1. **Inclusive India Summit :** Recently, on the occasion of **Global Accessibility Awareness Day (GAAD),** the Department of Empowerment of Persons with Disabilities (DEPwD), under the MoSJE, organized the **Inclusive India Summit** at the India International Centre in New Delhi.
   - **About Inclusive India Summit :** The hybrid event aimed to promote **inclusive development**, **digital accessibility**, and **empowerment of Divyangjan** in India.
     - It was organized in collaboration with SBI Foundation and National Association for the Blind Delhi, with support from Association of People with Disability and Mission Accessibility .
   - **Global Accessibility Awareness Day (GAAD):** Third Thursday of Each May is Global Accessibility Awareness Day. A global initiative aimed at raising awareness about digital accessibility and inclusion for people with disabilities.
   - **Digital accessibility:** It refers to the ability of people with disabilities/impairments to independently consume and/or interact with digital (e.g., web, mobile) applications and content.
2. **India-EU Trade and Technology Council:** Recently, India and the European Union (EU) launched two major joint research initiatives under the India-EU Trade and Technology Council (TTC).
   - **Research Initiatives Under India-EU TTC:**
     - **Marine Plastic Litter (MPL)**: Combat marine pollution using innovative tools and sustainable solutions.
       - ✓ **Scope:** Tackle pollutants (microplastics, heavy metals, POPs) and their effects on marine life, food chains, and health.
       - ✓ **Focus:** Detect micro/nano plastics, assess ecological risks, track pollution, and align with global ocean initiatives.
       - ✓ **Outcomes:** Develop tools, inform policy, and strengthen India-EU marine ties.
     - **Waste to Green Hydrogen (W2GH)**: Develop sustainable technologies to produce green hydrogen from biogenic waste.
       - ✓ **Scope:** Joint research on hydrogen production from various biogenic wastes.
       - ✓ **Focus:** Advanced catalysts, process intensification, feedstock treatment, and diverse production methods.

- ✓ **Goals:** High conversion efficiency, low emissions, cost-effectiveness, and minimal environmental impact.
- ✓ **Outcomes:** Scalable, safe hydrogen technologies and strengthened India-EU clean energy collaboration supporting national missions.

- **About India-EU TTC :** A bilateral platform to boost cooperation on **trade, technology, and security** between India and the EU.
  - EU's second TTC (after the US) and India's first-ever TTC.
  - Announced in **April 2022**, launched in **February 2023**, with the first ministerial meeting in **May 2023** alongside FTA talks.

3. **Aminated Graphene:** Recently, researchers from Nagaland University developed an innovative **supercapacitor material** that charges faster, lasts longer, and has the potential to redefine global energy storage standards.
   - The team developed a cost-effective, single-step method to produce aminated graphene.
- **Graphene:** It is a two-dimensional material that is extracted from graphite, consisting of a single layer of carbon atoms arranged in a honeycomb structure.
  - Graphene is the **thinnest material** known to man at one atom thick, and also incredibly strong - about 200 times stronger than steel.
  - **Flexibility:** It is extremely flexible and stretchable.
  - **Conductivity:** It is an excellent electrical and thermal conductor.
  - **Transparency:** It is almost perfectly transparent since it only absorbs 2% of light.
- **About Aminated Graphene:** Derived from **reduced graphene oxide** using a simple, single-step process at ambient conditions, eliminating the need for expensive rare-earth materials or complex manufacturing.
  - Laboratory tests show the new supercapacitor material has an electrochemical window of **2.2V**. It retains over 98% capacity after 10,000 charge-discharge cycles.
- **Uses & Impact:** Suitable for electric vehicles and grid-scale renewable energy storage.
  - Enables fast charging and offers long-lasting durability.
  - Supports efficient management of intermittent renewable sources like solar and wind.

4. **Kancha Gachibowli:** Recently, the Supreme Court directed Telangana to either restore the deforested Kancha Gachibowli area, cleared for an IT project over a long weekend, or risk having the Chief Secretary and several officials sent to a temporary prison near the site.
   - **About Kancha Gachibowli : Hyderabad's Green Lung:** Plays a key role in improving air quality and regulating urban temperatures.
     - Hosts 734+ flowering plant species, 10 mammals, 15 reptiles, and 220 bird species.
     - 27 bird species protected under Schedule I of the Wildlife Protection Act, 1972.
     - 32 species marked as high conservation priorities in the **2023 *State of India's Birds* report.**
     - **Key Species Found:** Tree Trunk Spider , Indian Roller , Oriental Skylark ,Monitor Lizards, Bronze-Backed Tree Snake, Flame of the Forest etc.
5. **Mahadayi River :** Recently, a protest erupted in Goa over a scientific paper titled **"The Water Budget of the Mahadayi River and Its Implications for the Inter-State Dispute."**
     - The paper was authored by scientists from the Council of Scientific and Industrial Research – National Institute of Oceanography (CSIR-NIO), Goa, and the Indian National Centre for Ocean Information Services (INCOIS), Ministry of Earth Sciences, Hyderabad.



   - **About the Mahadayi River**: Also called as Mandovi or Mhadei, it is a rain-fed interstate river vital for Goa's water supply, agriculture, biodiversity, and economy.
     - It **originates in Bhimgad Wildlife Sanctuary, Belagavi district, Karnataka**.
     - Flows through Karnataka, Maharashtra, and Goa, covering 111 km (35 km in Karnataka, 1 km in Maharashtra, 76 km in Goa).
     - Major tributaries include Kalasa, Banduri, Mapusa, and Ragada.
     - The Cumbarjua Canal links the Mahadayi River to **the Zuari River.**
     - Empties into the Arabian Sea near Panaji, close to Mormugao Harbour.
     - Features **Dudhsagar Falls and Salim Ali Bird Sanctuary**; supports navigation, iron ore transport, tourism, and includes Goa's tallest bridge, Atal Setu.

6. **EOS-09 Satellite:** ISRO is set to launch an earth observation satellite from the Sriharikota spaceport, enhancing its all-weather surveillance capabilities from space.
   - **About EOS-09** : Also known as **RISAT-1B**, weighing approximately **1,710 kg**
     - **Payload**: Equipped with **C-band synthetic aperture radar (SAR).**
     - **Capability**: High-resolution Earth imaging in all weather conditions, day and night.
     - **Significance:** Enhances India's **real-time Earth observation** capabilities across its vast territory.
       - ✓ Supports multiple sectors such as **agriculture, forestry, disaster management, urban planning, and national security**.
       - ✓ Complements existing satellites including **Resourcesat, Cartosat, and RISAT-2B**.
   - **C-band Synthetic Aperture Radar (SAR)** is important because it enables the satellite to capture clear images regardless of clouds, fog, or darkness. This capability is crucial for detecting intrusions, monitoring enemy movements, and supporting anti-terrorist operations.
7. **Economic Capital Framework (ECF):** Recently, the Reserve Bank of India's (RBI) central board convened in Mumbai to review the Economic Capital Framework (ECF), assessing the central bank's capital requirements and risk management strategies.
   - **About ECF :** Outlines how the Reserve Bank of India (RBI) manages its financial reserves, risk provisioning, and surplus (dividend) transfers to the central government.
     - Introduced in 2019 based on recommendations by the **Bimal Jalan Committee** (2018).
     - It prescribes rules for **Contingency Risk Buffer (CRB)**: A financial safeguard maintained by RBI to address unforeseen economic shocks.
     - The framework is reviewed every **five years**, with the **next review due in August 2024**.
     - Ensures RBI's financial resilience and supports its role as the **Lender of Last Resort (LoLR)** in times of crisis.
8. **Article 143 :** Recently, the Tamil Nadu Chief Minister strongly criticized the Presidential Reference made to the Supreme Court under Article 143 of the Constitution.
     - The Reference seeks the Court's advisory opinion on whether it can impose timelines for the Governor and the President to act on State Bills, as per Articles 200 and 201 of the Constitution.

- **About Article 143 of the Indian Constitution:** Empowers the President to seek the Supreme Court's advisory opinion on questions of law or fact that are of public importance and either likely to arise or already arisen.
  - Defines the Supreme Court's advisory jurisdiction, exclusive to the President.
  - **Article 143(1):** President may refer any matter; Supreme Court can choose to give or refuse its opinion.
  - **Article 143(2):** President can refer disputes from pre-Constitution agreements (including state matters); Supreme Court must give its opinion.
- **Related Provisions on Bills:**
  - **Article 200:** Governor's powers over state legislature bills – give assent, withhold assent, or reserve for the President.
  - **Article 201:** President's veto power on bills reserved by the Governor.

9. **Golden Dragon 2025:** Cambodia and China have recently commenced their largest-ever Golden Dragon joint military exercise, encompassing coordinated land, sea, and air operations.
   - **About Golden Dragon :** Annual bilateral military drill started in 2016 to strengthen military cooperation and strategic ties between the two nations.
     - Focuses on joint counter-terrorism operations and humanitarian relief, aiming to build peace and capacity.
     - The drills are hosted at the Ream Naval Base in **Sihanoukville, Cambodia.**
     - Features advanced technologies such as reconnaissance and attack drones, surgical robots, and robot dogs, highlighting a shift toward technology-driven warfare.
     - The exercise signals China's expanding ability to project military power beyond its borders, consistent with its **"String of Pearls"** strategic initiative.