1. **Grassland Bird Survey Report:** Recently, Kaziranga National Park and Tiger Reserve released its first-ever **Scientific Survey Report on Grassland Birds**, revealing a remarkable diversity of avian species.
   - **Key Highlights**: The survey spanned areas under the Eastern Assam, Biswanath, and Nagaon Wildlife Divisions.
     - The survey documented 43 species of grassland-dependent birds, including:
       - ✓ 1 **Critically Endangered** species
       - ✓ 2 **Endangered** species
       - ✓ 6 **Vulnerable** species
     - These findings underscore Kaziranga's floodplain grasslands as one of the richest avian habitats in India.
     - **Star Discovery:** A breeding colony of the **Endangered Finn's Weaver** (Ploceus megarhynchus), locally known as **Tukura Charai**, was rediscovered in the **Kohora Range**—a significant indicator of healthy grassland ecosystems.
     - **Focus on Threatened and Endemic Species**: 10 key species that are either globally threatened or endemic to the Brahmaputra floodplains.
   - **About Kaziranga National Park :** Located in the northeastern state of **Assam** (India), lies within the **Brahmaputra Valley floodplain**.
     - **Ecological Significance:** It is the **largest undisturbed and representative area** of the Brahmaputra Valley floodplains, playing a crucial role in ecosystem conservation.
     - Designated as a **UNESCO World Heritage Site in 1985.**
     - **Flora** includes dense elephant grass and swamplands enriched with aquatic plants like water lilies, hyacinths, and lotus.
     - F**auna** comprises several endangered species, including the one-horned rhinoceros (world's largest population), Royal Bengal tiger, eastern swamp deer, elephant, wild buffalo, hoolock gibbon, capped langur, and Gangetic dolphin, making it a vital wildlife habitat.
2. **Trade Watch Quarterly** *:* Recently, NITI Aayog released the third edition of its flagship publication, **Trade Watch Quarterly**, for the third quarter of FY 2024–25 (October–December 2024).

- **Key Highlights :** Despite geopolitical headwinds, India's trade performance in Q3 FY25 showed cautious resilience:
  - ✓ **Merchandise exports** grew by **3%**, reaching **$108 billion**.
  - ✓ **Imports** increased by **6.5%** to **$187 billion**, widening the trade deficit.
  - ✓ A **robust services surplus** of **$52 billion**, driven by **17% growth** in services exports, helped offset the merchandise gap.
  - o **Export Composition Trends**: India emerged as the **5th largest exporter of Digitally Delivered Services (DDS)**, clocking **$269 billion** in 2024.
    - ✓ **Aircraft, spacecraft, and related parts** entered the top export list with **over 200% YoY growth**.
    - ✓ **High-tech exports** especially in **electrical machinery** and **arms/ammunition**, have grown at a **CAGR of 10.6% since 2014**.
- **About NITI Aayog :** Established on **January 1, 2015**, NITI Aayog (National Institution for Transforming India) replaced the Planning Commission as the premier policy think tank of the Government of India.
  - o It aims to drive economic development, promote cooperative federalism, and enable state participation in national policymaking.
  - o **Composition:** → **Chairperson:** PM of India →**Vice Chairperson:** Appointed by the PM
    → **CEO:** Appointed by PM; holds Secretary rank
    → **Full-Time Members:** Subject matter experts in key fields
    → **Ex-Officio Members:** Up to four Union Ministers
    → **Governing Council:** Includes CMs of States, LGs of UTs, and PM (as Chair)
    → **Special Invitees:** UT administrators and domain experts
    → **Regional Councils:** Formed for addressing specific regional challenges

3. Operation Shiva : Recently, the Indian Army launched **Operation Shiva** to ensure the safe and uninterrupted conduct of the **Amarnath Yatra** in Jammu & Kashmir.

- o The annual pilgrimage leads to the **Amarnath Cave**, located at an altitude of around **3,888 meters**, where a naturally formed **ice Shivling** symbolizes **Lord Shiva**.

- **Key Features :** Conducted in coordination with the **civil administration** and **Central Armed Police Forces (CAPFs)**.
  - Focuses on securing both **Northern and Southern Yatra routes** amidst rising threats from **Pakistan-backed terror proxies**, particularly after **Operation Sindoor**.
  - Over **8,500 troops** have been mobilized, backed by advanced technology and logistics.
  - Dynamic counter-terrorism grid is in place with prophylactic security & corridor protection.
  - More than **50 Counter-Unmanned Aerial Systems (C-UAS)** and **Electronic Warfare (EW)** units have been deployed to neutralize drone threats.
  - **Unmanned Aerial Vehicles (UAVs)** conduct regular surveillance with live monitoring of the Yatra routes and the holy cave.
  - **Engineer task forces** are engaged in **track widening**, **bridge construction**, and **disaster mitigation**.
  - Over **150 doctors and paramedics** deployed.

4. **Quantum Noise :** Recently, scientists at the **Raman Research Institute (RRI),** Bengaluru, in collaboration with national and international researchers, conducted a groundbreaking study challenging the conventional belief that **quantum noise** always disrupts entangled states.
   - **About Quantum Noise :** Refers to **unwanted disturbances** in quantum systems that can disrupt their functioning, particularly in quantum computing and communication.
     - **Impact vs. Classical Noise:** Unlike classical noise, which adds random errors to a signal, **quantum noise has deeper, more complex effects**, often altering the fundamental quantum properties of the system.
   - **Key Findings:** Findings reveal that, under certain conditions, quantum noise can actually preserve and even generate entanglement within individual particles.
     - **Single-particle (intra-particle) entanglement is stronger:** Entanglement **within a single particle** is more **resistant to noise** than entanglement between two particles.
     - A specific type of noise called **amplitude damping** can not only **damage** but also **create** or **bring back** entanglement in single-particle systems.
     - In contrast, entanglement between **two separate particles** only **fades** with noise and doesn't recover or form on its own.

- Scientists developed a **formula** to **track and predict** how entanglement behaves when noise is present. Entanglement within one particle **decays more slowly** compared to between two particles, across different types of noise.
- The behavior of entanglement under noise can be shown using **simple geometric shapes**, making it easier to understand. This form of entanglement can help build **stronger and more reliable quantum computers and communication systems**.

- **Quantum Entanglement**, termed by Einstein as "spooky action at a distance," describes a mysterious linkage between particles, where a change in one instantly affects the other, regardless of the distance. However, this fragile connection is notoriously vulnerable to environmental noise, leading to a breakdown of coherence—a process called **decoherence.**

5. **Ordinarily Resident** : Recently, the Election Commission of India (EC) launched a **Special Intensive Revision (SIR)** of electoral rolls in Bihar, bringing renewed attention to the eligibility criteria for voter registration—especially the interpretation of **'ordinarily resident'** under electoral laws.
   - This move has reignited debate on the inclusion of India's vast migrant labour population within the existing framework.
   - **About Ordinarily Resident : Section 19**: A person can be included in the electoral roll of a constituency **only if they are an ordinarily resident** of that constituency.
     - **Section 20** defines ordinarily resident and makes key clarifications: Mere **ownership or possession of a house** in a constituency **does not qualify** someone as an ordinarily resident.
       - ✓ Who is **temporarily absent** from their home **can still be considered ordinarily resident**.
     - **Certain categories**, such as: Members of the **armed forces**,
       - ✓ **State armed police** posted outside their State,
       - ✓ Employees of the **Government of India posted abroad**, and
       - ✓ **Constitutional office-holders** (declared by the President in consultation with EC),----are deemed ordinarily resident **in their home constituencies**, along with their spouses.
   - **'Ordinarily Resident' Status Matters:** It ensures a genuine and habitual link between the voter and the constituency.
     - It helps maintain electoral integrity by preventing fraudulent registrations and promoting accountable representation.

6. **Sugar and Fat Boards** : Recently, in a landmark move to combat lifestyle diseases and promote healthy eating habits, the Ministry of Health and Family Welfare directed all Central and State government offices to display **'Sugar and Fat Boards'** in canteens and food stalls within their premises.
   - **Key Highlights:** The initiative is supported by the **Indian Council of Medical Research – National Institute of Nutrition (ICMR–NIN)**, which has also provided a **model template** for the boards.
     - **Recommended Limits: Sugar:** Max 25 grams per day (≈ 5 teaspoons)
       - ✓ **Visible Fats (oil, ghee, butter):** Max 30 grams per day (≈ 6 teaspoons)
     - **Origin of the Concept:** First introduced in **schools under CBSE and ICSE**, the initiative is now being scaled up to **government offices** nationwide.
     - Experts warn that reused cooking oil produces trans fats, increasing the risk of **cardiovascular diseases.**
7. **RoRo Ferry Service :** Recently, in a significant boost to inland water transport, the Goa government launched two **Roll-on Roll-off (RoRo)** ferry vessels 'Gangotri' and 'Dwarka' on the **Chorao-Ribandar** route across the **Mandovi River**.
     - The service is being hailed as the **first of its kind in India** in terms of scale, design, and operational efficiency.
   - **About RoRo Ferry Service:** Designed to transport wheeled vehicles like cars, trucks, and trailers. The term "roll-on roll-off" refers to the loading and unloading method, where vehicles are driven directly onto and off the ship using built-in ramps.
   - **About Mandovi River:** The **Mahadayi River**, also known as the **Mandovi River** in Goa, originates in the **Bhimgad Wildlife Sanctuary** in the **Western Ghats**, Karnataka, and flows westward into the **Arabian Sea at Panaji, Goa**.
     - The river is a **lifeline for North Goa**, meeting a major portion of the state's **drinking water and ecological needs**.
     - Key **tributaries** include: **Rogaro, Kushavati, Nanorem, Nanuz, Valvota**, and **Mapusa**.
     - The **Salim Ali Bird Sanctuary** is located on **Chorao Island**, situated in the Mandovi River.