



## Prelims Questions

### Q1. Recently Earth shot prize were awarded

1. Protect and restore nature
2. Clean our air
3. Revive our oceans
4. Build a waste-free world
5. Fix our climate.

Which of the above point is/are centre shot for the prize?

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

Answer: (D)

#### Explanation:

The Earth shot Prize is centred around **five “Earthshots”**, the ambitious goals which if achieved by 2030 will improve life for us all, for generations to come. The five Earthshots unveiled include **protect and restore nature; clean our air; revive our oceans; build a waste-free world, and fix our climate.**

### Q2. Consider the following statements;

1. Nitrous Oxide is one of the Green House Gases present in our Environment.
2. Nitrous Oxide is more potent than Carbon Dioxide.
3. Anthropogenic factors are the biggest contributor to Nitrous Oxide

Which of the above statements is/are correct?

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

Answer: (D)

#### Explanation:

All the above statements are correct.

### Q3. The Global Carbon Project was recently in the news. It was launched by which of the following organization/institutes;

1. The Future Earth
2. UNFCCC
3. UN Environment Program
4. International Nitrogen Initiative



Answer: (A)

**Explanation:**

### The Global Carbon Project

- It is a Global Research Project of Future Earth and a Research Partner of the World Climate Research Programme.
- It was formed to work with the International Science Community to establish a common and mutually agreed on a knowledge base to support policy debate and action to slow down and ultimately **stop the increase of Green House Gases in the Atmosphere**.
- **It was established in 2001** by a shared partnership between the International Geosphere Biosphere Programme (IGBP), the International Human Dimensions Programme on Global Environmental Change (IHDP), the World Climate Research Programme (WCRP) and Diversitas.
- This partnership constituted the Earth Systems Science Partnership (ESSP) which subsequently evolved into Future Earth.

### Q4. Consider the following Statements Regarding Ecosystem Services;

1. It is the positive benefit that Wildlife or Ecosystems provide to people.
2. Ecosystem Services Constitute Elements like Biodiversity Conservation, Employment Generation, Education and Research, Carbon Sequestration.

Which of the above statements is/are incorrect?

- |                  |                     |
|------------------|---------------------|
| (a) 1 only       | (b) 2 only          |
| (c) Both 1 and 2 | (d) Neither 1 nor 2 |

Answer: (D)

**Explanation:**

Ecosystem Services: An assessment by The Energy and Resources Institute (TERI) has found that the annual **Economic Value of Ecosystem Services Provided by the Delhi Zoo is ₹ 426 crores**. An ecosystem service is **any positive benefit that Wildlife or Ecosystems provide to people**. The benefits can be direct or indirect—small or large.

These 'Ecosystem Services' constitute heads such as **Biodiversity Conservation, Employment Generation, Education and Research, Carbon Sequestration** and Recreational and Cultural Contributions.

### Q5. Consider the following statements regarding Sulphur Dioxide Pollution;

1. There has been a Drastic Decline in Sulphur Pollution in past one decade.
2. Sulphur Dioxide is a Yellow Colour, Bad Smell and Toxic Gas.



Which of the above statements is/are correct?

- (a) 1 only (b) 2 only  
(c) Both 1 and 2 (d) Neither 1 nor 2

Answer: (D)

**Explanation:**

**Statement 1:** India's Sulphur Dioxide (SO<sub>2</sub>) emissions have recorded a significant **decline of approximately 6% in 2019** as compared to 2018 for the first time in the last 4 years.

- **India still occupies the top emitter's position** for the fifth consecutive year followed by Russia and China.
- **India emitted 21% of Global Anthropogenic (human-made) SO<sub>2</sub> Emissions** — or about 5,953 kilotons a year, mostly from coal-fired power plants that lack pollution-curbing equipment. The biggest **Emission Hotspots in India** are thermal power stations (or clusters of power stations) at Singrauli, Neyveli, Talcher etc. **so statement 1 incorrect.**

**Statement 2:** It is a colourless, bad-smelling, toxic gas, is part of a larger group of Chemicals referred to as Sulfur Oxides (SO<sub>x</sub>). **so statement 2 incorrect.**

**Q6. Consider the following statements regarding seagrasses;**

1. They are called Ecosystem Engineers for Marine Ecosystem
2. They are one of the biggest sources of the Carbon Sink in the Marine Ecosystem.

Which of the above statements is/are incorrect?

- (a) 1 only (b) 2 only  
(c) Both 1 and 2 (d) Neither 1 nor 2

Answer: (C)

**Explanation:**

**Statement-1:** They are called Ecosystem Engineers for the Marine Ecosystem. **so statement 1 correct.**

**Statement-2:** They are one of the biggest sources of the Carbon Sink in the Marine Ecosystem. Seagrasses absorb 83 million tonnes of Carbon from the Atmosphere annually. One acre of seagrass can sequester 740 pounds of carbon per annum — the same amount emitted by a car travelling around 6,212 kilometres. Seagrasses can capture carbon from the atmosphere up to 35 times faster than tropical rainforests. **so statement 2 correct.**





## Mains Questions

- Q1. Glacial Lake Outburst was recently in news. What do you understand by Glacial Lake Outburst? What is the major reason for the Outburst and what are the possible remedies to resolve the problem? **(15 Marks, 250 Word)**
- Q2. Green House Gases are the present reality to Human Beings. What do you understand by the term Green House Gases? What are the major sources for GHG's and what remedies can be followed to give alternative solutions? **(15 Marks, 250 Word)**
- Q3. What do you understand by the term Biodiversity? What all actions currently India is taking to enhance the Biodiversity of the Country? **(10 Marks, 150 Word)**

### Snippets



Map of Armenia and Azerbaijan in News Due to Recent Conflict