

1. **India's First 3nm Chip Design Centres** : Recently, the Union Minister for Electronics & IT, Railways, and Information & Broadcasting inaugurated two state-of-the-art chip design facilities of Renesas Electronics India Pvt. Ltd. in Noida and Bengaluru.
 - These centres are India's first to undertake **3 nm chip design**, a major leap in semiconductor innovation.
 - **Key Highlights:** The initiative is aligned with India's end-to-end semiconductor roadmap, covering design, fabrication, ATMP (Assembly, Testing, Marking, and Packaging), and critical supply chains like chemicals and gases.
 - A new semiconductor learning kit has been launched to enhance hands-on training in chip design for engineering students.
 - Over 270 academic institutions will receive these kits to complement their existing EDA (Electronic, Design, Automation) software tools and close the hardware-software skills gap.
 - Semiconductors have become a priority area under India's self-reliance drive, with chip demand rising across smartphones, laptops, defense, automotive, and medical electronics.
2. **Tsarap Chu Conservation Reserve** : Recently, the Himachal Pradesh government notified the Tsarap Chu Conservation Reserve in the remote Spiti Valley as the **largest conservation reserve** in India.
 - The declaration was made under Section 36A(1) of the **Wildlife (Protection) Act, 1972**, marking a significant step in biodiversity preservation in high-altitude ecosystems.
 - **About Tsarap Chu Conservation Reserve** : Spans 1,585 sq km, making it the largest conservation reserve in the country and the fifth in Himachal Pradesh.
 - Located in Spiti Valley, bordered by Ladakh, Kibber and Chandratal Wildlife Sanctuaries, and Kabjima Nala.
 - Includes the ecologically vital confluence of the Unam River and Charap Nala.
 - Known for its high snow leopard density, making it a critical site for the conservation of this elusive predator.

- Other key species include the Tibetan wolf, bharal (blue sheep), Himalayan ibex, kiang (wild ass), Tibetan argali, and rare birds like the Rose Finch, Tibetan Raven, and Yellow-billed Cough.
- **Community-Led Conservation:** Developed through consultations with local Gram Panchayats.
 - A dedicated management committee will include community representatives.
 - Aims to promote eco-tourism, research, and livelihoods while ensuring conservation.
- 3. **Global Report on Internal Displacements 2025:** Recently, the Internal Displacement Monitoring Centre (IDMC) published the Global Report on Internal Displacement 2025.
 - **Key Highlights from the Report:** In 2024, natural disasters displaced 11 million people within the United States, marking a record-high figure for any single country.
 - 45.8 million people were displaced globally in 2024, the highest since tracking began in 2008, with climate-related weather events responsible for 99.5% of the displacements.
 - Disasters driven by climate change affected 29 countries, including the US, marking the highest displacement figures for these nations.
 - **Regional Insights: Sub-Saharan Africa:** 19.3 million displaced, 7.8 million by disasters.
 - **East Asia & Pacific:** 16.2 million displaced, 14.8 million by disasters.
 - **South Asia:** 9.2 million disaster-related displacements, nearly tripling due to El Niño droughts.
 - **About IDMC:** Provides critical information and analysis on internal displacement. Operates under the Norwegian Refugee Council (NRC), a non-governmental humanitarian organization
 - It tracks forced movements of people within a country during a specific year.
 - **Established:** 1998 , **HQ:** Geneva
 - It influences policy and actions of governments, UN agencies, donors, and NGOs through evidence-based advocacy.
- 4. **First Geothermal Production In Northeast Region:** Recently, the Centre for Earth Sciences and Himalayan Studies (CESHS) drilled the first geothermal production well in **Dirang**, a town in West Kameng district, Arunachal Pradesh.
 - This groundbreaking project has the potential to make Dirang India's first geothermal-powered town.

- **About Geothermal Energy:** It is the heat derived from the Earth's interior.
 - It is harnessed by tapping into steam or hot water reservoirs beneath the Earth's surface.
 - This energy can be used directly for heating or converted into electricity through geothermal power plants.
- **Geothermal Energy In India:** The geothermal provinces of India have the potential to generate around 10,600 MW of electricity.
 - Around 350 geothermal energy locations have been discovered in India by the Geological Survey of India.
 - The Himalayas, Sohana, West Coast, Cambay (Gujarat), Godavari, Mahanadi, and Son-Narmada-Tapi (SONATA) geothermal provinces, as well as a number of geothermal springs, make up India's geothermal provinces.
 - Geothermal resources in India have been mapped, and a broad estimate suggests that there could be a 10 gigawatt (GW) geothermal power potential (MNRE).
- 5. **India's Air Defence Shield :** India's air defense strategy is centered around the Integrated Air Command and Control System(IACCS), which integrates data from various assets to respond swiftly to aerial threats.
 - It played a crucial role in Operation Sindoor, enhancing military effectiveness.
- **About IACCS :** Developed by Bharat Electronics Limited (BEL).
 - An automated command and control system that **connects a range of air defence systems including:** Ground-based radar, Airborne sensors, Civilian radar, Communication nodes and Air Force control centres.
 - Provides a consolidated real-time feed, enhancing situational awareness for military commanders.
 - Centralized control and decentralized execution allow for rapid decisions and effective response to aerial threats, improving reaction time.
 - Manage overlapping radar and radio coverage to ensure effective airspace management.
 - Works within a multilayered defence grid, including counter-drone systems and MANPADS (Man-Portable Air Defence Systems), and progressing to advanced surface-to-air missiles at various ranges.

- **Role of Akashteer:** The **Indian Army** has a similar air defence control system named **Akashteer**, developed by **BEL**.
 - Focuses on **low-level airspace monitoring** and connects **air defence weapon systems** on the ground.
 - It is set to integrate with **IACCS** to ensure better coordination between **Army** and **Air Force** air defence operations.
- 6. **PM SHRI Scheme:** Recently, Kerala decided to approach the Supreme Court over the Centre's withholding of ₹1,500 crore for education schemes, reportedly due to its non-participation in the PM Schools for Rising India (PM SHRI) scheme.
- **About PM SHRI Scheme:** Centrally Sponsored Scheme launched in 2022 to upgrade schools as model institutions for implementing the National Education Policy (NEP) 2020.
 - **Objective:** To establish inclusive, nurturing schools with modern infrastructure, holistic education, and competency-based learning.
 - **Implementation Timeline:** Active from 2022–23 to 2026–27. Post-implementation, states/UTs will sustain the achieved benchmarks.
 - Emphasizes critical thinking, collaboration, communication; uses experiential, learner-centered pedagogy.
 - Features smart classrooms, advanced labs (science, vocational, Atal Tinkering), promotes sustainability through water conservation, waste management, energy efficiency, and adopts competency-based evaluations tied to real-world applications.
 - **Eligible Schools(using UDISE+ data):** Government-run schools at Central, State, UT, and local levels. Also includes KVs and JNVs (non-project, permanent buildings only).
- 7. **WTO Agreement on Safeguards (AoS) :** Recently, India formally notified the World Trade Organization (WTO) of its intention to impose retaliatory tariffs on \$7.6 billion worth of U.S. goods.
 - This move responds to the U.S. decision to reintroduce 25% tariffs on steel and aluminium imports from March 2025, citing national security and offering no exemptions by country or product.

- **About WTO AoS** : Emergency trade actions under the WTO Agreement on Safeguards to protect domestic industries from a surge in imports causing or threatening serious injury.
 - **Purpose**: Prevent or reduce harm to domestic industries by temporarily restricting imports.
 - **Forms**: May include import quotas or raising tariffs above bound rates.
 - **Nature**: Unlike anti-dumping and countervailing duties, no unfair trade practice needs to be proven.
 - **Conditions**: Must be temporary and progressively liberalized.
 - Should apply on a non-selective, Most-Favored-Nation basis
 - Requires compensation to affected trading partners.
8. **Repairability Index (RI)**: The Department of Consumer Affairs (DoCA) in India has submitted a report on the Framework for Repairability Index (RI) in the mobile and electronic sector.
- **About RI**: A standardized, self-declared score provided by Original Equipment Manufacturers (OEMs) to assess how easily a product, such as a smartphone or tablet, can be disassembled, repaired, and maintained.
 - **Assessment Criteria**: Disassembly Depth, Repair Information Availability, Spare Parts Availability within a reasonable timeline, Software Updates, Tools Required for Repairs and Fasteners (types and availability).
9. **Treasury Bill**: India recently rolled over a \$50 million treasury bill for the Maldives, continuing a Government-to-Government arrangement established in 2019, where India provides annual emergency financial aid through treasury bill rollovers.
- **About Treasury Bills**: T-Bills are **money market instruments**.
 - First issued in India in 1917.
 - Issued via auctions conducted by the Reserve Bank of India (RBI) at regular intervals.
 - These are **short term debt instruments** issued by the Government of India.
 - **Tenure**: These are presently issued in three tenors, namely, **91 day, 182 day and 364 day**.
 - These are zero coupon securities and pay no interest. Instead, they are issued at a discount and redeemed at the face value at maturity.