

**PRELIMS EDGE 2026****28-01-2026**

TERMS IN NEWS

Doomsday Clock

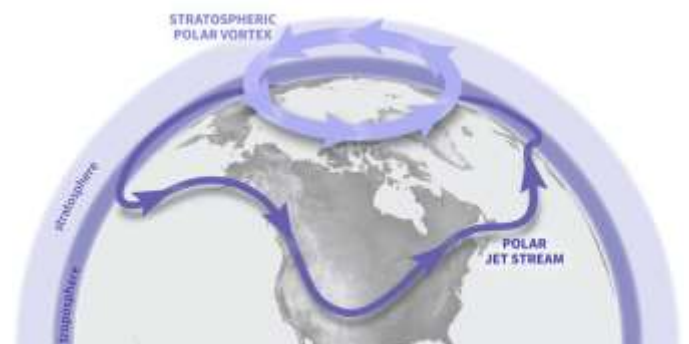


- It is a **symbolic clock adopted by atomic scientists to show how close human beings are considered to be to a global catastrophe, with midnight standing for annihilation, or “doomsday.”**
- Metaphorically, the clock's minute hand moves closer to or farther from midnight, depending on the level of threat thought to be posed by nuclear weapons, climate change, or disruptive technologies.
- The clock was **created in 1947 by the Bulletin of the Atomic Scientists (BAS)**, which was founded two years earlier.
- During that time, the clock was set at seven minutes to midnight.
- Since its invention in 1947, the clock has been reset 27 times.
- In January 2026 the clock was set to 85 seconds before midnight, the closest it has ever been to doomsday

Bulletin of the Atomic Scientists (BAS)

- It is a **nonprofit organization that sought to warn the public about the danger of nuclear weapons.**
- The Bulletin was founded by a group called the Atomic Scientists of Chicago in September 1945 at the University of Chicago.
- Its founding members and sponsors were scientists who had contributed to the development of the first atomic bombs as part of the **Manhattan Project**, including physicists **Albert Einstein, J. Robert Oppenheimer, and Eugene Rabinowitch.**
- Concerned about the devastating consequences of this new technology, the group published their first newsletter, the **Bulletin of the Atomic Scientists, in December 1945.**

Polar Vortex



- The polar vortex is a **large area of low pressure and cold air surrounding both of the Earth's poles.**

- The polar vortex extends from the **tropopause** (the dividing line between the stratosphere and troposphere) through the stratosphere and into the mesosphere (above 50 km).
- The term “vortex” refers to the **counter-clockwise flow of air that helps keep the colder air near the Poles.**
- These winds circulate and form a vortex near the North and South Poles of the planet.
- The polar vortex **contains some of the coldest air on Earth.**
- The strength of the polar vortex varies with the season, but **it is strongest during the winter season in each hemisphere, when the temperature contrast between the pole and the Equator is greatest.**
- It may weaken or disappear entirely during the warmer months of the year.
- Many times, during winter in the northern hemisphere, the polar vortex will expand, sending cold air southward with the jet stream.
- **Jet streams are relatively narrow bands of strong wind in the upper levels of the atmosphere, typically occurring around 30,000 feet (9,100 meters) in elevation.**
- This occurs fairly regularly during wintertime and is often associated with large outbreaks of Arctic air in the United States.
- This is not confined to the United States. Portions of Europe and Asia also experience cold surges connected to the polar vortex.
- By itself, the only danger to humans is the magnitude of how cold temperatures will get when the polar vortex expands, sending Arctic air southward into areas that are not typically that cold.
- The **Antarctic polar-front jet stream is more uniform and constant than its Arctic**

counterpart, because Antarctica is surrounded by ocean rather than a mix of land and water.

- Cold-air outbreaks, however, do occur in the Southern Hemisphere, but they are less frequent and strike heavily populated areas less frequently.

SCHEMES IN NEWS

India AI Mission



- The IndiaAI Mission was initially launched as a **joint initiative between the Ministry of Electronics and Information Technology and Nasscom in 2023**

The mission's key goals are:

- **“Making AI in India”** – Encouraging domestic AI development.
- **“Making AI Work for India”** – Ensuring AI benefits various sectors in the country.

Aims of the Mission

- Establish an **ecosystem for AI** innovation through public-private partnerships.

- Deploying over **10,000 Graphics processing units (GPUs)** for advanced AI computing infrastructure.
- Driving responsible, inclusive growth of India's AI ecosystem through democratization, data quality improvement, and indigenous AI capabilities development.
- **Ministry:** An umbrella programme by the Ministry of Electronics and Information Technology (MeitY).
- **Funding:** To be made available over 5 years through a public-private partnership model.
- **Implementing agency:** 'IndiaAI' Independent Business Division under Digital India Corporation.
 - MeitY Start-up Hub
 - Proposed National Centre on AI (NCAI)
- **Skilling in AI**
 - Future Skills Prime: Joint initiative by Nasscom & MeitY for AI certification programs.
 - Responsible AI for Youth: Program for government making school students AI ready.
- **AI Ethics & Governance**
 - RAISE: Responsible AI for Social Empowerment.

SPECIES IN NEWS

Pygmy Hog

Pillars of IndiaAI and Related Schemes

- **AI in Governance**
 - BHASHINI - [BHASHa Interface for India] an AI-based language translation tool for Indian languages.
 - Digital India
 - India Stack and AI
- **AI Compute & Systems**
 - AIRAWAT: India's AI supercomputer installed at C-DAC, Pune.
 - National Supercomputing Mission
 - MeitY Quantum Computing Applications Lab
- **Data for AI**
 - Data Management Office: Helps in standardisation of data management.
 - India Datasets Program and India Data Platform: Provides access to non-personal datasets for start-ups and researchers.
- **AI, intellectual property (IP) & Innovation**
 - Centre of Excellence for Artificial Intelligence



- It is the **smallest and rarest species of wild pig in the world.**
- It is **one of the very few mammals that build its own home, or nest, complete with a 'roof'.**
- It is an **indicator species** as its presence reflects the health of its primary habitat.
- **Habitat:** It prefers undisturbed patches of grassland dominated by early succession riverine communities, typically comprising dense tall grass intermixed with a wide variety of herbs, shrubs and young trees.

- Currently, they survive only in the **grasslands of Assam's Manas and Orang national parks**
- Using its snout, it digs for roots, tubers, wild fruits, termites, earthworms, eggs and other food sources found in the grasslands.
 - This digging aerates the soil and enhances its quality.
 - It also helps disperse seeds through its dietary and foraging habits.
- **Conservation Status**
 - IUCN: Critically Endangered
 - The Wildlife Protection Act, 1972: Schedule I.

PLACES IN NEWS

Kurdistan

- It is a **broadly defined geographic region traditionally inhabited mainly by Kurds.**
- It consists of an extensive plateau and mountain area, spread over large parts of what are now **eastern Turkey, northern Iraq, and western Iran and smaller parts of northern Syria and Armenia.**
- **Governorates:** Erbil, Sulaymaniyah, Dohuk, Halabja.
- **Capital: Erbil**
- **Mountains:** It includes the mountain systems of the Zagros and the eastern extension of the Taurus.
- **Rivers:** Tigris and Greater Zab Rivers flows through this region and support agriculture and settlements.

India and Kurdistan region

- India established a **consulate in Erbil**, the capital of the Kurdistan region, in August 2016

to enhance economic and commercial ties with Iraq.

- The Kurdistan region, comprising Erbil, Sulaymaniyah, and Dohuk, has seen a steady increase in Indian workers employed in sectors such as steel mills, oil companies, and construction projects. Workers from India are appreciated for their roles in these industries.



PRACTICE QUESTIONS

Q1; Consider the following statements regarding Kurdistan

1. It is a broadly defined geographic region traditionally inhabited mainly by Kurds.
2. It is spread over large parts of what are now eastern Turkey, northern Iraq, and western Iran and smaller parts of northern Syria and Armenia.
3. India has a consulate in Erbil, the capital of the Kurdistan region

How many of the above statements are correct

- A. Only One
- B. Only Two
- C. All of the Above
- D. None of the Above

Q2; It is one of the very few mammals that build its own home, or nest, complete with a

'roof'. It is an indicator species as its presence reflects the health of its primary habitat. Using its snout, it digs for roots, tubers, wild fruits, termites, earthworms, eggs and other food sources found in the grasslands. Currently, they survive only in the grasslands of Assam's Manas and Orang national parks

Identify the species from the given description

- A. Pigmy Hog
- B. Bharal
- C. Midhun
- D. Golden Langur

Q3; Consider the following statements regarding IndiaAI Mission

1. The IndiaAI Mission was initially launched as a joint initiative between the Ministry of Electronics and Information Technology and Nasscom in 2023
2. 'IndiaAI' Independent Business Division under Digital India Corporation is the implementing agency
3. It is a central sector scheme fully funded by the Union Government

How many of the above statements are incorrect

- A. Only One
- B. Only Two
- C. All of the Above
- D. None of the Above

Q4; Consider the following statements regarding the Polar Vortex

1. The polar vortex is a large area of low pressure and cold air surrounding both of the Earth's poles.
2. The term "vortex" refers to the counter-clockwise flow of air that helps keep the colder air near the Poles.
3. It is strongest during the winter season in each hemisphere, when the temperature contrast between the pole and the Equator is greatest.

How many of the above statements are incorrect

- A. Only One
- B. Only Two
- C. All of the Above
- D. None of the Above

Q5; Consider the following statements regarding the Doomsday Clock

1. It is a symbolic clock adopted by atomic scientists to show how close human beings are considered to be to a global catastrophe, with midnight standing for annihilation, or "doomsday."
2. Metaphorically, the clock's minute hand moves closer to or farther from midnight, depending on the level of threat thought to be posed by nuclear weapons, climate change, or disruptive technologies.
3. The clock was created in 1947 by the United Nations

How many of the above statements are incorrect

- A. Only One
- B. Only Two
- C. All of the Above
- D. None of the Above

Answers

1. C
2. A
3. A
4. D
5. A