



9 February, 2024

New Process for picking Election Commissioners

Context: This marks the inaugural use of a consultative process for the appointment of an Election Commissioner.

➤ Background:

- Previously, the appointment of Election Commissioners was solely at the discretion of the government.
- However, the Supreme Court intervened due to petitions filed in various years urging for a fair and transparent appointment process.

➤ Supreme Court Intervention:

- In October 2018, a two-judge bench referred the matter to a Constitution bench to interpret Article 324 of the Constitution.
- A five-judge Constitution bench led by Justice KM Joseph began hearing the petitions in September 2022.
- The petitioners highlighted Article 324(2) and criticized the opaque appointment system, calling for a consultative process.

➤ Appointment Process Before SC Ruling:

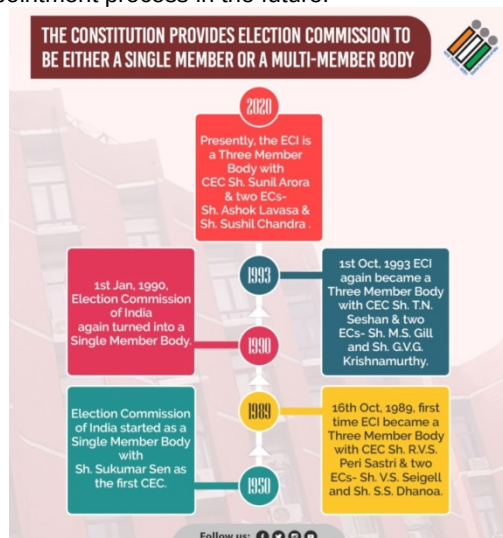
- Appointment authority rested with the Executive (Union government).
- A shortlist was created by the Law Ministry from a database of serving and retired officers.
- The Prime Minister made the final appointment, formally ratified by the President.

➤ Centre's Stand in Supreme Court:

- The Centre opposed SC intervention, citing the absence of a parliamentary law.
- It defended the existing process and argued against judicial interference.

➤ Supreme Court Ruling:

- On March 2, 2023, the SC ruled that a consultative process for appointing Election Commissioners was necessary.
- The Court outlined a process involving the Prime Minister, Leader of Opposition (or leader of the largest opposition party), and Chief Justice of India.
- It emphasized that Parliament could enact a law on the appointment process in the future.



➤ Consultative Process Proposals:

- Echoed recommendations from the 1990 committee chaired by Dinesh Goswami and the 2015 Law Commission's report.
- Proposed consultation with the Chief Justice of India and the Leader of Opposition or largest opposition party.

➤ Post-SC Judgment:

- The Centre introduced a Bill in Parliament in August.
- Passed in December 2023, the Bill establishes a committee comprising the Prime Minister, Leader of Opposition, and a Cabinet Minister nominated by the PM.
- Criticized for potentially undermining the Court's reforms, especially due to the composition of the committee.

Alternative Dispute Resolution Systems

Context: According to the information given by Minister of State (Independent Charge) for Ministry of Law and Justice, Government has been at the forefront of promoting Alternative Dispute Resolution Systems.

➤ Legal Framework for Alternative Dispute Resolution (ADR):

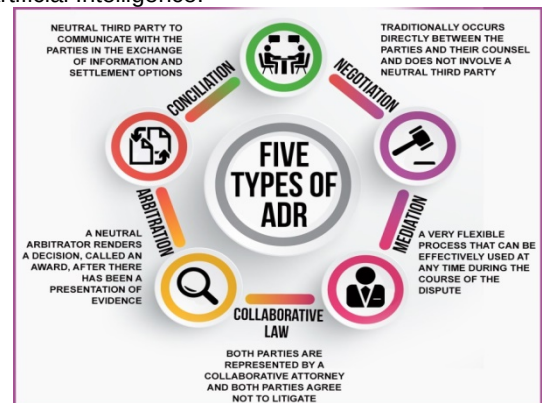
- Section 89 of the Civil Procedure Code, 1908, enables resolution of disputes through ADR methods like Arbitration, Conciliation, Mediation, and Judicial Settlement including Lok Adalats.
- Section 6 of the Mediation Act, 2023, empowers courts to refer compoundable offences, including matrimonial disputes, for mediation, subject to further consideration by the court.

➤ Government's Role in Case Disposal and Justice Delivery:

- The Government focuses on creating an ecosystem for efficient case disposal by the judiciary.
- Initiatives include the National Mission for Justice Delivery and Legal Reforms, and schemes for judicial infrastructure development.

➤ Judicial Infrastructure Development:

- Funds are allocated under the Centrally Sponsored Scheme for Judicial Infrastructure for constructing court halls, residential quarters, and digital facilities.
- The e-Courts Mission Mode Project aims at IT enablement of district and subordinate courts, with recent approval for Phase-III incorporating advanced technologies like Artificial Intelligence.



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➤ Judicial Appointments and Arrears Reduction:

- The Government fills vacancies in higher judiciary regularly.
- Arrears Committees in High Courts and district courts focus on reducing case pendency, aided by the establishment of Fast Track Courts.

➤ Legislative Reforms:

- Amendments to laws like the Negotiable Instruments Act, 2018, the Specific Relief Act, 2018, and the Criminal Laws Act, 2018, aim to expedite justice delivery.
- Enactment of the Arbitration and Conciliation Act, 1996, and subsequent amendments promote institutional arbitration and expedited proceedings.

➤ ADR Promotion:

- The Government promotes ADR mechanisms like arbitration, mediation, and Lok Adalats as less adversarial alternatives.
- The Mediation Act, 2023, provides a legislative framework for mediation, aiming to foster a culture of amicable dispute resolution.

➤ Role of Lok Adalats:

- Lok Adalats serve as forums for amicable settlement of disputes, providing an alternative to traditional litigation.
- Awards made by Lok Adalats are deemed final and binding, with no appeal lying against them.

Ultracold Atoms

Context: Indian scientists from the Raman Research Institute (RRI) have developed a novel image-correction algorithm, which notably improves the examination of ultracold atoms.

➤ Introduction to Ultracold Atoms:

- Ultracold atoms are those with temperatures near absolute zero, where their quantum-mechanical properties become significant.
- Achieving such low temperatures typically requires a combination of various techniques.

➤ Experimental Phenomena Studied:

- Experiments with ultracold atoms investigate a range of phenomena, including quantum phase transitions, Bose-Einstein condensation (BEC), superfluidity, quantum magnetism, and more.
- Ultracold atom systems are utilized as quantum simulators to study physics beyond their own realm, such as unitary Fermi gases and Ising and Hubbard models.
- Potential applications include the realization of quantum computers.

➤ Historical Background:

- Ultracold atom samples are prepared through interactions with laser fields, with evidence for radiation pressure dating back to 1901.
- The use of laser light for atom cooling was proposed in 1975, leading to techniques like Doppler cooling and the development of magneto-optical traps (MOTs).
- Evaporative cooling, used to achieve even lower temperatures, led to the discovery of Bose-Einstein condensate (BEC).

➤ Applications of Ultracold Atoms:

• Quantum Computing and Communication:

- Ultracold atoms support quantum information processing tasks like cryptography and networking.
- They enable quantum logic gates and algorithms due to their coherence and control.

• Precision Measurements:

- Ultracold atoms enhance precision in measuring constants, gravitational forces, and fields.
- They surpass classical limits in metrology, advancing atomic clocks and sensors.

• Biological System Simulation:

- Ultracold atoms simulate biological processes, aiding in understanding biomolecular interactions and drug design.
- They offer insights into protein folding and enzymatic reactions.

• Quantum Sensing and Imaging:

- Ultracold atoms enable high-resolution imaging and sensing of magnetic and electric fields.
- They have applications in medical diagnostics, environmental monitoring, and materials characterization.

• Cosmological Phenomena Simulation:

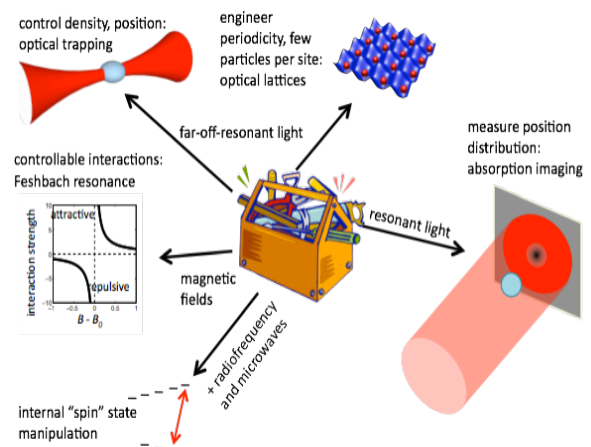
- Ultracold atoms simulate complex cosmological phenomena like dark matter behaviour.
- They aid in understanding galaxy formation and cosmological evolution.

• Quantum Materials Research:

- Ultracold atom systems model quantum materials such as superconductors and topological insulators.
- They explore novel quantum phases and electron behaviour in condensed matter systems.

• Quantum Chemistry and Dynamics:

- Ultracold atoms provide a controlled setting to study chemical reactions and molecular dynamics.
- They uncover reaction pathways, identify intermediates, and design efficient catalysts.



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NEWS IN BETWEEN THE LINES

Aadi Mahotsav



President Smt. Droupadi Murmu will inaugurate the Aadi Mahotsav 2024, at Major Dhyan Chand National Stadium in New Delhi on 10th February.

About Aadi Mahotsav:

- The Aadi Mahotsav is an **annual National Tribal Festival** celebrated since 2017.
- It is a national tribal festival that celebrates the culture, heritage and products of India's tribes.
- It is a joint initiative of the **Ministry of Tribal Affairs** and the **Tribal Cooperative Marketing Development Federation of India (TRIFED)**.
- Aadi Mahotsav 2024 will be organized from **10th to 18th February, 2024**.
- It is not only a platform to exhibit the **extraordinary talent and craftsmanship of tribal artisans** but also an opportunity to **interact, learn and contribute to the empowerment of tribal communities**.

Olive Ridley turtles



Recently, around 12 nesting sites of Olive Ridley turtles were identified on Tannirbhavi and Sasihihlu beaches in Mangalore, marking the first nesting incident in 29 years.

About Olive Ridley turtles:

- Olive Ridley turtles (*Lepidochelys olivacea*) are the **smallest and most common sea turtles** in the world.
- They are primarily found in **tropical and subtropical waters of the Pacific and Indian Oceans**, with significant nesting sites in countries like India, Mexico, and Costa Rica.
- They exhibit a unique mass nesting phenomenon known as "**arribada**," where thousands of turtles come ashore simultaneously to lay eggs, usually during the night.
- They are **omnivores**, primarily **feeding on jellyfish, crustaceans and small fish**.
- In **2021**, millions of Olive Ridley turtles missed their mass nesting near the **Rushikulya river** mouth in Odisha.
- The **Gahirmatha Marine Sanctuary in Odisha** is renowned as the world's largest sea turtle rookery.
- They are classified as **Schedule-I animals under the Wildlife Act of 1972** in India.
- They are listed as **endangered** in the International Union for Conservation of Nature (**IUCN**) **Red List**.

FAME II Scheme

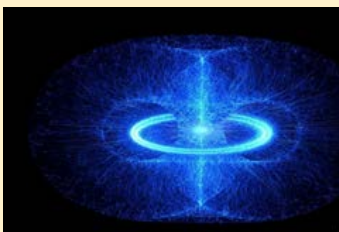


Recently, the Ministry of Heavy Industries (MHI) has revealed that the total utilisation of the FAME-II subsidy fund electric vehicles (EVs) till January 31 for FY24 was Rs 1,980.83 crore, which is only 38 per cent of its total allocation.

About Fame II Scheme:

- The Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME II) scheme is a **government initiative to promote the development of electric vehicles**.
- The **Ministry of Heavy Industries** is implementing the scheme for five years, starting **April 1, 2019**.
- The scheme **aims to establish charging infrastructure, with about 2,700 charging stations** in metros, other cities with a population of over one million, smart cities and cities in hilly states.
- It provides incentives of INR 10,000 for every kWh of **battery capacity for all EVs, except e-buses**.
- E-buses are provided** a maximum demand incentive of INR 20,000/ kWh.
- FAME India is a part of the National Electric Mobility Mission Plan.

Altermagnets



Recently, the scientists have investigated the newly discovered class of altermagnetic materials to examine their thermal properties.

About Altermagnets:

- Altermagnets are a class of materials that **exhibit magnetic properties**, but are not traditional ferromagnetic substances.
- They have a **unique blend of magnetic characteristics** that set them apart from conventional magnetic materials like **ferromagnets**.
- They have a **dual nature**, resembling antiferromagnets with zero net magnetization and ferromagnets with **non-relativistic spin splitting**.
- They exhibit properties observed in both **ferromagnets and antiferromagnets**.
- Altermagnets and Luttinger ferromagnets** have resonance frequencies that are 3 orders of magnitude higher.
- Altermagnetic devices are also appealing for potential applications in **spintronics and neuromorphic information technologies**.

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Place in News

Papua New Guinea

Recently, Papua New Guinea's Prime Minister becomes first Pacific leader to address Australia's Parliament.



Papua New Guinea (Capital: Port Moresby)

Location: Papua New Guinea is an **island country** situated between the **Coral Sea** and the **South Pacific Ocean** in the south-western Pacific Ocean.

Boundaries: It shares its border with **Solomon Islands** (East), **Indonesia** (West) and **Australia** (South).

Physical Features:

- The **Sepik River** is the longest river on the island of New Guinea and the second largest in Oceania by discharge volume.
- **Mount Wilhelm**, nestled in the Bismarck Range, stands as Papua New Guinea's highest peak.
- The country has **active volcanoes**, with around 60% of them being active.

POINTS TO PONDER

- Which country will host the UN Climate Change Conference (UNFCCC COP 29) scheduled to be held on November 11-24, 2024? - **Azerbaijan**
- Where was the 28th session of the United Nations Climate Change Conference 'COP28' organized? - **In Dubai, UAE from 30 November to 13 December, 2023**
- Which country has recently announced visa-free travel for Indian citizens? - **Iran**
- Olzas Bektenov, has been appointed as the new Prime Minister of which country? - **Kazakhstan**
- Which is the first state in India to implement the Uniform Civil Code (UCC)? - **Uttarakhand**

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