1. **Pralay Ballistic Missile:** The Defence Research and Development Organisation (DRDO) is set to showcase the Pralay missile at this year's Republic Day parade.
   - **About:** It is an indigenously developed short-range, quasi-ballistic surface-to-surface missile.
     - **Range**: Approximately **400 km**, complementing BrahMos and Parahar missiles for standoff strikes.
     - **Features**: Twin launcher configuration on **Ashok Leyland 12x12 high-mobility vehicle**.
       - ✓ Payload capacity: **500-1,000 kg**.
       - ✓ Powered by **solid-propellant rocket motor**.
       - ✓ State-of-the-art **navigation system** and **integrated avionics**.
     - **Missile capabilities**: Quasi-ballistic trajectory with precision targeting & Supports multiple warheads for various target types.
   - **About Sanjay Battlefield Surveillance System:** It is a centralised battlefield transparency through integration of ground and aerial sensors.
     - **Capabilities**: Produces a common surveillance picture over secured Army networks.
       - ✓ Enhances battlefield decision-making for Command and Army Headquarters.
     - **Development**: Jointly developed by **Indian Army** and **Bharat Electronics Limited**.
     - **Technologies**: Equipped with advanced **sensors, analytics, & satellite communication**.
   - **About Nirbhay Missile**: It is a **long-range sub-sonic land attack cruise missile**, with **range** of **1,000 km**.
2. **Fiscal Health Index 2025:** The NITI Aayog has recently released its first Fiscal Health Index (FHI).
   - **About the Top-Performing States**:
     - **Achievers**: Odisha, Chhattisgarh, Goa, Jharkhand.
       - ✓ Odisha topped with the **highest overall index score of 67.8**.
     - **Report Coverage**: Covers **18 major States** contributing significantly to India's **GDP, demography, public expenditure, revenues**, and **fiscal stability**.
   - **Category Rankings**:
     - **Achievers**: Mineral-rich States with high capital outlay and revenue surplus.
     - **Front-Runners**: Maharashtra, Uttar Pradesh, Telangana, Madhya Pradesh, Karnataka.
     - **Performers**: Tamil Nadu, Bihar, Rajasthan, Haryana.

- **Aspirational**: Punjab, Andhra Pradesh, West Bengal, Kerala (facing fiscal challenges).

- **Performance Insights**:
  - **Top Achievers**: High **capital outlay** (up to 4% of GSDP), effective **non-tax revenue mobilisation**, and low **interest payments** (up to 7% of revenue receipts).
  - **Front-Runners**: High **developmental expenditure** (up to 73%), consistent **tax revenue growth**, and balanced fiscal management with **debt-to-GSDP ratio of 24%**.
  - **Aspirational States**: Struggling with **fiscal and revenue deficit targets** and **Low revenue mobilisation**, high debt burden, and poor debt sustainability.
- **State-Specific Observations**:
  - **Odisha**: Tops **debt index** (99.0) and **debt sustainability** (64.0), maintains **low fiscal deficits**, strong debt profile, and high capital outlay/GSDP ratio.
  - **Kerala and Punjab**: Low **quality of expenditure** and poor **debt sustainability**.
  - **West Bengal**: Faces **revenue mobilisation** and **debt index** issues.
  - **Andhra Pradesh**: High **fiscal deficit**.
  - **Haryana**: Poor **debt profile**.
- **Historical Performance (2014-15 to 2021-22)**: Highest average FHI scores: **Odisha, Goa, Karnataka, Maharashtra, Chhattisgarh**.
- **Data Source**: Data from the **Comptroller and Auditor General (CAG)**.

3. **Purchasing Managers' Indices (PMI):** Private sector output and growth levels fell to a **14-month low**, as per HSBC Flash PMI.
   - **Purchasing Managers' Index (PMI):** It is **an indicator of business activity, both in the manufacturing and services sectors.**
     - It is a survey-based measures that asks the respondents about changes in their perception of some key business variables from the month before.
     - It is **calculated separately for the manufacturing and services sectors** and then a composite index is constructed.
   - **Method of Formulation:** The PMI is derived from a series of qualitative questions based on **5 key variables -** new orders (30%), output (25%), employment (20%), suppliers' delivery times (15%) and stock of items purchased (10%).

- **PMI Numbers: The indices vary between 0 and 100.** A figure above 50 denotes expansion in business activity. Anything below 50 denotes contraction.
- **Frequency of its release:** The PMI is released at the start of **every month.**

4. **NVS-02 Satellite**: The Indian Space Research Organisation (ISRO) is set to launch its **100th** satellite on-board GSLV-F15 from Sriharikota on January 29.
   - **About:** The launch of a **2,250-kg navigation satellite (NVS-02)** into **Geostationary Transfer Orbit (170 x 36,577 km)**.
     - **Second of five second-generation satellites** developed to replace existing IRNSS satellites.
     - **Satellite Features**: Equipped with **Made-in-India atomic clocks** for improved accuracy.
     - Utilises **L1 frequency** (used in the US GPS) for better compatibility with smaller devices like fitness trackers with increased lifespan of **12 years**.
   - **About IRNSS/NavIC System**: A **seven-satellite constellation** providing **positioning, navigation, and timing** services over India and 1,500 km around.
     - First satellite **IRNSS-1A** launched in 2013 with a **10-year mission life**.
     - Replacement needed for satellites with **malfunctioning atomic clocks**.
     - Replacement satellite **IRNSS-1H** failed to reach orbit due to PSLV heat shield malfunction.
   - **Historic Milestone**: **17th flight** of the **GSLV vehicle**, with the **11th flight** using the indigenously developed **cryogenic engine**.

5. **International Year of Cooperatives 2025:** The inaugural function of the International Year of Cooperatives 2025 was recently held in Mumbai, Maharashtra.
   - **About:** The International Year of Cooperatives (IYC2025) is a United Nations initiative to raise awareness of the role of cooperatives in social and economic development.
   - Celebrated in 2025 with the **theme** "**Cooperatives Build a Better World**".
   - **Key Highlights of Announcements and Initiatives during the Event:**
     - **12-Month Program**: To celebrate the Year of Cooperatives, expanding the cooperative movement and fostering transparency and inclusiveness.
     - **Umbrella Organization**: Virtual launch of the National Urban Cooperative Finance and Development Corporation (NUCFDC).

- Integration of **digital banking, mobile banking, and online transactions** with Urban Cooperative Banks.
- **Model Bylaws for PACS**: **10,000 M-PACS** training program initiated, with a goal to establish a PACS in every village panchayat.
- **Sectoral Developments**
- **Ethanol Production**: Boosting profitability of sugar mills.
- **Sugar Export**: Approval of 10 lakh tonnes for better pricing, benefiting Maharashtra's cooperative sugar mills.
- **Employment Creation**: Cooperatives to generate jobs in agriculture and rural areas.
- **Major Announcements: Tribhuvan National Cooperative University** which will focuses on producing skilled professionals for cooperatives.

6. **Kodaikanal Solar Observatory (KSO):** The **International Solar Conference** was **recently held** in **Bengaluru**.
   - **The conference on 'Sun, Space Weather, and Solar-Stellar Connections':** It has been organised by the Indian Institute of Astrophysics (IIA) to commemorate the 125th anniversary of the Kodaikanal Solar Observatory (KSO).
   - **About KSO:** A Solar Observatory of the Indian Institute of Astrophysics, a cornerstone of Indian astronomy, established in 1899, has been at the forefront of solar research.
   - **Nodal Department:** An Autonomous institute under the Department of Science and Technology.
   - **Location:** Palani hills, Kodaikanal, Tamil Nadu.
   - **Significance of KSO**: Provides insights into **solar behavior** and its impact on Earth.
     - Pioneer in **solar astrophysics** in India.
     - The **digitization of KSO records** and contributions to the **Aditya-L1 mission**.
     - Mentioned the upcoming **National Large Solar Telescope** at **Merak, Ladakh**.
7. **Thirukkural**: The Union Minister of State for Information and Broadcasting, announced a **Global Thirukkural Conference** to be held soon in **New Delhi**.
   - **About**: The Tirukkuṟaḷ or shortly the Kural is a classic Tamil language text on commoner's morality consisting of 1,330 short couplets, or kurals, of seven words each.

- **About: Author:** Attributed to **Valluvar,** also known in full as **Thiruvalluvar.**

SAINT THIRUVALLUVAR

- **Thiruvalluvar's Identity:** Thiruvalluvar, also known as Valluvar, was a prominent **Tamil philosopher** and **poet** who lived during the **Sangam era**, a period of Tamil classical culture.
- **Debated Period:** From the 3rd century BCE to the 6th century CE.
- **Thirukkural:**
  - **Meaning:** "Sacred Couplets".
  - **Genre:** Ethical work in Tamil literature.
  - **Structure:** Comprises 133 sections, each containing 10 couplets
  - **Division:** Divided into three books: aram (virtue), porul (government and society), and kamam (love)
  - **Content:**
    - ✓ **Aram:** Focuses on virtues, opens with praise of God and emphasizes a life of virtue
    - ✓ **Porul:** Envisions an ideal state, links good citizenship to virtuous private life
    - ✓ **Kamam:** Addresses both "secret love" and married love, includes a dialogue between husband and wife.