

Pre-Mix - 5 MCQs for Prelims

Subject - Environment

Date – 23rd February 2023

- 1. Consider the following statements regarding the Sloth bear:
 - 1. Sloth bears are extinct in India.
 - 2. Sloth bears hibernate during the extreme winter months.
 - 3. IUCN red list status is Vulnerable.
 - 4. It is listed in Appendix I of CITES.

Which of the above statements is/are correct?

- A. All except 1
- B. All except 2
- C. All except 3
- D. All except 4
- 2. In news, Green Ammonia is called so because:
 - 1. It is green in color which makes it a fit for large scale sustainable agriculture as it does not absorb heat energy when lying in the fields.
 - 2. Green ammonia production is where the process of making ammonia is 100% renewable and carbon-free.
 - A. 1 only
 - B. 2 only
 - C. Both are correct
 - D. None of the above statements is correct
- 3. Recently, Ramagundam (Telangana) was in news. It was because of:
 - A. It is the site of India's first Nuclear Fusion Reactor
 - B. It is the site of India's largest Nuclear Fission Power Plant
 - C. It is the site of India's largest floating solar PV plant



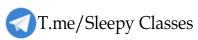
- D. It is the site of India's largest floating Wind power plant
- 4. Incorporating two of the promises made by India at the Glasgow conference last year, India recently enhanced its climate change targets for 2030.

In this context which of the following is/are true:

- 1. India is now committing itself to at least 45% reduction in the emissions intensity of GDP (emissions per unit of GDP) from 2005 levels.
- 2. The existing target was a 33% 35% reduction.
- 3. India is also promising to ensure that at least 75% of installed electricity generation capacity in 2030 would be based on non-fossil fuel-based sources.
- 4. This is an increase from the existing 40% target.
- A. All except 4
- B. All except 3
- C. All except 2
- D. All except 1

5.What is the difference between the antelopes Oryx and Chiru? (PYQ 2011)

- A. Oryx is adapted to live in hot and arid areas whereas Chiru is adapted to live in steppes and semi-desert areas of cold high mountains.
- B. Oryx is poached for its antlers whereas Chiru is poached for its musk.
- C. Oryx exists in western India only whereas Chiru exists in north-east India only.
- D. None of the statements (a), (b) and (c) given above is correct.





Click <u>here</u> to watch the following topics on YouTube.

1. Consider the following statements regarding the Sloth bear:

- 1. Sloth bears are extinct in India.
- 2. Sloth bears hibernate during the extreme winter months.
- 3. IUCN red list status is Vulnerable.
- 4. It is listed in Appendix I of CITES.

Which of the above statements is/are correct?

- A. All except 1
- B. All except 2
- C. All except 3
- D. All except 4

Answer: B

Explanation

From May 2022 Current Affairs

Sloth Bea

What is a Sloth bear, and how does it differ from other bears? • Sloth bears can be found in Sri Lanka, India, Physics and News they can be found.

- Bhutan, and Nepal, where they can be found primarily in lowland environments.
- When it comes to food, sloth bears prefer to eat termites and ants.
- Unlike other bear species, they also habitually carry their babies in their mouths.
- They are also highly fond of honey, which is why they have been given the nickname "hone bear."
- Sloth bears do not hibernate, as is commonly believed.
- Melursus ursinus is the scientific name for this species.
- Protection Status:
 - IUCN Red List: Vulnerable
 - It is listed in the Convention on International Trade in Endangered Species (CITES) as Appendix I
 - Schedule I of the Indian Wildlife Protection Act of 1972.
- It faces threats such as habitat loss, poaching for body parts, and being captured for use in
 performances, as well as being hunted because of their aggressive behaviour and destruction of crops

2. In news, Green Ammonia is called so because:

- 1. It is green in color which makes it a fit for large scale sustainable agriculture as it does not absorb heat energy when lying in the fields.
- 2. Green ammonia production is where the process of making ammonia is 100% renewable and carbon-free.



- A. 1 only
- B. 2 only
- C. Both are correct
- D. None of the above statements is correct

Answer - B

Explanation

 Covered in the Current Affairs of June 2022 (under Environment Section of Sleepy Classes Current Affairs module).

Context

 Production & Use of Green Hydrogen is increasing, paving greater interest in the production and use of Green Ammonia too.

Green Ammonia

- Ammonia is a pungent gas that is widely used to make agricultural fertilisers.
- Green ammonia production is where the process of making ammonia is 100% renewable and carbon-free.
- One way of making green ammonia is by using hydrogen from water electrolysis and nitrogen separated from the air.
- These are then fed into the Haber process (also known as Haber-Bosch), all powered by sustainable electricity.
- In the Haber process, hydrogen and nitrogen react together at high temperatures and pressures to produce ammonia, NH3.
- However, the process of making ammonia is currently not a "green" process.
- It is most commonly made from methane, water and air, using steam methane reforming (SMR) (to produce the hydrogen) and the Haber process.



- Approximately 90% of the carbon dioxide produced is from the SMR process.
- This process consumes a lot of energy and produces around 1.8% of global carbon dioxide emissions.

3. Recently, Ramagundam (Telangana) was in news. It was because of:

- A. It is the site of India's first Nuclear Fusion Reactor
- B. It is the site of India's largest Nuclear Fission Power Plant
- C. It is the site of India's largest floating solar PV plant
- D. It is the site of India's largest floating Wind power plant

Answer - C

Explanation:

- Covered in the Current Affairs of July 2022 (under Environment Section of Sleepy Classes Current Affairs module).
- The 100 MW Ramagundam floating solar PV project in Telangana is the largest one of its sort ever undertaken in India.

About Ramagundam Project

- It is equipped with cutting-edge technology as well as elements that are sensitive to the needs environment.
- The project covers an area of the reservoir that is equivalent to 500 acres, arranged in 40 sections, each of which possesses 2.5 MW.
- One floating platform and an array of 11,200 solar modules make up each individual block.
- The solar panels are supported by HDPE (high-density polyethylene)



- floaters that have been made specifically for this purpose.
- Through the use of a specialised HMPE (High Modulus Polyethylene) rope, the complete floating system is secured to the dead weights that have been positioned in the bed of the balancing reservoir.
- This project is one of a kind due to the fact that all of the electrical equipment, such as an inverter, transformer, hightemperature panel, and SCADA (Supervisory Control and Data Acquisition), are all housed on floating Ferro cement platforms.
- A floating solar power plant is going to be built in Madhya Pradesh's Khandwa.
- Said to be the world's largest floating solar plant, it will generate 600 Megawatt power by 2022-23.
- The project is estimated to be worth over ₹3000 crores.
- Omkareshwar Dam is built on the Narmada river.
- 4. Incorporating two of the promises made by India at the Glasgow conference last year, India recently enhanced its climate change targets for 2030.

In this context which of the following is/are true:

- 1. India is now committing itself to at least 45% reduction in the emissions intensity of GDP (emissions per unit of GDP) from 2005 levels.
- 2. The existing target was a 33% 35% reduction.
- 3. India is also promising to ensure that at least 75% of installed electricity generation capacity in 2030 would be based on non-fossil fuel-based sources.
- 4. This is an increase from the existing 40% target.





- A. All except 4
- B. All except 3
- C. All except 2
- D. All except 1

Answer - D

Explanation:

Covered in the Current Affairs of August 2022 (under Environment Section of Sleepy Classes Current Affairs module).

Context

 Incorporating two of the promises made by Prime Minister Narendra Modi at the Glasgow conference last year, India recently enhanced its climate change targets for 2030.

Updated NDCs

- India is now committing itself to at least a 45% reduction in the emissions intensity of GDP (emissions per unit of GDP) from 2005 levels.
- Electricity Generation India is also promising to ensure that at least 50% of installed electricity generation capacity in 2030 would be based on non-fossil fuel-based sources.
- This is an increase from the earlier 40% target.

5.What is the difference between the antelopes Oryx and Chiru? (PYQ 2011)

- A. Oryx is adapted to live in hot and arid areas whereas Chiru is adapted to live in steppes and semi-desert areas of cold high mountains.
- B. Oryx is poached for its antlers whereas Chiru is poached for its musk.
- C. Oryx exists in western India only whereas Chiru exists in north-east India only.

D. None of the statements (a), (b) and (c) given above is correct.

Answer : A Explanation

Oryx

- Oryx is a type of antelope.
- They are found in Arabian Peninsula and North and East Africa.
- The Arabian oryx was only saved from extinction through a captive-breeding program and reintroduction to the wild.
- North Africans are extinct in wild. East Africans are still present.
- All oryx species prefer near-desert conditions and can survive without water for long periods.



Chiru

- Chiru (or chiru goat) is also referred to as Tibetan antelope.
- It is a sociable, tiny, graceful antelopelike animal that lives on the Tibetan Plateau's high alpine steppes.





- They are mainly seen in the Ladakh region in India.
- The underfur of the Tibetan antelope, or "soft gold" as it's called by poachers, is the warmest and softest wool in the animal kingdom.
- Predominantly, this underfur is woven into a traditional shawl known as a shahtoosh.
- 'Near Threatened' in IUCN Red List.
- It has been enlisted in Schedule I of Wildlife Protection Act, 1972.
- To enhance its protection, its prime habitats have been declared as Wildlife Sanctuaries viz. Karakorma Wildlife Sanctuary and Changthang Cold Desert Wildlife Sanctuary.

