



Daily Current Affairs Prelims Quiz 19-03-2024 (Online Prelims Test)

1) Consider the following statements with respect to the Tiger Conservation Landscapes (TCLs) 3.0:

1. It is a joint initiative of the Ministry of Environment Forest and Climate Change and the Google Earth Engine.
2. The objective of TCLs 3.0 is to count the tiger population in India using satellite images provided by Google Earth Engine.
3. Tiger Conservation Landscapes (TCLs) 0 is a sub-scheme under Project Tiger.

How many of the above statement(s) is/are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

Answer : d

Tiger Conservation Landscape (TCL) 3.0

NASA satellite imagery and Google Earth Engine computing power are helping scientists develop a real-time monitoring system for tiger habitat globally.

- **Initiative by** - TCL 3.0 is a joint initiative of the [NASA, the European Space Agency \(ESA\)](#), and the Google Earth Engine.
- TCL 3.0 represents the third iteration of assessing tiger habitat across Asia and where tigers still occur.
- **Goal** - To monitor changes in real time to help stabilize tiger populations across the range.
- **Uses** - TCL 3.0 uses Earth observations such as VIIRS, MODIS and Landsat products.
- TCL 3.0 uses [geographic information systems](#), known as [GIS](#).
 - [GIS](#) is a technology that interprets and visualizes spatial data, such as how landscapes have changed over time, population densities, or the distance between different locations.
- **Helps in** - This helps in holistically seeing the impact of human activity on the critical habitats of tigers.

The TCL 3.0 program is a system that is open sources, meaning it can be applied not only to tigers, but to any species of concern.

- **Provides** - TCL 3.0, the mapping system provides tiger-range countries the information they need to identify priority areas, and monitor changes in the [habitat and populations](#).
- Platform for governments to align with global initiatives, such as the [Global Biodiversity Framework](#) and [Sustainable Development Goals](#), to address the challenges facing our

[ecosystems](#).

Groups at the Wildlife Conservation Society (one of the organizations that provided funding for the project) are already working on similar maps for vulnerable and threatened animals including [lions](#), [jaguars](#) and [bison](#).

- **Working of TCL 3.0** - Satellites provide constant, high-resolution imagery, which is used to analyze suitable landscapes from space.
- This data does not show what is going on under the tree canopy.
- Hence, the second layer of data comes from human footprint analysis, data collected from field surveys about the spread of urban areas and human activities.

Unlike previous versions, the map can be updated when new information becomes available.

2) Given are the tiger reserves in the state of Tamil Nadu. Arrange the following Tiger Reserves in the chronological order of their establishment.

1. Kalakkad-Mundanthurai Tiger Reserve
2. Mudumalai Tiger Reserve
3. Anamalai Tiger Reserve
4. Sathyamangalam Tiger Reserve
5. Srivilliputhur Megamalai Tiger Reserve (SMTR)

Choose the correct code.

- a. 1, 2, 3, 4, 5
- b. 2, 5, 1, 3, 4
- c. 3, 4, 1, 5, 2
- d. 5, 4, 3, 2, 1

Answer : a

Land acquisition for Tiger Reserve (TR)

In a first, the Tamil Nadu forest department has acquired 30.41 acres of erstwhile private patta land, situated in the core area of Srivilliputhur Megamalai Tiger Reserve (SMTR).

- The land was acquired through private negotiation under the [Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013](#).
- A sum of Rs 2.33 crore was paid to seven land owners, who volunteered to surrender their land.
- This is the **first time in India** where the state government has purchased private land for non-commercial use towards forest and biodiversity conservation.
- The titular Yegan Raja had been a lumberjack who assembled a sizable crew to work for British officers.
- He had exploited the forests for British officers, who in return arranged lands for him from the Gandamanur zamindar.
- The land has been passed on to various others since then.

The land acquired by the state government is locally known as Yegan Raja Board.

Tiger Reserves in Tamil Nadu - Established in the year

1. Kalakkad-Mundanthurai - 1988
2. Mudumalai - 2007
3. Anamalai - 2008
4. Sathyamangalam - 2011
5. Srivilliputhur-Megamalai - 2021

3) Consider the following statements with respect to the World Air Quality Report 2023:

1. It is released annually by the World Health Organisation (WHO).
2. India is ranked as the 9th most polluted country in the world.
3. Delhi is the most polluted capital of the world.

How many of the above statement(s) is/are **incorrect**?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

Answer : b

World Air Quality Report 2023



Delhi world's most polluted capital, India has 3rd worst air quality - World Air Quality Report.

- **Released by** - Swiss organisation IQAir.
- **IQAir** - A Swiss air quality technology company, prepares the annual world air quality reports based on data from monitoring stations operated by governments, institutions and organisations across the world.
- **Data** - Report includes 7,812 locations in 134 countries, regions and territories.

Causing an estimated one in every nine deaths worldwide, air pollution is the greatest environmental threat to human health.

- **Key Findings** - [India](#) had the **third-worst air quality** out of 134 countries in 2023 after Bangladesh and Pakistan.
- **PM2.5 Concentration** - India (54.4 micrograms per cubic metre), Bangladesh (79.9 micrograms per cubic metre) and Pakistan (73.7 micrograms per cubic metre).
- In 2022, India was ranked as the eighth most [polluted](#) country with an average PM2.5 concentration of 53.3 micrograms per cubic metre.

According to the WHO, air pollution is responsible for an estimated 7 million premature deaths worldwide every year.

- **Delhi** - Delhi's [PM2.5 levels](#) worsened from 89.1 micrograms per cubic metre in 2022 to 92.7 micrograms per cubic metre in 2023, *taking it to the top spot in the world's most polluted cities list.*
- The [national capital](#) was ranked the most polluted capital city in the world four times on the trot starting in 2018.
- **Begusarai** - Begusarai, in Bihar stood out as the most polluted metropolitan area globally with an average PM2.5 concentration of 118.9 micrograms per cubic metre.
- The city did not even figure in the 2022 rankings.

It is estimated that 1.36 billion people in India experience PM2.5 concentrations exceeding the World Health Organisation (WHO) recommended annual guideline level of 5 micrograms per cubic metre.

- **Impact** - Exposure to PM2.5 air pollution leads to and exacerbates [numerous health conditions](#), including but not limited to asthma, cancer, stroke and lung disease.
- Exposure to elevated levels of fine particles can impair cognitive development in children, lead to mental health issues, and complicate existing illnesses, including diabetes.

The IQAir report for 2022 had stated that roughly 60% of cities in India had recorded annual PM2.5 levels at least seven times higher than the WHO guidelines (annual guideline level at 5 micrograms per cubic metre).

4) Consider the following statements with respect to the Captive Elephant (Transfer or Transport) Rules, 2024:

1. It is released by the Ministry of Environment Forest and Climate Change.
2. Captive elephants can be transferred only when an owner is no longer in a position to maintain the elephant.
3. Before a transfer is effected, the genetic profile of the elephant has to be registered with the Ministry.

How many of the above statement(s) is/are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

Answer : c

Captive Elephant (Transfer or Transport) Rules, 2024

The Centre has notified a set of rules called the Captive Elephant (Transfer or Transport) Rules, 2024 that liberalise the conditions under which elephants may be transferred within or between states.

- **Released by** - The [Ministry of Environment Forest and Climate Change](#).
- Until August 2022, the [Wildlife Protection Act](#) explicitly prohibited the trade in wildlife including both wild and captive elephants.
- However [amendments](#) to the [Act](#) brought in an exemption that for the first time allowed

captive elephants to be transferred.

- **Rules** - Captive [elephants](#) can be transferred when an owner is no longer in a position to maintain the [elephant](#), the [elephant](#) will likely have a better upkeep than in the present circumstances.
- **Chief Wildlife Warden** - Otherwise, when a state's Chief Wildlife Warden deems it fit and proper in the circumstances of the case for better upkeep of the [elephant](#).
- Before a transfer within the state, an elephant's health has to be ratified by a veterinarian and the Deputy Conservator of Forests must establish that the animal's current habitat and prospective habitat are suitable.
- The Chief Wildlife Warden on receipt of such documents may choose to reject or approve the transfer.
- If the transfer involves moving the elephant outside of a state, similar conditions apply.
- **Genetic profile** - Before a transfer is effected, the [genetic profile](#) of the [elephant](#) has to be registered with the Ministry of Environment, Forest and Climate Change.

Elephant exemption

- The elephant being transferred ought to be accompanied by a mahout and an elephant assistant
- A health certificate from a veterinary practitioner to the effect that the elephant is fit for transport and is not showing any sign of musth or infectious or contagious disease, is to be obtained
- The transport shall be carried out after the mandatory quarantine period as advised by the veterinary practitioner is over, in case of contagious disease
- The elephant shall be properly fed and given water before loading
- Necessary arrangements shall be made to provide food and water to the elephant en route
- Tranquilisers/sedatives shall be used to control nervous or temperamental elephants upon prescription by the veterinary practitioner.
- **Committee** - A Parliamentary Committee, led by Congress Rajya Sabha MP, Jairam Ramesh, had recommended the deletion of this exemption clause for elephants.
- It also recommended providing only an exemption for elephants owned by temple trusts.
- **Final Version of the Act** - The final version of the amended act, however retains the clause on allowing the movement of captive elephants.
- However only animals with an existing certificate of ownership may be moved.

The government of India in the year 2010 declared Elephant as the national heritage animal of the country on the recommendations of the standing committee of the national board for wildlife.

5) Consider the following statements with respect to the Signals Technology Evaluation and Adaptation Group (STEAG):

1. It is a joint collaboration between the Indian Space Research Organisation (ISRO) and NASA.
2. The objective is to observe neutrinos from the most violent astrophysical sources in our universe.

Which of the above given statement(s) is/are correct?

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

Answer : d

Signals Technology Evaluation and Adaptation Group (STEAG)

Army raises elite unit to work on critical technologies having military applications.

- STEAG will undertake research and evaluation of futuristic communication technologies like 6G, Artificial Intelligence (AI), Machine Learning (ML) and quantum computing for military use.
- STEAG will be headed by a Colonel rank officer.
- STEAG is mandated to nurture technologies spanning the complete spectrum of wired and wireless systems.
- It will carry out technical scouting, evaluation, development, management of core ICT solutions, and provide user interface support by maintenance and upgradation of contemporary technologies available in the environment.
- The setting up of STEAG is part of the Army's efforts to develop technologies considering the future battlefield.
- STEAG will help bridge the divide between the armed forces on the one hand and industry and academia on the other.
- STEAG is aligned with the tenets of Atmanirbhar Bharat and Start-Up India.

