

8. Short News

1. Doctrine of Necessity

Context - Used in the CEC Appointment case because all Supreme Court judges are potential future CJs, creating a structural "conflict of interest."

Definition - A legal rule allowing a judge to hear a case despite a conflict of interest if no alternative forum exists.

Core Principle - Based on the idea that justice cannot be denied due to the absence of an unbiased adjudicator.

Exception - It is an exception to *Nemo judex in causa sua* (No one should be a judge in their own cause).

Precedent - Applied in the NJAC Case (2015) to prevent the judicial system from paralyzing.

2. Immigration, Visa, Foreigners Registration & Tracking (IVFRT) Scheme

Status - Extended by the Union Cabinet until 2031.

Purpose - Modernizes immigration and visa processes using emerging technologies for secure passenger movement.

Efficiency - Enables 100% contactless e-Visas; 91% of applications are cleared within 72 hours.

Impact - Reduced passenger clearance time at airports from 6 minutes to under 3 minutes.

3. Modified UDAN Scheme (2026–2036)

New Features - Subsidy support extended from 3 to 5 years.

Shift from airfare levies to direct government funding.

Targets - Development of 100 airports and 200 helipads.

Budget - ₹28,840 crore (a six-fold increase).

Core Goal - Sustainable regional connectivity and last-mile access in hilly/remote areas.

4. PRISM-SG Portal

Full Form - Portal for Rail-Road Inspection & Stages Management – Steel Girders.

Function - A digital platform to coordinate Road Over Bridges (ROBs) and Railway Bridge construction.

Benefit - Streamlines approvals and inspections by bringing Railways, road departments, and contractors onto one platform.

5. Antimatter & Antiprotons

Breakthrough - Scientists at CERN (Geneva) successfully conducted the first-ever road transport of antiprotons in March 2026.

Antiprotons - The "mirror image" of protons; they have the same mass but a negative charge.

Antimatter Interaction - When matter and antimatter meet, they annihilate each other, releasing intense energy (gamma rays).

CERN - The world's largest particle physics lab; famous for discovering the Higgs boson.

6. CALM-Brain

Definition - India's first open-source national repository for neuropsychiatric disorder data (based in Bengaluru).

Key Disorders - Focuses on Addiction, Bipolar Disorder, Dementia, OCD, and Schizophrenia.

Data Integration - Combines clinical, genetic, behavioral, and brain-imaging (MRI) data.

Objective - Early diagnosis and personalized "precision medicine" for mental health.

7. Cauvery River & Water Stress

New Study - IIT Gandhinagar predicts a 3.5% decline in water flow between 2026–2050.

Source - Originates at Talakaveri, Brahmagiri hills, Karnataka.

Tributaries - *Left* - Hemavati, Shimsha, Arkavati.

Right - Kabini, Bhavani, Amaravati.

Dispute - Involves Karnataka, Tamil Nadu (primary), Kerala, and Puducherry.

Climate Change - While northern rivers (Ganga) may see increased flow, Cauvery is a rare exception facing a near-term shortage.

8. Biogas Revival

Trigger - LPG shortages caused by shipping disruptions in the Strait of Hormuz (West Asia).

LPG Gap - India imports 65% of its LPG (mostly from West Asia), making it vulnerable to geopolitics.

Biogas Profile - Produced via anaerobic digestion of organic waste.

1. Contains roughly 60% Methane.
2. Provides a renewable, "dispatchable" energy source for rural kitchens.

9. Ayurveda-TB Integrative Study

Project - A global-first clinical study integrating Ayurveda with standard modern TB treatment (ATT).

Scale - 1,200 patients; joint initiative of the Ministry of AYUSH and Dept. of Biotechnology.

Goal - Use Ayurveda to reduce drug toxicity, improve nutrition, and speed up recovery.

India's Target - To eliminate TB by 2025 (5 years ahead of the global 2030 target).

10. Saraswati Samman 2025

Winner - Bengali novel "Hara Parbati Katha" by Ramkumar Mukhopadhyay.

The Award - Instituted by K.K. Birla Foundation (1991).

1. Given for outstanding work in any Indian language published in the last 10 years.
2. Prize includes ₹15 lakh and a citation.