

7. Short News

1. Colombo Security Conclave (CSC)

Context – 7th NSA Meet held in New Delhi.

Purpose – A regional security platform for the Indian Ocean Region (IOR) focusing on maritime and transnational security.

Membership (6 Members as of Nov 2025)

Founding – India, Sri Lanka, Maldives (Est. 2011).

New Members – Mauritius (2020), Bangladesh (2024), Seychelles (2025).

Secretariat – Located in Colombo, Sri Lanka.

Key Objectives

1. Maritime security and counter-terrorism.
2. Cybersecurity and humanitarian assistance.
3. Intelligence sharing and joint exercises.

2. Tejas (Light Combat Aircraft)

News – Crashed during a demonstration at Dubai Airshow 2025 due to a technical malfunction.

Type – Indigenous 4.5-generation single-engine, multirole fighter.

Note – 4.5-gen means advanced avionics/sensors but no full stealth.

Makers – Designed by ADA (DRDO) and manufactured by HAL.

Key Features

Canard-delta wing configuration (high manoeuvrability).

Speed – Mach 1.8 (approx. 2,200 km/h).

Role – Offensive air support, close combat, and ground attacks.

Status

Exports – Talks ongoing with Nigeria, Egypt, Argentina, Philippines (no final deal yet).

Procurement – MoD signed a contract for 97 Tejas Mk1A aircraft in 2025.

3. COP31 (Climate Summit)

Host Decision – Turkey will host COP31 in 2026 (specifically in Antalya).

Compromise Deal

Turkey – Official Host and Summit President.

Australia – Will lead the negotiations and organize a Pre-COP event for Pacific Island nations.

Background – Result of a standoff between Turkey and Australia (who wanted a "Pacific COP").

Future Timeline

COP30 (2025) – Brazil (Belem).

COP31 (2026) – Turkey (Antalya).

COP32 (2027) – Ethiopia (Addis Ababa).

4. Acanthosis Nigricans (Health)

What is it? A skin condition characterized by dark, thick, velvety patches in body folds (neck, underarms, groin).

Cause – Strongly linked to Insulin Resistance, obesity, and metabolic syndrome.

Significance – It serves as an early warning sign for Diabetes (Type 2), especially in children and young adults.

Treatment – Reversible by managing the underlying cause (weight loss, metabolic health improvement).

5. Exercise Sagar Kavach

Conducted By – Indian Coast Guard (ICG) jointly with the Indian Navy and State Coastal Security.

Location – Maharashtra and Goa coastline.

Type – Biannual coastal security exercise.

Objective – To assess preparedness against infiltration and attacks by Anti-National Elements.

Scale - Involved over 6,000 personnel and multiple central/state agencies to check coordination.

6. Trans neuron (Science & Tech)

Innovation - A new artificial neuron that uses electrical pulses (hardware-based) rather than software.

Mechanism - Uses a memristor (nanoscale silver-atom bridges) to generate brain-like pulses.

Capability - Can switch between motor, pre-motor, and visual functions dynamically.

Performance - Achieved up to 100% accuracy when tested against macaque neuron recordings.

Applications - Advanced robotics (mimicking human movement). Energy-efficient neuromorphic chips.

