

## UPSC Daily Current Affairs| Prelim Bits 28-01-2025

### World Leprosy Day

#### Why in News?

The World Health Organization (WHO) has requested governments to prioritize leprosy elimination and ensure sustained funding for surveillance, treatment, care and support.

### World Leprosy Day

- It is observed annually on the **last Sunday** of January since 1954.
- It was established by Raoul Follereau in honor of **Mahatma Gandhi's** compassion for leprosy patients.
- **Aim** - To raise public awareness about leprosy.
- **World Leprosy Day, 2025 - Theme** - 'Unite, Act, and Eliminate Leprosy'.

### Leprosy

- It is a neglected tropical disease that primarily affects the nervous system.
- It is also known as Hansen's disease.
- It is an infectious disease caused by **Mycobacterium leprae** that causes severe, disfiguring skin sores and nerve damage in the arms, legs, and skin areas around the body.
- It's more common in people living in poverty.
- **Symptoms** - Most prominent in cooler parts of the body such as the hands, feet, and face.
- In some cases, body parts may lose their sense of touch and pain, increasing the likelihood of injuries such as cuts and burn.
- **Transmission** - Leprosy is not so contagious, repeated contact with nose and mouth droplets from someone with untreated leprosy can spread.
- **Treatment** - Leprosy is curable with antibiotics, Treatment usually lasts one to two years, and early treatment can prevent disability.
- **Global scenario** - In 2023, 1,82,815 new cases were reported from more than 100 countries, with 95% of those concentrated in 23 global-priority countries.
- Alarmingly, more than 5% of the new cases were reported with Grade 2 Disability (visible deformity), highlighting delays in detection.
- 5.6% of the new cases were among children, with some countries reporting child rates exceeding 30%, indicating ongoing transmission.
- **Jordan** became the 1<sup>st</sup> country to be verified and acknowledged by the WHO for elimination of leprosy, demonstrating what is possible with focused and concerted efforts
- Additionally, in 2023, 56 countries reported zero new case of leprosy.

- **Scenario in India** - India accounts for 53% of the global leprosy cases.
- As of recent statistics, India has successfully achieved the goal of eliminating leprosy as a public health problem, defined as having less than 1 case per 10,000 people.
- **Global Leprosy Strategy** - The Global Leprosy Strategy 2021-2030 has a vision of zero disease, zero disability and zero stigma and discrimination.

## Reference

[The Hindu | Leprosy Elimination](#)

## White-naped Tit

### Why in News?

*A group of bird enthusiasts traced the rare white-naped tit for the first time at Kadakola village in the Kappatagudda hills, North Karnataka.*

- It is a **passerine bird** (any bird of the order Passeriformes) in the tit family Paridae.
- **Scientific Name** - *Machlolophus nuchalis*.
- **Size** - White-naped tit is a 12-13 cm medium-sized **shy** bird.
- It is the only pied (black-and-white) tit in India.
- **Appearance** - It has the wing-coverts, crown, sides of head, chin, throat, a ventral band running down the breast and belly to the vent black.
- The cheeks below the eye, the ear-coverts and a patch on the nape are white.
- The wing has white on the outer primaries and the base of the secondaries. The last tertiaries are completely white.



- **Nesting** - It prefers nesting and roosting only in cavities made by coppersmith barbets and woodpeckers on old trees of Indian frankincense Toothbrush Tree, Gum Arabica, and Indian Jujube.
- **Distribution** - It is very patchily distributed and endemic to India.
  - In India, it is found in only some parts of Rajasthan, Gujarat, the Eastern Ghats of Southern Andhra Pradesh, Northern Tamil Nadu, Haryana, and Southern Karnataka.
  - In South Karnataka, it's documented only in the ***Cauvery Wildlife Sanctuary***.
- **Habitat** - Found in dry thorny scrub forests in two disjunct populations, in western India and southern India.

- This species is and has been vulnerable to extinction, especially because of the
- **Diet** - It mainly feeds on insects and nectar from flowers of caper berries (Chippuri/Kariuppi).
- **Vocal** - Quite vocal, commonly gives a 2- to 5-noted high-pitched “psi-psi-psi” ending in a harsh churrr.
- **Conservation status**
  - IUCN - Vulnerable.
- **Threats** - scarcity of suitable habitats, particularly nest cavities made by woodpeckers.

## References

1. [Times of India | White-naped tit](#)
2. [iNaturalist | White-naped Tit](#)

## Epicoccum Indicum

### Why in News?

*A new species of phytopathogenic fungi, epicoccum indicum was recently discovered by researchers at Banaras Hindu University.*

- It is a ***new species of phytopathogenic fungi*** associated with an emerging leaf spot disease in Chrysopogon zizanioides (vetiver).
- The species was identified based on morpho-cultural characteristics and multigene molecular phylogenetic analyses.
- It forms a distinct clade, separate from other related species, which justifies its classification as a new species.
- The species name refers to India, where it was discovered.



## Phytopathogenic fungi

- It can cause diseases in plants, leading to significant economic losses in agriculture and horticulture

- It is contributed to **70-80%** of plant diseases and infect parts of the plants such as roots, stems, leaves, fruits and flowers.
- Most of these fungi belongs to Ascomycetes and the Basidiomycetes.
- They possess a wide range of enzymes destroying the carbohydrate polymers (constitute the building materials of the cell walls).
- Some fungi ***kill their hosts*** and feed on dead material (necrotrophs), while others colonize the living tissue (biotrophs).

### Leaf spot disease

- It is a plant disease that causes circular or elongated spots on leaves, stems, and sheaths.
- These spots can be brown, black, tan, or reddish in color, and can vary in size.
- Leaf spot disease can be caused by fungi, bacteria, nematodes, or other organisms.

### Reference

[Times of India | Epicoccum Indicum](#)

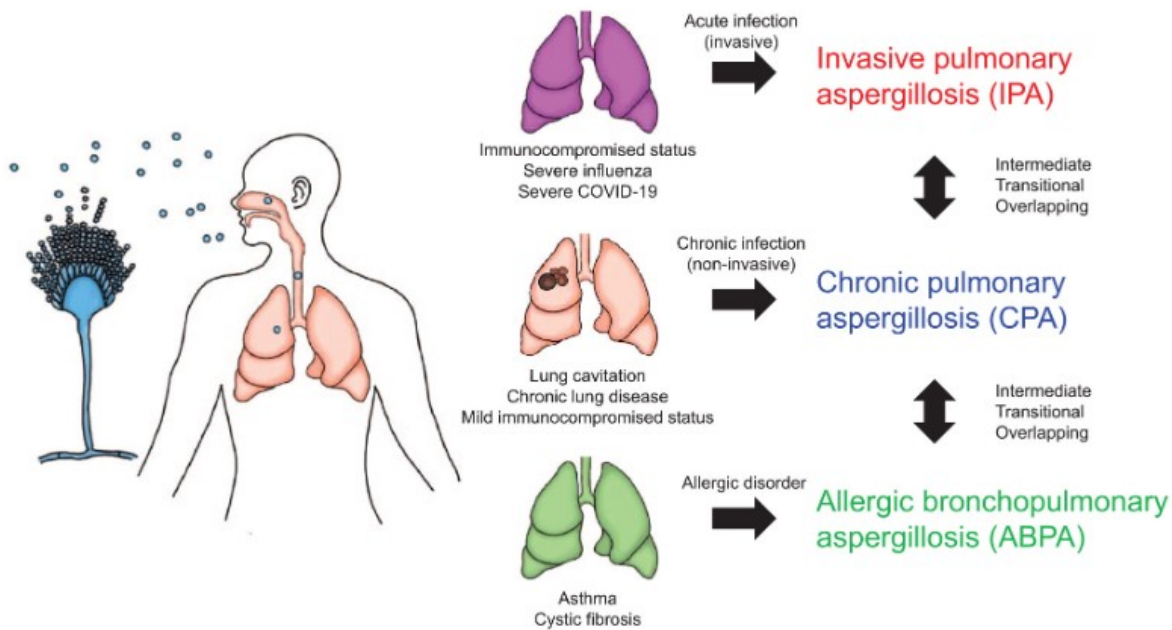
### Chronic Pulmonary Aspergillosis (CPA)

#### Why in News?

*Recently, a new research has identified a Chronic Pulmonary Aspergillosis (CPA) in tuberculosis survivors among Assam's tea plantation workers.*

- **CPA** - It is a serious and ***long-term fungal infection*** that affects the lungs.
- **Caused by** - *Aspergillus fumigatus, a fungus* that strikes individuals with immunodeficiency.
- **Conditions** - It is a chronic lung disease that occurs commonly in ***pre-existing lung cavities***.
- Poverty, poor nutrition, kitchen smoke, close contact with smear-positive patients and living in congested environments.
- **Risk factors** - It mostly occurs in,
  - Post-Tuberculosis (TB) or active TB patients.
  - People with weakened immune system or
  - Lung diseases.
- **Transmission** - It is not a contagious disease.
- It can't be passed from person to person.

*According to the National Tuberculosis (TB) Prevalence Survey 2019-2021, TB has been a major public health issue across the tea belts in Assam's Brahmaputra and Barak valleys, afflicting 217 per 1,00,000 population.*



- **Incubation period** - 3 months or more.
- **Symptoms** - Chronic cough, haemoptysis (coughing blood), weight loss or fatigue and other respiratory.
- **Impact** - It causes severe bleeding in the lungs, which lead to be fatal.
- **Treatment** - It vary depending on the severity of symptoms and any underlying conditions.

*Using advanced serological testing and radiological imaging, the researchers recorded a CPA prevalence of 17.18% in the year-long study and seropositivity was 18.5% in active TB patients but spiked to 48.9% in those who had completed treatment.*

## References

1. [The Hindu](#) | Assam's tea workers prone to Chronic Pulmonary Aspergillosis (CPA)
2. [Healthline](#) | Chronic Pulmonary Aspergillosis (CPA)

## One Liners 28-01-2025

### History, Art and Culture

#### Jayati Jai Mamah Bharatam (JJMB)

- **JJMB** - It is a spectacular ensemble featured over 5,000+ artists performed more than 50 folk and tribal dance forms.
- It showcasing India's rich heritage on a global stage.
- **Themes** - Viksit Bharat, Virasat bhi Vikas bhi and Ek Bharat Shreshtha Bharat.
- **Performance** - Sangeet Natak Akademi.
- **Nodal Ministry** - Ministry of Culture.
- **Recognized by** - Guinness World Records for 'The Largest Indian Folk Variety Dance'.

### Geography



## Lake Victoria

- **Located in** - Africa, *largest lake in the African Great Lakes.*
- **Bordering** - Uganda, Kenya, and Tanzania.
- **Chief reservoir of** - *Nile.*
- **Facts** - *World's largest tropical lake.*  
- *2<sup>nd</sup> largest fresh water body in the world.*
- **Threats** - Deforestation, land use change, loss of wetland quality and waste from urban areas, industries and farm lands.
- **Impact** - Pollution, Loss in water quality and Algal blooms.



## Polity & Governance

### Draft Legal Metrology (Indian Standard Time) Rules, 2025

- **Aim** - One Nation, One Time.
- **Published by** - Legal Metrology Division.
- **Association with** - National Physical Laboratory (NPL) and India Space Research Organization (ISRO).
- **Nodal Ministry** - Ministry of Consumer Affairs, Food & Public Distribution
- **Rule** - It is a comprehensive rule *standardizing and mandating* the use of *Indian Standard Time (IST)* across India.
- **Feature** - It provides a unified and precise timekeeping framework for strategic, non-strategic, industrial and societal applications.

### Water Use Efficiency-Strategies for a Sustainable Future

- **Organized by** - Bureau of Water Use Efficiency (BWUE) and Indian Plumbing Association (IPA).
- **Nodal Ministry** - Ministry of Jal Shakti.
- **Concept** - It is a *one-day workshop* with a focus on the domestic water sector.
- **Role** - Low-flow fixtures and smart sanitary ware solutions in reducing water consumption.

### Uniform Civil Code (UCC)

*Uttarakhand becomes the 1<sup>st</sup> state to implement UCC from January 27.*

- **UCC** - It is a call for the formulation of *One Law for India.*
- **Under** - *Article 44.*
- **Article 44** - It states that the State shall endeavour to secure a Uniform Civil Code for the citizens throughout the territory of India.
- **Aim** - To provide protection to vulnerable sections as envisaged by Ambedkar including women and religious minorities.
- **Feature** - Applicable to *all religious communities* in matters such as marriage, divorce, inheritance and adoption.

## Economy

## Certificate of Origin (eCoO) 2.0

- **Launched by** - Directorate General of Foreign Trade (DGFT).
- **Nodal Ministry** - Ministry of Commerce & Industry.
- **eCoO 2.0** - It is a platform designed to *simplify the certification process for exporters*.
- The electronic filing of *Non-Preferential Certificates of Origin become mandatory* through this platform.
- **Feature** - It allowing exporters to request corrections to previously issued certificates through an easy online application process.

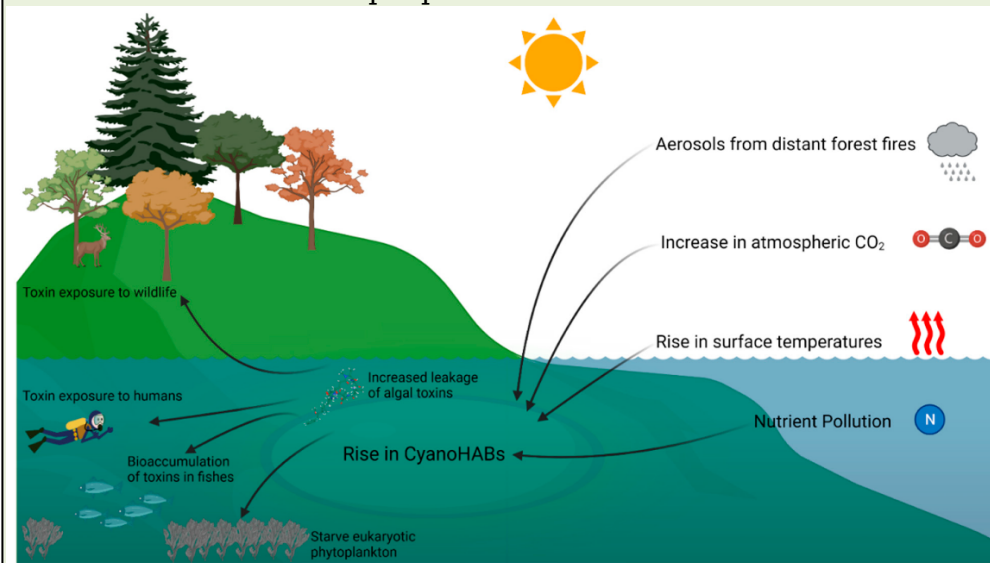
## Environment

### Cyanobacteria

- **Cyanobacteria** - It is a *photosynthetic microscopic bacteria* that live in all types of waterbodies.
- It is a *single-celled organisms* and produces toxins called *Cyanotoxins*.
- It is known as Cyanophyta, Cyanoprokaryota, Chloroxybacteria, and *Blue-Green Algae*.

### Cyanobacterial Harmful Algal Blooms (CyanoHABs)

- **CyanoHABs** - *Increase in population* of cyanobacteria results in Harmful Algal Blooms (HABs).
- **Causes** - It turns the waterbody into *bright green or blue-green*.
- It forms a discoloration and mat on the bottom sediments of the water column.
- It causes *Dissolved Oxygen (DO)* swings.
- **Impact** - Plant and animal die-off
  - Taste and odor issues
  - Polluted water
  - Toxic to animals and people.



## Science

### Parkinson Disease (PD)

- **PD** - It is a *brain condition* that causes problems with movement, mental health, sleep, pain and other health issues.
- **Symptoms** - Tremors, painful muscle contractions and difficulty speaking.
- **Risk factors** - Usually occurs in *older people*, and younger people also affected.
  - *Men are affected more* than women.
- **Treatment** - There is *no cure*, therapies and medicines can reduce symptoms.

## Miscellaneous

### **Malaria-Free Certification**

- **Elimination Process** - It requires a country to demonstrate the transmission of indigenous malaria has been interrupted nationwide for at least *3 consecutive years*.
- **Officially recognized by** - World Health Organization (WHO) of a country's malaria-free status.
- **Advisory body** - Technical Advisory Group on Malaria Elimination and Certification (TAG-MEC).
- **Georgia** - It has officially been *certified as malaria-free*.
- **Turkey** - It remains the only country in the WHO European Region *not yet certified* malaria-free.



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