

Central Industrial Security Force (CISF)

- Recently, the Ministry of Home Affairs (MHA) has asked the Central Industrial Security Force (CISF) to take security charge of the Parliament building from the Delhi Police.

❖ About CISF

- ❑ The Justice Mukherjee Commission recommended the establishment of a dedicated industrial protection force.
- ❑ Thus, the CISF was set up by an Act of Parliament on March 10, 1969.
- ❑ It is one of seven Central Armed Police Forces (CAPF) under the MHA, the other six being
 - The Border Security Force, the Indo-Tibetan Border Police, the Sashastra Seema Bal, the Assam Rifles, the National Security Guard, and the Central Reserve Police Force.
- ❑ The CISF operates with a sanctioned strength of 1.8 lakh personnel.
- ❑ The force is divided into nine sectors (Airport, North, North-East, East, West, South, Training, South-East, Central), in addition to its Fire Service Wing.
- ❑ CISF has the largest percentage of women in its force, in comparison to all other CAPFs.

❑ Role

- As the name suggests, the CISF was created “for the better protection and security of Industrial undertakings.”
- It was first inducted at the Fertilizer Corporation of India manufacturing plant in Trombay, Maharashtra, on November 1, 1969.
- Initially, its remit was restricted to protecting government-owned industries, but this was expanded to include joint-ventures and private undertakings in 2009.
- It also provides consultancy services to the private sector.
- Today, the force is deployed in over 350 locations across the country, in diversified areas such as atomic energy and space installations, sea-ports, steel plants, coal fields, hydro-electric and thermal power plants, defence production units, fertiliser and chemical industries, RBI’s note-printing mints, heritage monuments such as the Taj Mahal, more than 60 airports, Delhi Metro, and other important government buildings.
- Notably, it is a compensatory cost force — which means that it bills its clients for the services it provides.
- In recent years, the CISF has also become involved in providing security cover to VIPs.



Weather Forecasting by AI Tool

- At the recent COP28, NASA and IBM announced that an Artificial Intelligence (AI) tool called watsonx.ai would be available on the open-source AI platform Hugging Space.
- Watsonx.ai will help users monitor the Earth from space, measuring environmental changes that have already happened while also making predictions about the future.

❖ About the AI Tool

- ❑ Like Microsoft’s Bing, OpenAI’s ChatGPT, and other chatbots, watsonx.ai is also built on a foundation model.
- ❑ It’s trained on a broad set of uncategorised data allowing the model to apply information about one situation to another.
- ❑ In the case of watsonx.ai, NASA provides the datasets (in terms of satellite images instead of words,) and IBM created the foundation model to interpret them.
- ❑ In order to train the model to comprehend visual sequences that unfold over time, scientists filled in blank areas in each image and asked the model to piece it back together.
- ❑ It became increasingly adept at figuring out how the photos connected to one another as it reassembled additional images. The model was then adjusted for certain tasks like segmenting and categorising photos.

❖ Significance

- ❑ When this type of generative AI is used in weather forecasting in the future, it may be possible to anticipate hurricanes, droughts, and other catastrophic weather occurrences with greater accuracy.



- ❑ This may clarify for us the precise ways in which alterations in the environment, such as the melting of ice in the poles, may affect our daily existence.
- ❑ The technology could also apply to businesses, helping disaster response teams to prepare for fires impacting residential housing or helping supply chain logistics companies better understand macro weather patterns.

Securities Appellate Tribunal (SAT)

- Recently, the Securities Appellate Tribunal (SAT) quashed a SEBI order banning Future Retail chairperson and some other promoters from the securities market for one year in an insider trading case.



❖ About SAT

- ❑ Securities Appellate Tribunal is a **statutory body**. It was established under the provisions of Section 15K of the Securities and Exchange Board of India Act, 1992.
- ❑ **Roles**
 - It was created to hear and dispose of **appeals against orders passed by the Securities and Exchange Board of India** or by an adjudicating officer under the Act; and to exercise jurisdiction, powers and authority conferred on the Tribunal by or under this Act or any other law for the time being in force.
 - SAT hears and disposes of appeals against orders passed by the **Pension Fund Regulatory and Development Authority (PFRDA) and Insurance Regulatory Development Authority of India (IRDAI)**.
 - It has the same powers as vested in a civil court.
 - Further, if any person feels aggrieved by SAT's decision or order can appeal to the Supreme Court.
- ❑ **Composition** : SAT consists of a Presiding Officer and Two other members.
 - The Presiding officer of SAT shall be appointed by the Central Government in consultation with the Chief Justice of India or his nominee.

Volcanoes

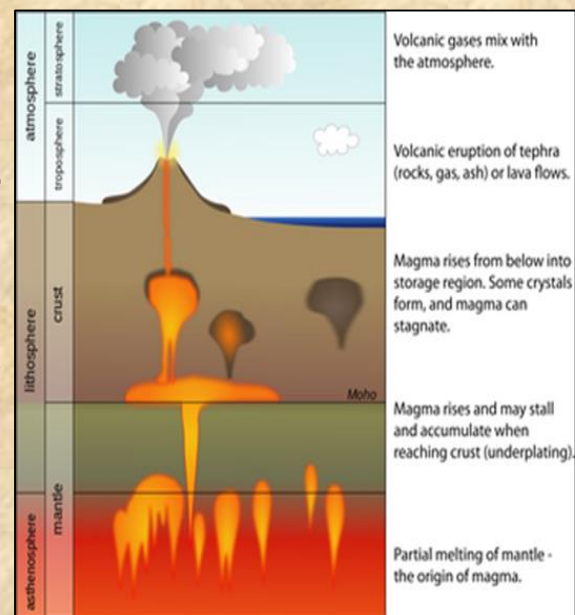
- Lava flows from a volcano in Iceland were slowing down on December 20.
- The volcano, which is known as Fagradalsfjall and located on the Reykjanes peninsula in southwest Iceland, erupted on December 18 after weeks of intense earthquakes and tremors.

❖ Key Highlights

- ❑ This is the third time that the Fagradalsfjall volcano has erupted in the past two years.
- ❑ It had been dormant for over 6,000 years but became active in March 2021.
- ❑ Notably, Iceland is one of the most volcanically active regions on the planet.
- ❑ It witnesses an eruption every four to five years.

❖ About Volcanoes

- ❑ Volcanoes are openings, or vents where lava, tephra (small rocks), and steam erupt onto the Earth's surface. Volcanoes can be on land and in the ocean.
- ❑ They are, in part, a result of their own eruptions but also the general formation of our planet, as tectonic plates move.
- ❑ Mountain ranges like the Andes in South America and the Rockies in North America, as well as volcanoes, formed through the movement and collision of tectonic plates.
- ❑ There are four main types of volcanoes: Cinder cones, composite or stratovolcanoes, shield volcanoes and lava domes.
- ❑ Their type is determined by how the lava from an eruption flows and how that flow affects the volcano, and, as a result, how it affects its surrounding environment.
- ❑ **Mechanism** :
 - Essentially, it's a case of magma, or molten rock, below the surface of the Earth, bubbling up, rising and overflowing, like boiling milk out of a pot on a stove.
 - The magma finds its way to vents in the volcano and gets spewed across the land and into the atmosphere. When magma erupts from a volcano, it is called lava.
- ❑ **Measuring Explosivity of a Volcano** : The Volcanic Explosivity Index (VEI) is a scale used to measure the explosivity of a volcano.
 - It has a range of 1 to 8 with a higher VEI indicating more explosivity.



- ❑ **Pacific Ring of Fire** : Some of the most active volcanoes are located in the Pacific Ring of Fire, which includes New Zealand, Southeast Asia, Japan and the western coast of the Americas.
 - About 90% of all earthquakes worldwide strike within this region.
- ❑ **Some Important Volcanoes** : Krakatoa, Indonesia, Mount Vesuvius, Italy, Mount Fuji, Japan, Eyjafjallajökull, Iceland, Kīlauea, Hawaii, Mount St Helens, USA.

Breakfast Tourism Scheme and Gyrocopter

- To offer a novel experience to visitors, Uttarakhand is planning a “breakfast tourism” scheme, which aims to combine the thrill of aviation with the serenity of nature.



❖ Key Features of the Scheme

- ❑ Uttarakhand already has The Himalayan AirSafari service, and the government aims to add one more element to it — breakfast in the clouds.
- ❑ In this, tourists will be flown to select locations difficult to reach by road, where they can enjoy a sumptuous breakfast along with the peace and quiet that comes from being close to nature.
- ❑ According to a proposal for phase one, Kalsi, Chinyalisaur, Gaucher, Bairagi Camp, Nainisaini and Pantnagar have been identified as starting points.
- ❑ Breakfast arrangements can be made at places like Raithal, Harsil, George Everest, Rishikesh and Nainital.

❖ Gyrocopters

- ❑ Recently, a trial run was done for India’s first-ever Himalayan AirSafari using gyrocopters.
- ❑ A gyrocopter is a mix between a helicopter and an airplane.
- ❑ It has a big rotating blade on top, like a helicopter, but it does not use an engine to spin it.
- ❑ Instead, when it moves forward, the air pushes through the blades, making them spin, which helps it stay up in the air.
- ❑ Gyrocopters are generally considered safe and stable.
- ❑ They are also nimble and maneuverable, allowing pilots to fly closer to attractions.
- ❑ Gyrocopters don’t require extensive runways for take-off and landing, so they can operate from smaller airfields or even open spaces.

Sahitya Akademi Award

- Recently, Sahitya Akademi awards for 2023 were announced.
- The Award will be presented at the award presentation function on 12th March next year.



❖ Key Highlights

- ❑ Nine books of poetry, six novels, five short story collections, three essays and one literary study have won the Sahitya Akademi Awards this year.
- ❑ Tamil author Rajasekaran has been chosen for his novel Neervazhi Padoom, Telugu writer Patanjali Sastry for his short story collection and Malayalam litterateur, EV Ramakrishnan for his literary study Malayala Novelinte Deshakalangaal.
- ❑ The authors who will receive the honour for their poetry collections include Vijay Verma in Dogri, Vinod Joshi in Gujarati, and Ashutosh Parida in Odia.
- ❑ The authors who have been chosen for their short stories include Pranavjyoti Deka in Assamese, Nandeswar Daimary in Bodo, and Taraceen Baskey in Santali.
- ❑ Sanjeev will get Sahitya Akademi Award for his Hindi novel Mujhe Pahachaano and Neelam Saran Gour will get the award for her English Novel Requiem in Raga Janki.
- ❑ The award, in the form of a casket containing an engraved copper plaque, a shawl, and one lakh rupees.

❖ About Sahitya Akademi Award

- ❑ Established in 1954
- ❑ It is a **literary honor** that is conferred annually by Sahitya Akademi, India’s National Academy of letters.
- ❑ Akademi gives **24 awards annually to literary works** in the languages it has recognized and an equal number of awards to literary translations from and into the languages of India.
- ❑ This award is the second highest literary honour by the Government of India, after the Jnanpith award.

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