1. **Governor:** Recently, the Supreme Court said that a Governor cannot reserve a Bill for the President's consideration if it is presented for the second time after being returned under Article 200.
   - **Key Highlights of SC Verdicts:** Court clarified that the Governor must grant assent to a re-passed Bill within one month.
   - Three-month limit set for reserving Bills for President, but only in the first instance, not after reconsideration.
   - **About:** Governor is an unelected constitutional authority and acts as the Head of the State.
     - Governor's role in lawmaking includes granting, withholding, returning, or reserving Bills.
     - Discretionary powers of the Governor must be constitutionally bound and non-arbitrary.
   - **Governor's Powers under Article 200:**
     - **Article 200** empowers the Governor to: (1) Grant assent, (2) Withhold assent, (3) Return for reconsideration, (4) Reserve for President.
     - Proviso to Article 200 mandates the Governor to return Bills promptly with a message, except Money Bills.
     - Re-passed Bill by the State Assembly requires the Governor to mandatorily grant assent.
   - **Recent Issues:** Supreme Court (2023) held that a Governor cannot stall lawmaking by indefinitely withholding assent.
     - Tamil Nadu case (2025) clarified that reservation for President is invalid after re-passage of the Bill.
     - Expression 'in his discretion' from the 1935 Act was omitted in Article 200, limiting the Governor's discretion.
2. **Chittorgarh Fort:** Recently, the Rajasthan Government informed the Supreme Court that it is "actively considering" a complete ban on mining up to 10 km from the outer boundary of Chittorgarh Fort.
   - **About Chittorgarh Fort:** Built by local Maurya rulers in the 7th century A.D., the Chittorgarh Fort in Rajasthan is one of the largest forts in India. The common belief is that Chitrangada Mori, the local Maurya ruler, developed the fort originally.



- Later, the fort was captured by the Mewar rulers in 728 CE. It used to be the capital of the Mewar rulers, situated on a 180-meter-high hill that rises from the banks of river Berach.
- The Fort has been witness to several legendary warriors in Indian history, including Badal, Gora, Maharana Pratap, Rana Kumbha, Patta, and Jaimal, among others.
- It was declared a **UNESCO World Heritage Site in 2013**.

- **Features:** The fort is known for its seven gates, namely Padan Gate, Ganesh Gate, Hanuman Gate, Bhairon Gate, Jodla Gate, Lakshman Gate, and the main gate, which is named after Lord Ram.
  - The fort houses four palaces, 19 temples (including Jain and Hindu temples), 20 water bodies, and four memorials.
- **Jauhar Mela:** Every year, a Jauhar Mela is held in Chittorgarh.
  - This Rajput festival celebrates the anniversary of one of the jauhars.
  - Though there's no specific name given, it is believed that the fair commemorates Rani Padmini's jauhar and celebrates Rajputana valour.

3. Topological materials: Recently, Microsoft released a quantum-computing chip made of such topological materials.

- **About Topological Materials:** Materials that behave differently on the surface and inside, such as a metal outside and an insulator inside, are called topological materials.
  - Such materials were discovered in the second half of the 20th century, and some of their discoverers won the Nobel Prize for Physics in 2016.
  - To understand why these materials work, one needs quantum mechanics, whose foundational principles were discovered 100 years ago.
  - 2025 has been declared as the International Year of Quantum Science and Technology by the UN.
- **How Does Mirror Work?**
  - A mirror is not one material but two — glass (shy electrons) and metal (unruly electrons).
  - A mirror feels like glass but reflects like a steel plate. It has a thin metal layer at the back.
  - The glass lets light through, and metal reflects it back. This combination makes a long-lasting mirror.

- Imagine a block of glass with silver on all sides — it will look like metal but won't conduct inside. Creating such behaviour in a single material results in topological materials.

- **Note:** When you next stare at a mirror, appreciate the dance of electrons in both the glass and metal layer, sending your light back to you.
  - To deeply understand this, consider learning quantum mechanics, such as through physics courses at institutions like IIT Kanpur.

4. **3D-printed Train Station:** The West Japan Railway Company unveiled a 3D-printed train station in Arida city, claiming it as a world first.
   - The new station's **components were 3D-printed elsewhere and assembled on-site in less than six hours**.
   - **About 3D printing:** Also known as additive manufacturing, is a process that creates three-dimensional objects from a digital design by layering material until the object is complete.
   - **Key Sectors Adopting 3D Printing in India:**
     - **Aerospace:** HAL & Wipro 3D, printed air blower component for TEJAS aircraft using Direct Metal Laser Sintering (DMLS) → 50% weight reduction.
     - **GE:** Manufactured 3D-printed jet engine fuel nozzle in India → improved durability and thermal efficiency.
     - **Automotive:** Mahindra, produces 200+ 3D-printed polymer parts annually for prototypes → faster design verification.
     - **Construction:** India's first 3D-printed house: Built in 2 weeks by Tvasta using concrete extrusion technique.
     - **Healthcare:** Yaantra, the 3D-printed skull implant helped surgeons visualise tumour shape accurately.
       - ✓ Ossio: Developed orthopaedic implants from Ossioglass → matches bone strength and hardness.
     - **Consumer Goods:** Dochub & Carbon Heel, use 3D printing for customised, flexible footwear.
     - **Public Infrastructure:** India's first 3D-printed post office, constructed in 45 days by L&T and IIT Madras → shows rapid construction capability.
     - **Biomimicry:** Designs inspired by natural structures (e.g. spider webs, lotus leaves).

5. **City Key of Honour:** The President of India, Smt Droupadi Murmu recently received the 'City Key of Honour' of Lisbon honour by the President of Portugal.
   - **About:** The 'City Key of Honour' is a ceremonial accolade bestowed by the city of Lisbon to distinguished individuals, symbolizing their honorary citizenship and recognizing their significant contributions or esteemed status.
   - **Portugal's Role in India-EU Relations:** The President appreciated Portugal's role in promoting India's relations with the European Union.
   - During Portugal's EU Presidency that the first India-EU Summit was held in 2000, and in May 2021, again under the Portuguese Presidency, the historic "India-EU Plus 27" Leadership Summit took place in Portugal.
6. **Niveshak Didi:** The Investor Education and Protection Fund Authority (IEPFA) and India Post Payments Bank (IPPB) have signed a Memorandum of Agreement to launch Phase 2 of the Niveshak Didi initiative to deepen financial literacy among rural women in India.
   - **About Niveshak Didi Initiative:**
     - **Women-led Financial Literacy Drive:** Empowers rural women through community-based financial education.
     - **Launched in:** 2023; now expanded in Phase 2 in April 2025.
     - **Implemented by**: Investor Education and Protection Fund Authority (IEPFA) under Ministry of Corporate Affairs. India Post Payments Bank (IPPB) under Department of Posts, Ministry of Communications.
     - **Objective:** Spread financial awareness and responsible money management in rural areas.
       - ✓ Encourage inclusive banking, digital literacy, & fraud prevention through local women influencers.
   - **Key Features:**
     - **Grassroots Deployment:** 40,000+ women postal workers to be trained as Niveshak Didis for outreach in underserved areas.
     - **Financial Literacy Camps:** 4,000+ new camps to be organised across rural, semi-urban, and tribal regions.
     - **Focused Curriculum Includes:** Savings, digital banking, safe investment, & fraud prevention.

- **Women-Centric Model**: Over 60% beneficiaries in Phase 1 were women from remote areas, leveraging their community influence.
- **Digital Inclusion:** Promotes paperless and cashless banking using IPPB tools in 13 vernacular languages.

7. **Electronics Components Manufacturing Scheme:** The Ministry of Electronics and Information Technology (MeitY) has notified the Electronics Components Manufacturing Scheme to deepen India's electronics ecosystem and strengthen its position as a global electronics manufacturing hub.
   - **About Electronics Components Manufacturing Scheme:** Under the scheme, over 400 production units active in electronics components manufacturing.
   - **Export CAGR:** Over 20%; Production CAGR: Over 17%.
   - **Objective:** Strengthen deep component manufacturing, ensure value addition, and promote self-reliance in electronics production.
   - **Electronics Manufacturing Evolution:** Shift from finished goods → sub-assemblies → component manufacturing (3rd phase).
   - **Coverage:** A horizontal scheme benefiting sectors like: Consumer electronics → Medical devices → Automobiles → Power electronics → Electrical grids
   - **Focus Components: Examples:** Resistors, capacitors, connectors, inductors, speakers, relays, switches, oscillators, sensors, films, lenses, etc.
     - Active components to be covered under the India Semiconductor Mission (ISM).
   - **Capital Equipment Support:** Scheme includes support for design and manufacture of capital tools and equipment.
     - Inspired by Semiconductor Mission's success in attracting firms like Applied Materials, Lam Research.
     - Companies like Linde setting up facilities in India.
   - **Incentive Models:** Turnover-linked incentive → Capex-linked incentive → Hybrid incentive model
   - **Employment Requirement:** Job creation is mandatory for all applicants, including: Component manufacturers & Capital equipment producers.