UPSC Daily Current Affairs| One Liners 18-04-2025

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History, Art and Culture

Fourth Anglo-Mysore War

The Fourth Anglo-Mysore War commenced on April 17, 1799, and concluded swiftly with the fall of Seringapatam on May 4, 1799.

• **Initial British Military Successes** – Early in the conflict, Tipu Sultan faced significant defeats at the hands of English Generals Stuart and subsequently Harris, weakening his forces.

• **Tipu Sultan's Final Stand** – The war culminated in Tipu Sultan's courageous defense of his capital, Seringapatam, where he ultimately met his death while valiantly fighting the British forces.

• **Consequences for Tipu's Family** – Following Tipu Sultan's demise, the British took his family into custody, detaining them at Vellore, and seized his considerable wealth and treasures.

Geography

Devastation on Tuti Island

In recent times, Tuti Island has suffered immense devastation due to Sundanese Civil war which erupted on April 15, 2023.

• **Located in** – Khartoum, Sudan, at the confluence of the Blue Nile and White Nile rivers.

• **Historical significance** – As one of Khartoum's oldest settlements, Tuti Island is deeply rooted in history. The Mahas community, who settled there in the 15th century, consider it a vital symbol of their indigenous identity.

• **Traditional livelihoods** – The 8-square-kilometer island was traditionally known as "Khartoum's garden" due to its fertile land, supporting the livelihoods of its inhabitants through farming and fishing.

• **Impact of the Sudanese conflict** – The ongoing civil war has had a catastrophic impact on Tuti Island, contributing to the wider crisis in Khartoum, where UN estimates indicate mass displacement, casualties, and severe famine conditions.

Polity & Governance

First Onboard ATM on Panchavati Express

The Mumbai-Manmad Panchavati Express has become the first train in India to feature an onboard ATM, installed in an air-conditioned coach. The trial run was successful, allowing passengers to withdraw cash during travel.

• **Innovative Revenue Scheme** – This initiative is part of Indian Railways' Innovative and Non-Fare Revenue Ideas Scheme (INFRIS).

• **Aim** – To enhance passenger convenience and generate non-ticket revenue.

• **Collaboration and trial success** – The ATM is a result of collaboration between the Bhusawal division of Indian Railways and the Bank of Maharashtra.

Booth Level Agents (BLAs)

In a first, ECI trains Booth Level Agents (BLAs) to strengthen grassroot participation by political parties.

• **Appointed by** – Recognised political parties.
• **Role** – To ensure error-free electoral rolls as per the provisions of the RP act, 1950.
• **Training programme** – To familiarise them with various aspects of the election processes including the preparation, updation and revision of electoral rolls.
• They were also trained in the use of the provision of first and second appeals under,
- Sections 24(a) and 24(b) of the Representation of People Acts, 1950 in case they are aggrieved of the final electoral rolls as published.

Economy

GI Tag for Banaras Shehnai

Recently, the Banaras Shehnai has been granted the Geographical Indication (GI) tag, recognizing its significant intangible cultural heritage.

• **Symbolic and cultural value** – Beyond being a musical instrument, the shehnai symbolizes sacred and ceremonial music in Varanasi (Kashi). It is traditionally played in temples, weddings, on ghats, and in classical performances.
• **Artisan recognition** – For the traditional artisans of Varanasi, this GI tag is more than official recognition. It's a deeply felt cultural validation of their generational legacy, unwavering commitment, and exceptional craftsmanship.
• **Ustad bismillah khan's legacy** – Ustad Bismillah Khan, a native of Varanasi, played a pivotal role in elevating the Banaras Shehnai to global prominence, becoming its iconic face and bringing it classical acclaim.

Security

CENJOWS Hosts Defence Literature Festival

Recently, Centre for Joint Warfare Studies (CENJOWS), organized the 2nd Defence Literature Festival 'Kalam & Kavach 2.0' in New Delhi.

• **Theme** – Securing India's Rise through Defence Reforms.
• **Expert participation and focus areas** – The festival brought together armed forces experts, policymakers, industry leaders, and specialists to discuss crucial aspects of India's national security. Key focus areas included Defence Technology and Future Warfare, Defence Manufacturing, and Procurement Reforms.
• **Defence technology and modern warfare** – Discussions highlighted the critical role of integrating emerging technologies such as AI, cyber technologies, quantum computing, drones, space technology, and semiconductors into contemporary military operations.
• **Future warfare dynamics** – Central deliberations revolved around the evolving nature of warfare, emphasizing the increasing convergence of multiple domains – land, air, sea, cyber, and space – in shaping modern defence strategies.
• **AI and cyber capabilities** – The increasing significance of Artificial Intelligence and cyber capabilities in bolstering operational efficiency and strengthening cybersecurity within military operations was particularly emphasized during the discussions.

DUSTLIK-VI Military Exercise

Recently, the 6th edition of the India-Uzbekistan Joint Military Exercise, DUSTLIK-VI, commenced at the Foreign Training Node in Aundh, Pune.

• **Aim** – To significantly enhance the interoperability and foster greater cooperation between the armed forces of India and Uzbekistan.

• **Participating contingents** – The Indian contingent comprises 60 personnel from a battalion of the JAT Regiment and units of the Indian Air Force. Uzbekistan is represented by personnel from its army.

• **Focus of the current edition** – DUSTLIK-VI will concentrate on Joint Multi-Domain Sub-Conventional Operations within a semi-urban environment, simulating various counter-terrorism scenarios.

• **Simulated operations** – It will involve territory capture, establishing a joint operations center, population control, raids, search-and-destroy missions, and the coordinated utilization of air assets.

• **Technology and Strategic Elements** – It will also include the deployment of drones, counter-UAS systems, Air Force logistics support, heliborne operations, and special forces missions, promoting tactical and technical exchange.

Science

Ironwood Tensor Processing Unit (TPU)

Recently, Google has introduced Ironwood, its 7th-generation TPU, specifically designed to accelerate the processing of artificial intelligence models.

• Ironwood is the latest TPU, engineered exclusively for high-performance AI workloads.

• **Developed by** – Google Cloud's AI Infrastructure team.

• **AI-specific architecture** – As an ASIC chip, Ironwood is built to efficiently process tensors, the fundamental data structures in machine learning, making it highly specialized for matrix operations and neural networks.

• **Enhanced processing capabilities** – Ironwood significantly reduces the time required for AI model training, potentially cutting down processes that previously took weeks to mere hours.

• **Integration and scalability** – Serving as a crucial component of the Google ecosystem, Ironwood powers AI in services like Google Search, YouTube, and DeepMind. Its full integration with Google Cloud enables cloud-ready scalability for large-scale AI applications.

Etalin Hydroelectric Project (EHEP)

The Arunachal Pradesh government has recently allocated ₹269.97 Crore for the development of EHEP, located in the Dibang Valley.

• It is a significant 3,097 MW hydropower initiative planned in the Dibang Valley of Arunachal Pradesh, making it one of India's largest proposed hydropower projects by installed capacity.

• **Project structure** – It is designed as a combination of two run-of-the-river schemes. It involves the construction of two concrete gravity dams, with heights of 101.5 metres and 80 metres, on the Dri and Tangon rivers, which are tributaries of the Dibang River.

• **Ecological significance** – The project area is situated within a region recognized as the "richest bio-geographical province of the Himalayan zone" and is part of a global "mega biodiversity hotspot," highlighting its ecological importance.

• **Local communities** – The project area is primarily inhabited by indigenous populations belonging to the Idu-Mishmi tribes, whose way of life and environment are directly linked to the region.

• **Project execution** – The Etalin Hydro Electric Power Company Limited, a joint venture between Jindal Power Limited (74% stake) and Hydro Power Development Corporation of Arunachal Pradesh Limited (26% stake), is responsible for executing the project._

Gaganyaan Mission : Astronaut Safety

The recent return of NASA astronauts Sunita Williams and Barry Wilmore highlights the critical role of safety protocols in human spaceflight. ISRO is now prioritizing similar measures for its Gaganyaan mission.

• **3 Phases of Human Spaceflight** – Launch, Orbit, and Re-entry.
• Each phase necessitates specific and stringent safety protocols to ensure astronaut well-being.
• **Launchpad emergency measures** – Drawing lessons from tragedies like the Apollo-1 fire, ISRO has implemented launchpad safety measures, including ziplines and fireproof lifts for rapid evacuation.
• **Crucial emergency exit system** – A key safety feature during launch is the emergency exit device. The human-rated launch vehicle incorporates a tower-like Crew Escape System for quick detachment of the crew module during emergencies.
• **Crew escape system functionality** – The Crew Escape System utilizes two motors: the Low-altitude Escape Motor (LEM) and the High-altitude Escape Motor (HEM), activating based on the altitude of the emergency. Pad aborts involve both motors for swift evacuation.
• **Historical precedents** – Incidents like the Soyuz T-10 launch abort and Blue Origin's NS-23 mission underscore the proven effectiveness and vital importance of robust crew escape systems in safeguarding astronauts during launch emergencies.