



## Day 21

 [drishtiias.com/printpdf/day-21](https://drishtiias.com/printpdf/day-21)

### Environment: Pollution and Climate Change

---

Every year several questions are asked from the topics of environment and biodiversity. The scope of questions that can come from this topic is very broad. However, by analysing the previous year questions it can be depicted that a lot of times questions are asked on those events which have remained in news. Thus, we have picked some current affairs for this type of questions.

### Ecosystem and Ecology

---

#### Previous Year Questions on Ecosystem and Ecology

---

Q. Which one of the following is the best description of the term 'ecosystem'? (2015)

- (a) A community of organisms interacting with one another
  - (b) That part of the Earth which is inhabited by living organisms
  - (c) A community of organisms together with the environment in which they live**
  - (d) The flora and fauna of a geographical area
- 

Q. Which of the following leaf modifications occur(s) in the desert areas to inhibit water loss? (2018)

1. Hard and waxy leaves
2. Tiny leaves
3. Thorns instead of leaves

Select the correct answer using the code given below:

(a) 2 and 3 only

(b) 2 only

(c) 3 only

**(d) 1, 2 and 3**

---

Q. Which of the following statements best describes “carbon fertilization”? (2018)

**(a) Increased plant growth due to increased concentration of carbon dioxide in the atmosphere.**

(b) Increased temperature of Earth due to increased concentration of carbon dioxide in the atmosphere.

(c) Increased acidity of oceans as a result of increased concentration of carbon dioxide in the atmosphere.

(d) Adaptation of all living beings on Earth to the climate change brought about by the increased concentration of carbon dioxide in the atmosphere.

---

Q. Consider the following: (2018)

1. Birds
2. Dust blowing
3. Rain
4. Wind blowing

Which of the above spread plant diseases?

(a) 1 and 3 only

(b) 3 and 4 only

(c) 1, 2 and 4 only

**(d) 1, 2, 3 and 4**

---

Q. The FAO accords the status of ‘Globally Important Agricultural Heritage System (GIAHS)’ to traditional agricultural systems. What is the overall goal of this initiative? (2016)

1. To provide modern technology, training in modern farming methods and financial support to local communities of identified GIAHS so as to greatly enhance their agricultural productivity.
2. To identify and safeguard eco-friendly traditional farm practices and their associated landscapes, agricultural biodiversity and knowledge systems of the local communities.
3. To provide Geographical Indication status to all the varieties of agricultural produce in such identified GIAHS.

Select the correct answer using the code given below:

(a) 1 and 3 only

**(b) 2 only**

(c) 2 and 3 only

(d) 1, 2 and 3

---

## **Biodiversity and Conservation Efforts**

---

- **Importance of Tiger Conservation**
- **Tiger Census 2018: Guinness Book of World Records**
- **Dhole Conservation**
- **Concerns Over Drilling in Dibru-Saikhowa National Park**
- **Golden Birdwing: India's Largest Butterfly**
- **Gynandromorphism**
- **Biosphere Reserves in India**
- **Agrobiodiversity for India**
- **Invasive Weeds Threatening Tiger Habitats**
- **Gangetic Dolphin Annual Census**
- **International Day for Biodiversity**
- **In Depth – Biodiversity: Warning Bells**
- **6<sup>th</sup> National Report to CBD**

---

## **Previous Year Questions on Biodiversity and Conservation Efforts**

---

Q. With reference to the circumstances in Indian agriculture, the concept of “Conservation Agriculture” assumes significance. Which of the following fall under Conservation Agriculture? (2018)

1. Avoiding the monoculture practices
2. Adopting minimum tillage.

3. Avoiding the cultivation of plantation crops
4. Using crop residues to cover soil surface
5. Adopting spatial and temporal crop sequencing/crop rotations

Select the correct answer using the code given below:

- (a) 1, 3 and 4
  - (b) 2, 3, 4 and 5
  - (c) 2, 4 and 5**
  - (d) 1, 2, 3 and 5
- 

Q. In which one of the following States is Pakhui Wildlife Sanctuary located? (2018)

- (a) Arunachal Pradesh**
  - (b) Manipur
  - (c) Meghalaya
  - (d) Nagaland
- 

Q. Consider the following statements: (2018)

1. The definition of “Critical Wildlife Habitat” is incorporated in the Forest Rights Act, 2006.
2. For the first time in India, Baigas have been given Habitat Rights.
3. Union Ministry of Environment, Forest and Climate Change officially decides and declares Habitat Rights for Primitive and Vulnerable Tribal Groups in any part of India.

Which of the statements given above is/are correct?

- (a) 1 and 2 only**
  - (b) 2 and 3 only
  - (c) 3 only
  - (d) 1, 2 and 3
-

Q. Recently there was a proposal to translocate some of the lions from their natural habitat in Gujarat to which one of the following sites? (2017)

(a) Corbett National Park

**(b) Kuno Palpur Wildlife Sanctuary**

(c) Mudumalai Wildlife Sanctuary

(d) Sariska National Park

---

Q. In India, if a species of tortoise is declared protected under Schedule I of the Wildlife (Protection) Act, 1972, what does it imply? (2017)

**(a) It enjoys the same level of protection as the tiger.**

(b) It no longer exists in the wild, a few individuals are under captive protection; and now it is impossible to prevent its extinction.

(c) It is endemic to a particular region of India.

(d) Both (b) and (c) stated above are correct in this context.

---

Q. Which of the following National Parks is unique in being a swamp with floating vegetation that supports a rich biodiversity? (2015)

(a) Bhitarkanika National Park

**(b) Keibul Lamjao National Park**

(c) Keoladeo Ghana National Park

(d) Sultanpur National Park

## **Environmental Pollution**

---

- **High Level of Ammonia in Yamuna**
- **Decrease in Dolphin Number: Chambal River**
- **Anthropause Period**
- **Antibiotics- Contaminating the Rivers**
- **Plastic Waste**
- **Plastic invading Nicobar Islands**
- **Marine Pollution**
- **Environmental Impact of Dams**

- Aegean Sea Litter

## Previous Year Questions on Environmental Pollution

---

Q. Which of the following is/are the possible consequence/s of heavy sand mining in riverbeds? (2018)

1. Decreased salinity in the river
2. Pollution of groundwater
3. Lowering of the water-table

Select the correct answer using the code given below.

(a) 1 only

**(b) 2 and 3 only**

(c) 1 and 3 only

(d) 1, 2 and 3

---

Q. The term “sixth mass extinction/sixth extinction” is often mentioned in the news in the context of the discussion of (2018)

(a) Widespread monoculture practices in agriculture and large-scale commercial farming with indiscriminate use of chemicals in many parts of the world that may result in the loss of good native ecosystems.

(b) Fears of a possible collision of a meteorite with the Earth in the near future in the manner it happened 65 million years ago that caused the mass extinction of many species including those of dinosaurs.

(c) Large scale cultivation of genetically modified crops in many parts of the world and promoting their cultivation in other parts of the world which may cause the disappearance of good native crop plants and the loss of food biodiversity.

**(d) Mankind’s over-exploitation/misuse of natural resources, fragmentation/loss of natural habitats, destruction of ecosystems, pollution and global climate change.**

---

Q. Biological Oxygen Demand (BOD) is a standard criterion for (2017)

(a) Measuring oxygen levels in blood

(b) Computing oxygen levels in forest ecosystems

**(c) Pollution assay in aquatic ecosystems**

(d) Assessing oxygen levels in high altitude regions

---

Q. With reference to agricultural soils, consider the following statements: (2018)

1. A high content of organic matter in soil drastically reduces its water holding capacity.
2. Soil does not play any role in the sulphur cycle.
3. Irrigation over a period of time can contribute to the salinization of some agricultural lands.

Which of the statements given above is/are correct?

(a) 1 and 2 only

**(b) 3 only**

(c) 1 and 3 only

(d) 1, 2 and 3

---

Q. In the context of mitigating the impending global warming due to anthropogenic emissions of carbon dioxide, which of the following can be the potential sites for carbon sequestration? (2017)

1. Abandoned and uneconomic coal seams
2. Depleted oil and gas reservoirs
3. Subterranean deep saline formations

Select the correct answer using the code given below:

(a) 1 and 2 only

(b) 3 only

(c) 1 and 3 only

**(d) 1, 2 and 3**

## **Climate Change**

---

- **Forest Fires**

- Land Use Changes
- Sixth Mass Extinction
- Aboriginals and Climate Change
- Climate Change and Land
- Cape Verde Turtles and Climate Change
- In Depth – Melting Himalayas

### Previous Year Topic on Climate Change

---

Q. Which of the following has/have shrunk immensely/dried up in the recent past due to human activities? (2018)

1. Aral Sea
2. Black Sea
3. Lake Baikal

Select the correct answer using the code given below:

**(a) 1 only**

(b) 2 and 3

(c) 2 only

(d) 1 and 3

---

Q. Which of the following best describes/describe the aim of 'Green India Mission' of the Government of India? (2016)

1. Incorporating environmental benefits and costs into the Union and State Budgets thereby implementing the 'green accounting'.
2. Launching the second green revolution to enhance agricultural output so as to ensure food security to one and all in the future.
3. Restoring and enhancing forest cover and responding to climate change by a combination of adaptation and mitigation measures.

Select the correct answer using the code given below.

(a) 1 only

(b) 2 and 3 only

**(c) 3 only**

(d) 1, 2 and 3



---

Q.Which of the following are the key features of ‘National Ganga River Basin Authority (NGRBA)’? (2016)

1. River basin is the unit of planning and management.
2. It spearheads the river conservation efforts at the national level.
3. One of the Chief Ministers of the States through which the Ganga flows becomes the Chairman of NGRBA on rotation basis.

Select the correct answer using the code given below:

**(a) 1 and 2 only**

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

---

Q. Due to their extensive rice cultivation, some regions may be contributing to global warming. To what possible reason/reasons is this attributable? (2010)

1. The anaerobic conditions associated with rice cultivation cause the emission of methane.
2. When nitrogen based fertilizers are used, nitrous oxide is emitted from the cultivated soil.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

**(c) Both 1 and 2**

(d) Neither 1 nor 2

## **Important Miscellaneous Topics**

---

### **Previous Year Questions**

---

Q.Where is the headquarters of Animal Welfare Board of India located? (2009)

(a) Ahmedabad

**(b) Chennai**

(c) Hyderabad

(d) Kolkata

---

Q. Three of the following criteria have contributed to the recognition of Western Ghats, Sri Lanka and Indo-Burma regions as hot-spots of biodiversity: (2011)

1. Species richness
2. Vegetation density
3. Endemism
4. Ethno-botanical importance
5. Threat perception
6. Adaption of flora and fauna to warm and humid conditions

Which three of the above are correct criteria in this context?

(a) 1, 2 and 6

(b) 2, 4 and 6

**(c) 1, 3 and 5**

(d) 3, 4 and 6

---

Q. Consider the following statements: (2010)

1. The Taxus tree naturally found in the Himalayas.
2. The Taxus tree is listed in the Red Data Book.
3. A drug called "taxol" is obtained from Taxus tree is effective against Parkinson's disease

Which of the statements given above is/are correct?

(a) 1 only

**(b) 1 and 2 only**

(c) 2 and 3 only

(d) 1, 2 and 3

---

Q. Consider the following pairs: (2010)

<b>Protected area</b>	<b>Well-known for</b>
1. Bhitarkanika, Orissa	: Salt Water Crocodile
2. Desert National Park, Rajasthan	: Great Indian Bustard
3. Eravikulam, Kerala	: Hoolak Gibbon

Which of the pairs given above is/are correctly matched?

(a) 1 only

**(b) 1 and 2 only**

(c) 2 only

(d) 1, 2 and 3