

## GS-3 ENVIRONMENT and ECOLOGY

- Approximately 40-50 marks for mains – 4 questions
- Approximately 20-25 marks for prelims – 10-12 questions on average
- application based Question and we need to answer with awareness and alertness

x/y	2022	2021	2020	2019	2018	2017	2016	2015	2014
Prelims	14	19	16	11	13	11	18	10	17
mains	50	40	60	30	50	30	40	30	30

### GS-3 ENVIRONMENT QUESTIONS (YEAR-WISE)

#### 2022-BIODIVERSITY AND ENVIRONMENT QUESTIONS

1. Discuss the details the **Photochemical smog** emphasise it's formation, effects and litigation. Explain the 1999 Gothenburg protocol
2. Explain the mechanism and occurrence of **cloud burst** in the context of the indian subcontinent discuss two recent examples
3. Discuss the **global warming** and mention it's effects on the global climate. Explain the control measures to bring down the level of greenhouse gases which cause global warming, in the light of the kyoto protocol 1997
4. Explain the cause and effects of **coastal erosion in India**. What are the available coastal management techniques for combating the hazard

#### 2021 – BIODIVERSITY AND ENVIRONMENT QUESTIONS

1. Explain the purpose of Green Grid Initiative launched at the World Leaders Summit of **COP26 UN Climate Change** Conference in Glasglow in November 2021. When was the idea first floated in the International Solar Alliance (ISA)? (Answer in 150 words)
2. Describe the key points of the revived **Global Air Quality Guidelines** (AQGs) recently released by the World Health Organisation (WHO). How are these different from its last update in 2005? What changes in India's National Clean Air Programme are required to achieve these revised standards?

3. Describe the major outcomes of the 26th session of the Conference of the Parties (COP) to **the United Nations Framework Convention on Climate Change (UNFCCC)**. What are the commitments made by India in this conference? (Answer in 250 words)

## 2020-BIODIVERSITY AND ENVIRONMENT QUESTIONS

1. How does the **draft Environment Impact Assessment (EIA)** Notification, 2020 differ from the existing EIA Notification, 2006?
2. What are the salient features of the Jal Shakti Abhiyan launched by the Government of India for **water conservation and water security**?
3. Suggest measures to improve water storage and irrigation system to make its judicious use under the depleting scenario.
4. Describe the benefits of **deriving electric energy from sunlight** in contrast to conventional energy generation. What are the initiatives offered by our Government for this purpose?
5. What are the key features of the **National Clean Air Programme (NCAP)** initiated by the Government of India?

## 2019-BIODIVERSITY AND ENVIRONMENT QUESTIONS

1. **Coastal sand mining**, whether legal or illegal, poses one of the biggest threats to our environment. Analyze the impact of sand mining along the Indians coasts, citing specific examples.
2. Define the concept of **carrying capacity of an ecosystem** as relevant to an environment. Explain how understanding this concept is vital while planning for the sustainable development of a region.

## 2018-BIODIVERSITY AND ENVIRONMENT QUESTIONS

1. What are the impediments in disposing of the huge quantities of discarded **solid wastes** which are continuously being generated? How do we remove safely the toxic wastes that have been accumulating in our habitable environment?
2. **What is a wetland?** Explain the Ramsar concept of 'wise use' in the context of wetland conservation. Cite two examples of Ramsar sites from India.

3. Sikkim is the first '**Organic State**' in India. What are the ecological and economical benefits of an Organic State?
4. How does biodiversity vary in India? How is the **Biological Diversity Act,2002** helpful in the conservation of flora and fauna?

## 2017-BIODIVERSITY AND ENVIRONMENT QUESTIONS

1. Not many years ago, **river linking** was a concept but it is becoming a reality in the country. Discuss the advantages of river linking and its possible impact on the environment.
2. '**Climate Change**' is a global problem. How will India be affected by climate change? How Himalayan and coastal states of India will be affected by climate change?

## 2016-BIODIVERSITY AND ENVIRONMENT QUESTIONS

1. Give an account of the current status and the targets to be achieved pertaining to **renewable energy** sources in the country. Discuss in brief the importance of the National Programme on Light Emitting Diodes (LEDs).
2. **Rehabilitation of human settlements** is one of the important environmental impacts which always attracts controversy while planning major projects. Discuss the measures suggested for mitigation of this impact while proposing major developmental projects.
3. The frequency of **urban floods due to high-intensity rainfall** is increasing over the years. Discussing the reasons for urban floods, highlight the mechanisms for preparedness to reduce the risk during such events.

## 2015-BIODIVERSITY AND ENVIRONMENT QUESTIONS

1. The **Namami Gange** and National Mission for Clean Ganga (NMCG) programmes and causes of mixed results from the previous schemes. What quantum leaps can help preserve the river Ganga better than incremental inputs?

## 2014-BIODIVERSITY AND ENVIRONMENT QUESTIONS

1. Should the pursuit of carbon credit and clean development mechanisms set up under **UNFCCC** be maintained even though there has been a massive slide in the value of carbon credit? Discuss with respect to India's energy needs for economic growth.
2. **Environmental impact assessment** studies are increasingly undertaken before the project is cleared by the government. Discuss the environmental impacts of coal-fired thermal plants located at Pitheads.

## 2013-BIODIVERSITY AND ENVIRONMENT QUESTIONS

1. What are the consequences of Illegal mining? Discuss the Ministry of Environment and Forest's concept of **GO AND NO GO zones for the coal mining** sector.
2. Enumerate the **National Water Policy of India**. Taking river Ganges as an example, discuss the strategies which may be adopted for river water pollution control and management. What are the legal provisions of the management and handling of hazardous wastes in India?

## PRACTICE QUESTIONS CHAPTER WISE

UNIT	MODEL QUESTIONS
<p><b>1</b></p> <p><b>ENVIRONMENT AND ECOLOGY</b></p>	<ol style="list-style-type: none"> <li>1. Explain the concept of ecological succession and also mention characteristics of ecological succession</li> <li>2. Explain the concept and significance of food chain and also mention its applications in understanding the movement of toxic substance in food chain</li> <li>3. Explain ecological adaption and also mention various types of response and adaption by the plants and animals with respect to abiotic factors of ecosystem</li> <li>4. Explain the concept of decomposition and various process associate with it and also describe the effect of climate factor on decomposition activity</li> <li>5. Define eutrophication and also explain cause and effects of eutrophication</li> <li>6. Explain the condition for growth of coral reefs and how coral reefs are declining across the world</li> <li>7. Explain , Mangroves are the unique ecosystem and also explain conservation efforts</li> </ol>

	8. Explain significance of wetlands and also mentions mention the measure under taken to protect wetlands
<b>2</b>	<ol style="list-style-type: none"> <li>1. Explain biodiversity with levels and also discuss the measurements of biodiversity</li> <li>2. Explain the conservation strategies of biodiversity with benefits and explain explain government initiatives to prevent the threats . with two examples</li> <li>3. What is biodiversity and write the comparison between national park , wild life sanctuaries and biosphere reserve with examples</li> <li>4. Define terminologies               <ol style="list-style-type: none"> <li>a) Sacred forest</li> <li>b) Botanical garden</li> <li>c) Criteria for hotspot</li> <li>d) Hope spots</li> </ol> </li> <li>5. What do you mean by megadiverse countries and Explain the conservation status of biological species with examples</li> <li>6. List out the global and national conservation efforts and explain any two each of global and national conservation efforts ( mind map enough )</li> </ol>
<b>3</b>	<ol style="list-style-type: none"> <li>1. Air Pollution</li> <li>2. Water Pollution</li> <li>3. E-Waste</li> <li>4. Plastic Pollution</li> <li>5. Biomedical Waste Management</li> </ol>
<b>4</b> <b>CLIMATE CHANGE</b>	<ol style="list-style-type: none"> <li>1. EXPLAIN GLOBAL WARMING AND HOW GLOBAL WARMING IMPACT TO CHANGE IN GLOBAL CLIMATE PATTERN – 150 WORDS</li> <li>2. HOW CHANGE IN GLOBAL CLIMATE PATTERN EFFECTED TO INDIAN SUBCONTINENT-150 WORDS</li> <li>3. WHATS SEA SURFACE TEMPRATUTRE AND HOW IT IMPACTS TO CLIMATIC CHANGE -150 WORDS</li> <li>4. WHATS CLIMATE CHANGE AND EXPLAIN THE CLIMATE CHANGE MITIGATION STRATEGIES -250 WORDS</li> <li>5. EXPLAIN INITIATIVES TO MITIGATE CLIMATE CHANGE EFFECTS IN INDIA AND NAME THE ANY FIVE CLIMATE CHANGE ORGANISATION WITH OBJECTIVES -250 WORDS</li> </ol>
<b>5</b>	1. EXPLAIN THE ROLE OF WILD LIFE PROTECTION ACT 1972 AND

<p><b>NATIONAL ENVIRONMENT LEGISLATION</b></p>	<p>ALSO HOW 2023 AMENDMENT DIFFERENT FROM ITS PREVIOUS UPDATE</p> <ol style="list-style-type: none"> <li>2. WHAT IS THE PROTECTED AREA NETWORK AND EXPLAIN NECESSARY TO ESTABLISHMENT OF PROTECTED AREA NETWORK</li> <li>3. DISCUSS THE DIFFERENT STATUTORY BODIES AND AUTHORITIES FOR EFFECTIVE IMPLEMENTATION OF PROVISIONS OF THE WILD LIFE PROTECTION LAW</li> <li>4. COMPARE THE FOREST CONSERVATION ACT BILL-2023 WITH 1980</li> <li>5. COMPARE BIODIVERSITY CONSERVATION ACT BILL -2023 WITH 2002</li> </ol>
<p><b>6 INTERNATIONAL ENVIRONMENTAL GOVERNANCE</b></p>	<ol style="list-style-type: none"> <li>1. WHAT IS NATIONAL DETERMINE CONTRIBUTION AND EXPLAIN RECENT REVISED NATIONAL DETERMINE CONTRIBUTION IN COP-21 PARIS AGREEMENT</li> <li>2. WHATS THE OUTCOMES OF PHASE 1 AND PHASE 2 OF COP-15</li> </ol>

