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WHAT IS THE OUTER SPACE TREATY?

- It is an international agreement that governs how nations act in space.
- Formally known as the "**Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies**," it is one of international space law's foundational documents.
- Born out of the geopolitical tensions of the Cold War and the competitive spirit of the space race, the treaty emerged as a response to the potential militarization of space.
- The overall purpose of the Outer Space Treaty is to **keep space peaceful**.
- The treaty was **adopted by the United Nations in 1967**.
- Its **first signatories** were the **United States**, the **United Kingdom**, and the **Soviet Union**.
- **115 countries are parties** to the treaty, including all major spacefaring nations, **including India and China**. Another 22 countries are signatories.
- It includes several important principles that guide space exploration and use to this day.
- According to the U.N. Office of Outer Space Affairs, the treaty's **key principles are**:
 - That the **exploration and use of outer space** shall be carried out **for the benefit and in the interests of all countries** and shall be the province of all mankind
 - That **outer space** shall be **free for exploration and use by all states**
 - That **outer space** is **not subject to national appropriation by claim of sovereignty**, by means of use or occupation, or by any other means
 - That **states shall not place nuclear weapons or other weapons of mass destruction in orbit or on celestial bodies** or station them in outer space in any other manner;
 - That the **Moon and other celestial bodies** shall be used **exclusively for peaceful purposes**; prohibits their use for **testing weapons** of any kind, **conducting military maneuvers**, or **establishing military bases**, installations, and fortifications

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- That **astronauts** shall be **regarded as the envoys of mankind**
- That **states** shall be responsible for national space activities whether carried out by governmental or non-governmental entities
- That **states** shall be **liable for damage caused by their space objects**
- That **states** shall **avoid harmful contamination of space** and celestial bodies.
- **Verification:**
 - **States Parties agree to inform** the UN Secretary-General as well as the public and the international scientific community, to the greatest extent feasible and practicable, of the **nature, conduct, locations, and results of activities covered in this treaty.**
 - The Treaty sets forth that **all stations, installations, equipment, and space vehicles on the Moon and other celestial bodies shall be open to representatives of other States Parties on a reciprocal basis.**

NATIONAL FORMULARY OF INDIA



- It is published periodically by the **Indian Pharmacopoeia Commission (IPC)** since 2009.
- The **first edition** of NFI was **published in 1960.**
- It is a guidance **document for healthcare professionals** aimed at promoting the **rational and safe use of medicines.**
- It is an authoritative guide to **prescribing, dispensing and administering medicines for healthcare professionals.**
- It will be useful for **framing national drug policies in the country.**
- It serves as an important **bridge between scientific standards and clinical practice,** guiding healthcare professionals in the appropriate and rational use of medicines.

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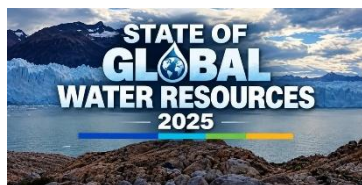
National Formulary of India 2026:

- It comprises chapters, appendices and drugs, including **fixed-dose** combinations and
- **Drug monographs** have been revised to align with **the National List of Essential Medicines (NLEM)** and National Health Programmes.
- It provides access to links relating to **National Health Programmes, immunisation schedules**, Jan Aushadhi, safe disposal of unused or expired pharmaceutical products and other authoritative regulatory resources.

What is Biovigilance Programme of India?

- It is aimed at expanding the **country's patient-safety framework**.
- Under the programme, the **Indian Pharmacopoeia Commission** will **monitor and prevent adverse events linked to medicines and biological products** used in organ and tissue transplantation.
- The new programme will complement existing **pharmacovigilance and materiovigilance** mechanisms, creating a broader safety-monitoring framework covering medicines, medical devices and transplant-related procedures.

STATE OF GLOBAL WATER RESOURCES 2025



- It is annually published by the **World Meteorological Organization (WMO)**.
- It provides a comprehensive quantitative overview of global water resources, with a focus on hydrological variability and trends.
- **SGWR 2025 Highlights:**
 - Satellite observations and hydrological models showed that **42% of global land area had below-normal water storage in 2025**.
 - The measure covers water in rivers, streams and lakes, groundwater, soil moisture, snow and ice.
 - **Global terrestrial water storage** has shown a declining trend since 2014–2016 — a persistent, decade-long signal.

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- For the **fourth consecutive year**, every **major glaciated region** on Earth **lost ice mass**.
 - The **estimated loss during the 2025** hydrological year was about 408 gigatonnes, equivalent to roughly **1 millimetres of global sea-level rise**.
 - **Central Asia, western Canada** and the **United States** were among the regions recording particularly **severe glacier losses**.
- **India-Specific Findings:**
 - India recorded **below-normal terrestrial water storage in 2025**, particularly across the **northern part** of the country.
 - Among India's major river systems, the **Ganges, Godavari, Krishna and Indus** recorded **above-normal to much-above-normal discharge** in 2025.
 - The WMO found **persistent groundwater deficits in India during 2022-2025**, with widespread below-normal to much-below-normal groundwater levels, particularly in northwestern India.

MISSING MEASURE IN INDIA'S MAGNET MISSION

- India's ambition to become a global manufacturing and technology leader depends not only on large industrial projects but also on critical components embedded within advanced technologies.

The Strategic Importance of Permanent Magnets

- Permanent magnets translate material properties into technological capabilities.
- While **ferrite, Alnico and Samarium-Cobalt magnets** remain important, NdFeB magnets offer an exceptional combination of magnetic strength, compactness and high power-to-weight efficiency.
- They are increasingly important for electric motors, wind turbines, automation, robotics and precision equipment.
- Consequently, disruptions in their supply can affect entire manufacturing ecosystems, increase costs and expose strategic industries to external shocks.

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Beyond Minerals: Understanding the Complete Value Chain

- The permanent-magnet ecosystem extends far beyond mining:
 - Exploration → Mining → Mineral Processing → Chemical Separation → Oxides → Metal Refining → Alloys → Magnetic Materials → Finished Magnets → Industrial Applications
- Every stage requires different scientific knowledge, infrastructure, investment and technological maturity.
- Possessing **rare-earth deposits** does not guarantee industrial self-reliance if processing, separation, refining or magnet manufacturing remains dependent on foreign suppliers.

The Way Forward

- **ITEM as a Policy Solution**
 - An **Integrated Techno-Economic Mapping (ITEM)** framework could bridge this information gap by connecting engineering knowledge with economic and industrial data.
- **From Resource Security to Technological Capability**
 - India's objective should extend beyond simply replacing imports because import substitution alone cannot ensure technological resilience.
 - Sustainable strategic autonomy requires capabilities in processing, refining, materials science, alloy production, engineering and magnet manufacturing.
 - International partnerships will remain useful where domestic capabilities are limited, but they should be guided by a clear understanding of technological dependence and realistic opportunities for indigenous capacity building.

Conclusion

- Permanent magnets illustrate how a relatively small industrial component can become foundational to clean energy, electric mobility, precision engineering and advanced manufacturing.
- India therefore needs to understand not merely how much rare-earth material it possesses, but how resources move through the entire **technological value chain**.

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ARTICLE 22: SUPREME COURT SETS STRICT RULES ON ILLEGAL ARREST AND RE-ARREST

The Supreme Court has held that an arrested person denied the grounds of arrest or access to a lawyer must be released immediately.

A Bench of Justices Ujjal Bhuyan and Atul S. Chandurkar delivered a 69-page ruling that also laid down strict guidelines for when such a person can be re-arrested.

What Article 22(1) Guarantees

- Article 22 is a **fundamental right** protecting personal liberty at the moment of arrest. It requires that an accused be:
 - Produced before a magistrate within 24 hours of arrest.
 - Informed of the grounds of arrest, in writing, in a language they understand.
 - Given access to a lawyer of their choice.
- The Court called these "fundamental principles" governing personal liberty, not mere procedural requirements.

"Sacrosanct" and Non-Negotiable

- SC bench said that the Article 22(1) **"cannot be breached under any situation."** Any violation makes the arrest itself **unconstitutional**, entitling the person to immediate release.
- Crucial distinction:** When a person is released for this reason, they are **not "enlarged on bail."** They are released from **illegal and unconstitutional detention** — a fundamentally different legal status.

Rules for Re-Arrest

- The Court accepted that a blanket immunity from future arrest cannot exist, since some cases involve grave offences.
- But it insisted that any re-arrest must pass through **strict judicial oversight**, so the same authority that violated the right does not also decide on re-arrest.
- The procedure laid down:

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- The accused must first be given the **written grounds of arrest**.
- The police must file an application before a **magistrate**, giving recorded reasons for seeking re-arrest and explaining why grounds were not furnished the first time.
- The application must be **endorsed by a senior/immediate superior officer**, so the superior is put on notice of the earlier lapse.
- The magistrate may permit re-arrest only if satisfied there were **bona fide reasons** for the earlier failure.
- The magistrate must decide the application **within a week**.
- The investigation must be **handed to another officer**, and a **departmental inquiry** ordered into the original lapse. An adverse finding brings departmental action, recorded in the officer's service book.
- As per the apex court, once Article 22(1) is breached, the power to re-arrest "**must not** be left to the discretion of the very same authority who had violated" It must carry "**judicial imprimatur**."
- The Bench also directed High Courts to grant "suitable mandatory compensation" wherever arrests violate these procedural safeguards.

Building on Recent Precedent

- This ruling is the latest in a line of cases over the past three years strengthening the requirement to communicate arrest grounds in writing.
- Monday's judgment builds directly on this trajectory, extending it specifically to the question of re-arrest after an illegal arrest.

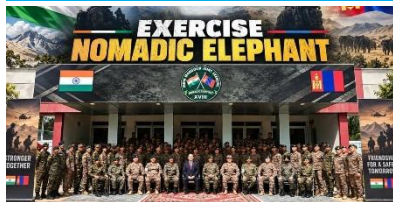
Conclusion

The ruling closes a loophole where police could treat an illegal arrest as a technical error to be quietly corrected.

By requiring magisterial sanction, a senior officer's endorsement, and a departmental inquiry before any re-arrest, the Court has placed liberty above administrative convenience. Article 22, the Bench makes clear, is a wall, not a formality.

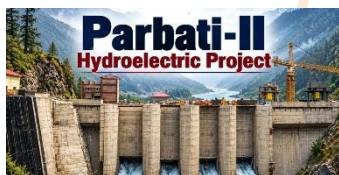
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EXERCISE NOMADIC ELEPHANT



- It is an **annual joint military exercise** conducted alternatively in **India and Mongolia**.
- The **last edition** of the exercise was conducted at **Ulaanbaatar, Mongolia**.
- **Aim:** To enhance the **joint military capability of both sides** to undertake Counter-Insurgency Operations in **semi-urban and mountainous terrain** under the United Nations Mandate.
- **Focus of Exercise Nomadic Elephant 2026:**
 - It focuses on **tactical-level operations, exchange of best practices**, refinement of operational drills and enhancement of interoperability between the two armies.
 - The training curriculum will include **Cordon and Search Operations**, Room Intervention Drills, **Special Heliborne Operations**, **Cyber Security Training** and employment of drones and counter-drone systems, among other activities.
 - These drills will provide troops of both Armies an opportunity to train together in realistic operational scenarios and strengthen their ability to operate jointly.

PARBATI-II HYDROELECTRIC PROJECT



- It is a **run-of-the-river project** under construction on the **Parbati River** (major tributary of the **Beas River**), in the **Kullu District of Himachal Pradesh**.
- By constructing a high **concrete gravity dam** near Pulga village in the Manikaran valley, the **flow of the Parbati River is diverted**, and the water is being taken to Sainj Valley through a 31.56 km long headrace tunnel, where a powerhouse has been constructed at Siund village.
- The 31.56 km long HRT of the project is the **longest hydroelectric tunnel in India**.

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- **Total Capacity: 800 MW** (four units of 200 MW each)
- Once fully commissioned, it is expected to generate approx. 3,074 million units (MU) of electricity annually.
- The project is being **developed** and currently **owned by National Hydroelectric Power Corporation Private Limited (NHPC)**. The company has a **stake of 100%**.
- **Himachal Pradesh** will get **12% free power** from the project, and the additional 1% free power will be used for the Local Area Development Fund.

PILIBHIT TIGER RESERVE



- It is situated in the Pilibhit and Lakhimpur Kheri districts of **Uttar Pradesh**, forming part of the **Terai Arc Landscape**, in the **upper Gangetic Plain**.
- It lies along the **India-Nepal border** in the foothills of the Himalayas.
- **Rivers:** The **River Gomti originates** from the PTR, which is also the **catchment** of several others like **Sharda, Chuka, and Mala Khannot**.
- The **Sharda Sagar Dam** is on the boundary of the reserve.
- It has a **dry and hot climate**, which brings a **combination of dry teak forest and Vindhya Mountain soils**.
- **Vegetation:** **Tropical Moist Deciduous Forests, Tropical Dry Deciduous Forests, Seasonal Swamp Forests** and **Tropical Semi-evergreen Forests** are the major forest types found in the reserve.
- **Flora:**
 - The **Sal woodland** is very dense with good natural regeneration, amounting to almost **76% of the reserve area**.
 - Other trees like **teak, khair, semal** and Mahua are also seen.
- **Fauna:** It is home to a myriad of wild animals, including the endangered tiger, swamp deer, Bengal florican, hog deer, leopard, etc.