? What is the percentage share in the total forest area of this state?
 (a) Kerala; 35% (b) Madhya Pradesh; 75%
 (c) Rajasthan; 25% (d) Uttarakhand; 75%

III. Nature worship is an age old tribal belief based on the premise that all creations of nature have to be protected. Such beliefs have preserved several virgin forests in pristine form called Sacred Groves (the forests of God and Goddesses). These patches of forest or parts of large forests have been left untouched by the local people and any interference with them is banned. Indian society comprises several cultures, each with its own set of traditional methods of conserving nature and its creations. Sacred qualities are often ascribed to springs, mountain peaks, plants and animals which are closely protected. You will find troops of macaques and langurs around many temples. They are fed daily and treated as a part of temple devotees. In and around *Bishnoi* villages in Rajasthan, herds of black buck (*chinkara*), *nilgai* and peacocks can be seen as an integral part of the community and nobody harms them.

Answer the following MCQs by choosing the most appropriate options:

7. Sacred Groves are:
 (a) parts of large forests that have been left untouched by the local people.
 (b) places for grazing animals.
 (c) forests earmarked for commercial felling of trees.
 (d) forests used for planting trees with medicinal properties.
8. Tribes of and worship the tamarind and mango trees during weddings.
 (a) Bihar and UP (b) Punjab and Gujarat
 (c) Bihar and Odisha (d) Odisha and Kerala
9. How are the sacred groves treated?
 (a) Only the villagers can use them.
 (b) They are left untouched by the local people.
 (c) They are under government control.
 (d) Local communities take care of them.

IV. Conservation strategies are not new in our country. We often ignore that in India, forests are also home to some of the traditional communities. In some areas of India, local communities are struggling to conserve these habitats along with government officials, recognising that only this will secure their own long-term livelihood. 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. The inhabitants of five villages in the Alwar district of Rajasthan have declared 1,200 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.

Answer the following MCQs by choosing the most appropriate options:

10. Which of the following conservation strategies do not directly involve community participation?
 (a) Joint forest management
 (b) Beej Bachao Andolan
 (c) Chipko Movement
 (d) Demarcation of Wildlife Sanctuaries
11. Which state passed the first resolution for joint forest management and when did it come into existence.
 (a) Madhya Pradesh, 1987 (b) Odisha, 1988
 (c) Himachal Pradesh, 1977 (d) Karnataka, 1987
12. JFM depends on the formation of that undertake protection activities mostly on degraded forest land managed by the forest department.
 (a) State managed institutions
 (b) District level institutions
 (c) local (village) institutions
 (d) National bodies

V. Read the given source and answer the questions that follow: (2023)

COMMUNITY AND CONSERVATION

Conservation strategies are not new in our country. We often ignore that in India, forests are also home to some of the traditional communities. In some areas of India, local communities are struggling to conserve these habitats along with government officials, recognising that only this will secure their own long-term livelihood. 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. The inhabitants of five villages in the Alwar district of Rajasthan have declared 1,200 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.

13. How are forests related with Communities?
 14. Explain the aim of 'Wildlife Protection Act.'
 15. How are communities working for the conservation of wildlife? Explain with example.



Stand Alone Multiple Choice Answers

1. (b) 2. (b) 3. (a) 4. (d) 5. (b)
6. (c) 7. (b) 8. (b) 9. (a) 10. (c)
11. (d) 12. (b) 13. (b) 14. (c) 15. (b)

Assertion-Reason Answers

- (a) Both assertion and reason are true and reason is the correct explanation of assertion.**
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. Thus, we are very much dependent on this system for our own existence.
- (a) Both assertion and reason are true and reason is the correct explanation of assertion.**
Vanishing forests are the major reason for the extinction of species of animals and plant life. Thus, neglecting our environment has led to direct consequences.
- (a) Both assertion and reason are true and reason is the correct explanation of assertion.**
Depletion of forests causes a lot of danger. Water scarcity, drought and deforestation induced floods are some of the dangers. Thus, forests are vital for the quality of life and environment.
- (a) Both assertion and reason are true and reason is the correct explanation of assertion.**
Clearing of forests is still continuing with projects like the Narmada Sagar Project in Madhya Pradesh which would inundate large areas of forests. Thus, contributing significantly to the loss of forests.
- (a) Both assertion and reason are true and reason is the correct explanation of assertion.**
Conservation preserves the ecological diversity and our life support systems and also preserves the genetic diversity of plants and animals for better growth of species and breeding. Thus, there is a direct need for conservation of our forests and wildlife.
- (d) Both assertion and reason are false.**
Tiger population is on the verge of extinction and the major threats to tiger population are numerous, such as poaching for trade, shrinking habitat, depletion of prey base species, growing human population, etc.

- (b) Both assertion and reason are true but reason is not the correct explanation of assertion.**
The destruction of forests and wildlife has affected the livelihood of many communities who are dependent on forests. Thus, resulting in loss of cultural diversity and severe droughts and floods. However the reason does not explain the assertion.
- (a) Both assertion and reason are true and reason is the correct explanation of assertion.**
It offers protection to all beings, offering shade even to the axe men who destroy it. Therefore, the tree is an organism of unlimited kindness that extends generosity to humanity.

Match the Columns

- (a)–(v); (b)–(iii); (c)–(i); (d)–(ii); (e)–(iv)
- (a)–(ii); (b)–(iii); (c)–(i)

Case/Source Based Answers

1. (d) 2. (d) 3. (d)
 4. (c) 5. (d) 6. (b)
 7. (a) 8. (c) 9. (b)
 10. (d) 11. (b) 12. (c)
13. In India forests are home to some of the traditional communities. Local communities conserved these habitats to secure their own long-term livelihood.
 14. Under the Indian Wildlife Protection Act 1972, an All India list of protected species was published. The aim was to protect the remaining population of certain endangered species by: (a) banning hunting (b) giving legal protection to their habitats and (c) restricting trade in wildlife.
 15. (i) In Sariska Tiger Reserve, Rajasthan villagers have fought against mining by citing the Wildlife Protection Act.
(ii) The inhabitants of five villages in the Alwar district of Rajasthan have declared 1,200 hectares of forests as Bhairodev Dakav 'Sonchuri' declaring their own set of rules and regulation which do not allow hunting and protect wildlife against outside encroachments.

DO IT YOURSELF...

Short Answer Type Questions

- Q.1. Name the primary producers of the ecological system on which all other living beings depend. 1
- Q.2. Write any **one** cause of damage to the Indian forests during colonial period. 1
- Q.3. Why Fuel-Fodder demand is partially responsible for depletion of forest resources? 1
- Q.4. What is ecological imbalance? 1
- Q.5. Write any **one** use of Forests and wildlife to us. 1
- Q.6. What is deforestation? 1
- Q.7. What is afforestation? 1

Long Answer Type Questions

- Q.8. In what ways the forests were harmed by the colonial government? 5

- Q.9. Distinguish between reserved and protected forests. 5
- Q.10. Name any **two** North-Eastern States of India having over 60 per cent of Forest cover. Give **two** reasons. 5
- Q.11. How do human beings influence the ecology of a region? 5
- Q.12. Which are the **three** types/categories of forest and wildlife resources classified by the forest department? Explain. 5
- Q.13. Suggest some ways that can put an end to the indiscriminate destruction of our wildlife? 5
- Q.14. Classify Indian forests into three categories. Write the main feature of each. 5
- Q.15. Explain any **five** main causes of depletion of forests in India since independence. 5



For Answers
please SCAN

