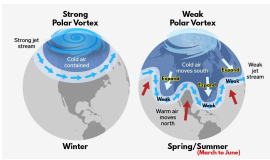**09 January 2025**
National and International News

Miyawaki technique	**Why in news?** ● In the past two years, approximately 56,000 square meters of dense forests have been created in Prayagraj using the Miyawaki technique. **Key Points:** ● Miyawaki forests or Miyawaki technique, **refer to a unique approach to afforestation and ecological restoration developed by Japanese botanist Dr. Akira Miyawaki.** ● The methodology was **developed in the 1970s, with the basic objective to densify green cover within a small parcel of land.** ● The method **involves creating dense, multi-layered forests that grow rapidly and mimic the natural biodiversity of native forests.** ● This method involves **planting two to four different types of indigenous trees within every square metre.** ● The plants used in the Miyawaki method are mostly **self-sustaining and don't require regular maintenance like manuring and watering.** ● In this method, **the trees become self-sustaining and they grow to their full length within three years.**
Classical Language Status	**Why in news?** ● Recently, the **Marathi language** has been officially granted classical status. **Key Points:** ● The recognition of a classical language is based on criteria established by a **Linguistic Experts Committee.** ● According to the committee, the following revised benchmarks must be met for a language to be considered "classical": ● **High antiquity of (its) is early texts/recorded history over a period of 1500- 2000 years.** ● A body of ancient literature/texts, which is considered a heritage by generations of speakers. ● **Knowledge texts, especially prose texts in addition to poetry, epigraphical and inscriptional evidence.** ● The Classical Languages and literature could be distinct from its current form or could be discontinuous with later forms of its offshoots. ● **Other Recognised Classical Languages are: Tamil (2004), Sanskrit (2005), Telugu(2008), Kannada (2008), Malayalam(2013) and Odia (2014).** ● **Benefits of Classical Language Status:** ○ Two major international awards annually for scholars of

	eminence in the language. ○ Establishment of a Centre of Excellence for Studies in the Classical Language. ○ Requesting the University Grants Commission (UGC) to create Professional Chairs in Central Universities dedicated to the classical language.
Polar Vortex 	**Why in news?** ● The US, parts of Europe, and Asia experienced chilly winds when the **polar vortex at the North Pole weakened and traveled from its usual position.** ● The extreme weather has been caused by the expansion of the polar vortex southwards. **Key Points:** ● The polar vortex is a **large area of low pressure and cold air surrounding both of the Earth's poles.** ● It **always exists near the poles, but weakens in summer and strengthens in winter.** ● The term **"vortex" refers to the anti-clockwise flow of air that helps keep the colder air near the Poles.** ● Many times, during winter in the northern hemisphere, the polar vortex will expand, sending cold air southward with the jet stream. ● **Jet stream is the area of fast-moving air high in the atmosphere that surrounds the polar vortex.** ● This occurs fairly regularly during wintertime and is often associated with large outbreaks of Arctic air in the United States & Canada. ● Portions of Europe and Asia also experience cold surges connected to the polar vortex.
Digital Personal Data Protection (DPDP) Act, 2023	**Why in news?** ● The Union government is aiming to finalize and notify the **Digital Personal Data Protection Rules**, which are currently in draft form, by the middle of the year, according to Union Minister of Electronics and Information Technology, Ashwini Vaishnaw. **Key Points:** ● The DPDP Act is a **legal framework introduced in India to safeguard the personal data of individuals and ensure that their data is shared only with their consent.** ● It regulates the processing of digital personal data and outlines various provisions to protect individuals' privacy in the digital age. ● **Applicability:** ○ It applies to the processing of digital personal data within the territory of India collected online or collected offline and later digitized. ○ It is also applicable to processing digital personal data outside the territory of India, if it involves providing goods or services to the data principals within the territory of India. ● **Evolution:**

- The conceptual basis of the DPDP Act is the report of the Expert Committee set up under the chairmanship of Justice BN Srikrishna, which led to the introduction of the Personal Data Protection Act in 2019.
- After several iterations and consultations, the Digital Personal Data Protection Act, 2023, was introduced and subsequently passed by both the Lok Sabha and the Rajya Sabha.

- **Key Stakeholders:**
  - **Data Principal (DP): – the data owner.**
    - DP could be individuals or entities whose data is to be protected.
    - The DP has to give written consent to generate and process the data indicating the specific purpose of its use.
    - DP can withdraw the consent at any time or can restrict its use.
  - **Data Fiduciary– A data collecting, storing, and sharing entity.**
    - A data fiduciary also acts as a "Consent Manager" who enables a DP to give, manage, review, and withdraw consent through an accessible, transparent, and interoperable platform.
    - The Central Government may notify any Data Fiduciary or class of Data Fiduciaries as Significant Data Fiduciaries, on the basis of an assessment of relevant factors when they turn out to be systemically significant.
  - **Data Processor–**an entity processing the data on behalf of a data fiduciary.
    - Both Data fiduciary and data processor could also be the same in certain small entities.
  - **Data Protection Officer (DPO):** – could be any individual appointed as DPO by a Data Fiduciary under the provisions of this Act.

Places in news: Chabahar Port	**Why in news?** - **India and the Taliban held their first top-level talks to address security concerns related to trade through the Chabahar port.** **Key Points:** - It is a **deep-water port located in Iran's Sistan-Baluchistan province.** - It is on the **Gulf of Oman at the mouth of the Strait of Hormuz.** - It is the only Iranian port having direct access to the Indian Ocean. - It consists of two separate ports called Shahid Beheshti and Shahid Kalantari. - Its geographic proximity to countries such as Afghanistan, Pakistan, and India, as well as its status as a key transit center on the burgeoning International North-South Transport Corridor (INSTC),

gives it the potential to develop into one of the most important commercial hubs in the region.

- ○ **INSTC is a multi-modal transportation route linking the Indian Ocean and the Persian Gulf to the Caspian Sea via Iran, and onward to northern Europe via Saint Petersburg in Russia**.
- **Chabahar Project:**
  - ○ In May 2016, India signed a tripartite agreement with Iran and Afghanistan to develop the Shahid Beheshti Terminal at Chabahar.
  - ○ **It is India's first foreign port project.**
  - ○ The deal agreement aims to establish an international transport and transit corridor in Chabahar.
  - ○ The construction of the Chabahar Port and the construction of a rail line from Chabahar Port to Zahedan are the major highlights of this project.
  - ○ The idea was that the port would **enable India to bypass Pakistan and access Afghanistan, and ultimately Central Asia.**
  - ○ Moreover, the port could serve as a hub for transit trade between India, Iran, and Afghanistan and provide an alternative route to the traditional Silk Road that passes through China.

SpaDeX mission	Why in news? - ISRO has delayed the **Space Docking Experiment (SpaDEx) involving two satellites once again, citing excessive drift during a critical maneuver.** Key Points: - SpaDeX (Space Docking Experiment) is a **technology demonstrator mission developed by the ISRO to showcase in-space docking technology.** - This mission aims to demonstrate the ability to rendezvous, dock, and undock two small spacecraft, marking a significant advancement in India's space capabilities. - **Objective:** The primary goal of SpaDeX is to develop **docking technologies for two small spacecraft, SDX01 (Chaser) and SDX02 (Target), in low Earth orbit.** - **Mission Duration:** Two years - **Mission Design:** SpaDeX will deploy two satellites, SDX01 and SDX02, into a 470 km orbit using the Polar Satellite Launch Vehicle (PSLV) rocket, where they drift apart and gradually approach each other, eventually docking at distances from 20 km to 3 meters. - SpaDeX will use **PSLV's fourth stage, POEM (PSLV Orbital Experimental Module)-4**, to carry **24 payloads from academic institutions and startups.** - **Docking Challenge:** The two satellites (**Chaser and Target**) will orbit at speeds of 28,800 km/h. They will need to carefully reduce their relative velocity to just 0.036 km/h before docking.

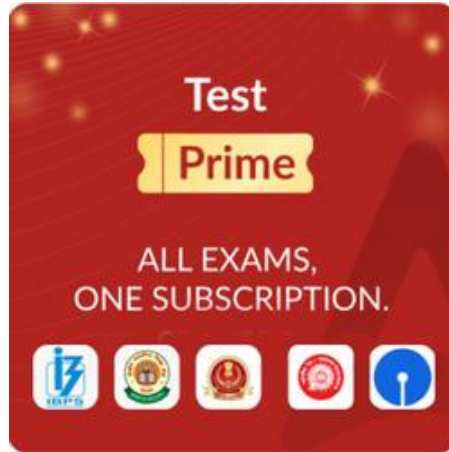|	**What isSpace Docking?** ● Space docking is the **intricate process of maneuvering two fast-moving spacecraft into the same orbit, bringing them closer, and joining them to form a single unit.**