

Today's Prelims Topics

Rise of Smaller Language Models

Context

Recent advancements in Artificial Intelligence (AI) have seen a shift from scaling up massive models to focusing on smaller, more efficient models.

About Small Language Models (SLMs)

- SLMs are artificial intelligence (AI) models that can process, understand and generate human language.
- SLMs also work on a **neural network-based architecture** known as the **transformer model**.
- SLMs are **cheaper, faster to train and require fewer computational resources** compared to LLMs.
- **Advantages of SLMs:**
 - **Accuracy:** SLMs can provide higher quality and more accurate results than LLMs.
 - **Privacy:** SLMs can perform tasks locally, such as text prediction, voice commands, and translation without sending data to the cloud.
 - **Specialization:** SLMs are designed for specific use cases rather than the broad general intelligence goals of LLMs.
 - **Sustainability:** SLMs have lower energy consumption, which contributes to improved sustainability.
 - **On-Device Functionality:** Apple Intelligence integrates SLMs into iPhones and iPads, balancing performance with device constraints.
- **Limitations of SLMs:**
 - **Inferior Performance on Complex Tasks:**
 - SLMs struggle with benchmarks like coding, logical reasoning and solving intricate problems.
 - They cannot yet match LLMs in addressing challenges requiring broad general intelligence.
 - **Factual accuracy:** SLMs may not be able to store much factual knowledge, which can lead to factual inaccuracies
- **Industry Adoption:**
 - Google DeepMind released **Gemini Ultra, Nano, and Flash** models.
 - OpenAI launched **GPT-4o mini**, and Meta introduced **Llama 3 models**.
 - Amazon-backed Anthropic AI released **Claude 3 and Haiku**.
 - **Indian initiatives:** Visvam (IIIT Hyderabad) and Sarvam AI.

Source:

- [The Hindu - What is different about small language models?](#)

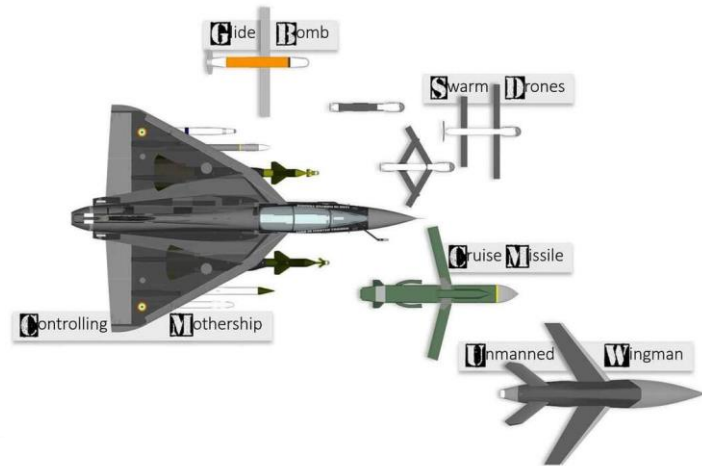
Combat Air Teaming System

Context

Hindustan Aeronautics Limited (HAL) has successfully conducted the engine ground run for its full-scale demonstrator of the Combat Air Teaming System.

About Combat Air Teaming System (CATS)

- CATS is a semi-autonomous, futuristic combat system designed to operate in collaboration with fighter jets.
- The system consists of a manned fighter aircraft that acts as the "mothership" and a group of unmanned aerial vehicles (UAVs) and unmanned combat aerial vehicles (UCAVs) that are controlled by the mothership.
- It is developed in collaboration with **National Aerospace Laboratories (NAL), Defence Research and Development Organisation (DRDO) and Newspace Research & Technologies.**
- **Components:** CATS Warrior, CATS Hunter, CATS Alpha-S and CATS Infinity, all having different specific roles.
 - **CATS Warrior:** A semi-autonomous drone capable of working alongside manned fighter jets.
 - **CATS Hunter:** A cruise missile launched by the mother ship, capable of penetrating deep into contested airspace to execute precision strikes.
 - **CATS Alpha-S:** A glider system designed to carry and release swarms of quadcopter drones (ranging from 4 to 20) into enemy territory, 50–100 km beyond the frontlines.
 - **CATS Infinity:** A high-altitude, solar-powered UAV designed for extended intelligence, surveillance, and reconnaissance (ISR) missions. Operating at altitudes of ~70,000 feet, it can remain airborne for 2–3 months, providing satellite-like coverage.
- **Similar Systems Worldwide:**
 - **Boeing Loyal Wingman:** Royal Australian Air Force.
 - **Skyborg (USAF):** Autonomous wingman program by the United States.



Source:

- [The Hindu - HAL's latest Combat Air Teaming System](#)

Hoollongapar Gibbon Wildlife Sanctuary

Context

The Standing Committee of the National Board for Wildlife (NBWL) has approved a proposal to carry out oil and gas exploration in the ecosensitive zone of the Hoollongapar Gibbon Wildlife Sanctuary.

About Hoollongapar Gibbon Wildlife Sanctuary (WLS)

- It is an **isolated** protected area of **evergreen forest** located in **Jorhat, Assam**.
- It was given WLS status in 1997. It is the **only sanctuary** in India **named after a gibbon**.
- **River: Bhogdoi River (Tributary of the Brahmaputra)** creates a waterlogged area along the sanctuary's border
- **Flora:** Hollong tree, Nahar tree (cobra's saffron) along with evergreen shrubs and herbs.
- **Fauna:**
 - It contains **India's only gibbons—the hoolock gibbons** and **Northeastern India's only nocturnal primate—the Bengal slow loris**.
 - **Other species found:** Elephants, tigers, leopards, stump-tailed macaque, northern pig-tailed macaque etc.

National Board for Wildlife (NBWL)

- **Formation:** In 2003 (**Statutory Body** under Wildlife Protection Act,1972)
- **Composition:**
 - **Chairperson:** The Prime Minister of India
 - **Vice-Chairperson:** The Union Minister of Environment, Forests and Climate Change
 - **Members - 47 (Members of Parliament (3): 2 Lok sabha + 1 Rajya sabha)**
- **Standing Committee of NBWL:**
 - **Chairman:** The Union Minister of Environment, Forests and Climate Change
 - It meets every **3 months**.
- **No Alteration of boundaries** in national parks and wildlife sanctuaries can be done **without the approval** of the National Board for Wildlife.

Source:

- [The Hindu - oil and gas exploratory drilling in Assam sanctuary](#)

World's Freshwater Species are at risk of extinction

Context

A recent study published in the journal *Nature* reveals that nearly **24% of the world's freshwater species are at risk of extinction.**

Key Findings of the study

- **Conducted by:** International Union for Conservation of Nature (IUCN).
- **Species Evaluated:** 23,496 freshwater species, including: Fish, Crustaceans (e.g., crabs and shrimp) & Insects (e.g., dragonflies and damselflies).
- **Risk of Extinction**
 - **Overall Threatened Species:** 24% of freshwater species face high extinction risks.
 - **Specific Groups at Risk:** 30% of crustaceans, 26% of fish species & 16% of odonates.
- **Extinction and Habitat Loss:**
 - **Already Extinct:** Nearly 90 freshwater species.
 - **Habitat Reduction:** Freshwater habitats like lakes, rivers and wetlands have declined by more than one-third since 1970.
- **Biodiversity Hotspots Under Threat:**
 - **Lake Victoria (Africa):** Threatened by pollution and invasive species like the Nile Perch.
 - **Lake Titicaca (South America):** Faces similar challenges, including overfishing and habitat degradation.

Major Threats to Freshwater Species

- **Pollution:** Degrades water quality and impacts species survival.
- **Dams and Water Extraction:** Disrupt ecosystems and reduce habitat availability.
- **Agriculture:** Leads to runoff and eutrophication of water bodies.
- **Invasive Species:** Nile Perch threatening native species in Lake Victoria.
- **Overfishing:** Depletes fish populations critical for ecosystem health.

About IUCN

- It was established in **1948** in Fontainebleau, France.
- It was previously called the 'International Union for the Protection of Nature' (IUPN) from (1948–1956) and the World Conservation Union (1990–2008).
- **Membership:** It is composed of both government and civil society organizations
- **Headquarters:** Gland (Switzerland)
- **Functions:**
 - It works to conserve the various species of flora and fauna.
 - It established the **IUCN Red List of Threatened Species in 1964.**

Source:

- [IUCN - One quarter of freshwater animals at risk of extinction](#)
- [The Hindu - Big Shot](#)

Pink Fire Retardant in Wildfire Control

Context

Authorities in Southern California have deployed **pink fire retardant** using aircraft to curb the spread of fires.

What is Pink Fire Retardant ?

- Fire retardant is a **chemical mix** designed to extinguish or slow wildfires by coating vegetation and **preventing oxygen from fueling the flames**.
- The most commonly used brand in the US is **Phos-Chek**, which primarily contains **ammonium phosphate-based slurry**.
- It is **more durable than water**, as it does not evaporate quickly and stays in place for extended periods.
- **Color and Visibility:** A bright pink color is added to ensure **visibility against the landscape**, helping firefighters identify areas treated with retardant and create fire lines.
- Fire retardant is sprayed **ahead of the fire** to coat vegetation and reduce its flammability.



Concerns Around Fire Retardant

- **Environmental Impact**
 - A 2024 study by the **University of Southern California (USC)** revealed that Phos-Chek is laden with **toxic metals**, including **chromium** and **cadmium**.
 - These metals are linked to **cancer** and **kidney and liver diseases** in humans and are harmful to aquatic life when they enter waterways.
- **Water Pollution**
 - Retardants entering rivers and streams are a major concern, as they can kill aquatic species and disrupt ecosystems.
- **Effectiveness Debate**
 - According to Forest Service scientists, the effectiveness of retardants depends on environmental conditions such as:
 - **Terrain and slope.**
 - **Fuel type and weather conditions.**
- **Cost and Scale:**
 - According to critics, the method is expensive and not the most efficient way to combat wildfires.

Source:

- [Indian Express - What is pink fire retardant, being used to curb California wildfires](#)

Declining fertility levels push up Kerala's maternal mortality ratio

Context

Kerala is facing a rise in its **Maternal Mortality Ratio (MMR)**.

About Kerala's Maternal Mortality Ratio (MMR)

- **Maternal Mortality Rate:** It is the **number of maternal deaths per 100,000 live births**.
- **Current MMR:** 19 per one lakh live births (**lowest in India**).
- **Health Department's Estimate (2024-25):** MMR has risen to 32
- This increase is due to the **decline in childbirths** rather than an actual rise in maternal deaths.
- **Decline in Fertility Rate:**
 - Kerala's fertility rate has been decreasing for over three decades.
 - In 1991, the fertility rate went below **replacement level (2.1 children per woman)**
 - In 2020, the total fertility rate (TFR) dropped to 1.5 and is currently at 1.46, **i.e.** couples in Kerala mostly have one or no children.

Key Factors Behind Declining Birth Rates

- **Demographic Transition:** Changing societal attitudes towards marriage and childbirth have led to **delayed marriages, low fertility rates**, and some couples opting not to have children.
 - Kerala was the first Indian state to reach below-replacement fertility in **1991**.
- **Migration and Workforce Loss:** A significant proportion of individuals in the reproductive age group migrate abroad for education and employment, often settling there permanently.
- **Aging Population:** The proportion of elderly population is expected to surpass the child population in Kerala within a decade.
- **Delayed Childbearing:** Older mothers face higher pregnancy-related health risks and morbidities, further contributing to maternal mortality.

Source:

- [The Hindu - Declining fertility levels](#)

Places in News

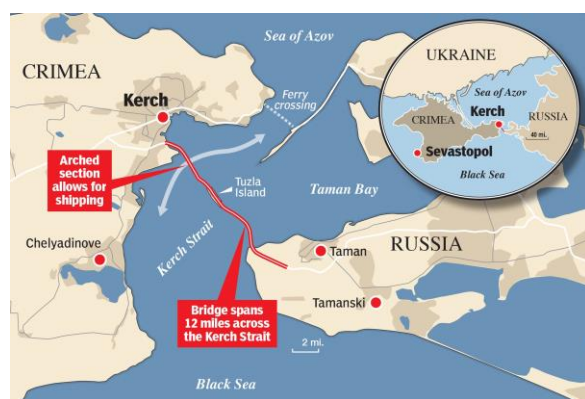
Kerch Strait

- Recently a Russian oil tanker carrying thousands of tonnes of oil products split apart during a heavy storm, causing an oil spill in the **Kerch Strait**.
- Russia has formed a task force to ramp up the cleaning process of oil spill in its **Krasnodar Region**.

Facts

- A strait is a narrow waterway between two pieces of land that connects two large bodies of water.
- **Sea of Azov:** It is an **inland sea in Eastern Europe**. It is bounded by **Russia & Ukraine**.
- **Countries bordering Black Sea:** Turkey, Bulgaria, Ukraine, Russia, Georgia & Romania.

(Trick to Remember - T-BURGeR)



- It is located in **Eastern Europe** and is the only water body which **connects the Black Sea with the Sea of Azov**.
- It separates the **Kerch Peninsula (Crimea)** from the **Taman Peninsula (Russia)**.
- It is an **important global shipping route &** also a key point of conflict between Russia and Ukraine after Moscow annexed the Crimean peninsula in 2014.
- **Kerch Strait Bridge:** It is also known as the **Crimean Bridge** as it links mainland Russia with Crimea.

Source: [Indian Express](#)

News in Shorts

UN Committee of Experts on Big Data and Data Science for Official Statistics

- Recently, India has joined the UN Committee of Experts on Big Data and Data Science for Official Statistics (UN-CEBD).
- **Origin:** In 2014 with Australia as its first chair.
- **Membership:** 31 member states and 16 international organizations (**Including India**).
- **Mandate:**
 - Provide a strategic vision, direction and coordination for a global programme on Big Data for official statistics.
 - Promote practical use of Big Data sources, while finding solutions for many challenges (methodological, legal, security).
 - Promote capacity-building & Advocate the use of Big Data for policy applications.
- **What is Big Data ?**
 - It is a term used to describe large and complex sets of data that are difficult to manage and analyze using traditional data processing tools.
 - Organizations use big data to improve processes and policies, create customer-centric products, and make strategic business decisions.

Source:

- [PIB - India Joins the UN Committee](#)

New State emblem for Tripura

- The Union Ministry of Home Affairs (MHA) has given its approval for the new state emblem of Tripura.
- It comprises the national emblem in the centre of an outline of Tripura map that is within a circle of saffron colour with Tripura government written below.
- Approval was given under **Rule 4(2) of the State Emblem of India (Regulation of Use) Rules, 2007**.
- **According to Rule 4(2)**, When a State Government proposes to incorporate the emblem or any part thereof in the Emblem of its state. It shall do so after obtaining the prior approval of the Central Government and shall get the design and layout approved by the Central Government.



Source:

- [The Hindu - New State emblem for Tripura sparks row](#)

Challenges in Enforcing the 2017 Make-in-India Rules in Government Procurement

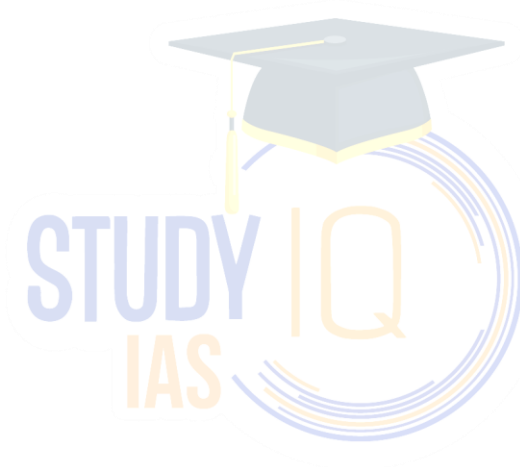
- According to a recent report 4 out of 10 Govt tenders can't comply with Make in India rules which were floated in 2017.
- **Key Provisions of Make in India Rules 2017:**
 - Departments must source goods and services from **local suppliers** with a minimum **local content** (percentage of domestically manufactured components):
 - **More than 50% local content:** Priority given.
 - **20–50% local content:** Considered if sufficient competition is unavailable.
 - **Less than 20% local content:** Allowed only in exceptional cases, such as global

tenders.

- **Extent of Non-Compliance:** Between October 2021 and February 2023:
 - **1,750 high-value tenders** were scrutinized, worth **₹53,355 crore**.
 - **936 tenders (53%)** were non-compliant.
- **Challenges in Implementation:**
 - **Resistance to Domestic Products:** Departments argue that foreign brands offer better quality or cost-efficiency. **E.g.** CPWD highlighted issues with locally-made lifts for projects.
 - **Supply-Side Constraints:** Domestic suppliers sometimes fail to meet technical requirements or demand.
 - **Lack of Accountability:** Ministries often delay or avoid addressing flagged violations.

Source:

- [Indian Express - Lifts to computers](#)



Editorial Summary

The reforms needed in the MEA

Context

India's rising global influence requires a stronger MEA to effectively execute its foreign policy ambitions.

Achievements of the Ministry of External Affairs (MEA)

- **Leadership in G20 Presidency:** India successfully hosted the G20 Summit, promoting inclusive development, climate action, and global digital public infrastructure, and positioning itself as a leader of the Global South.
- **Strategic Autonomy in Foreign Policy:** MEA navigated the Russia-Ukraine conflict with neutrality, balancing relations with Russia and the West while safeguarding India's strategic and economic interests.
- **Vaccine Diplomacy During COVID-19:** Through the "Vaccine Maitri" initiative, India supplied vaccines to over 100 countries, showcasing its commitment to global health and solidarity.
- **Championing the Global South**
 - India voiced the concerns of developing nations in multilateral forums, strengthening its leadership position among Global South countries.
- **Strengthened Bilateral and Multilateral Ties:** Enhanced relationships with key global powers like the U.S., EU, and ASEAN, and initiated cooperation frameworks such as QUAD, I2U2, and SCO membership.
- **Expansion of Diplomatic Presence:** Opened new missions in Africa and other regions, extending India's diplomatic footprint and engagement with underrepresented areas.
- **Diaspora Engagement:** Improved services for the Indian diaspora through initiatives like Pravasi Bharatiya Divas and enhanced support for Indians abroad during emergencies, such as Operation Ganga (Ukraine evacuation).
- **Economic Diplomacy:** Negotiated trade agreements like the India-UAE CEPA and India-Australia ECTA, boosting economic ties and market access.
- **Crisis Response and Evacuations:** Efficient evacuation efforts during global crises, including Operations like Rahat (Yemen), Devi Shakti (Afghanistan), and Ganga (Ukraine).
- **Innovations in Foreign Policy:** Establishment of specialized divisions like Policy Planning and Research and the Centre for Contemporary China Studies to tackle emerging challenges and align with global trends.

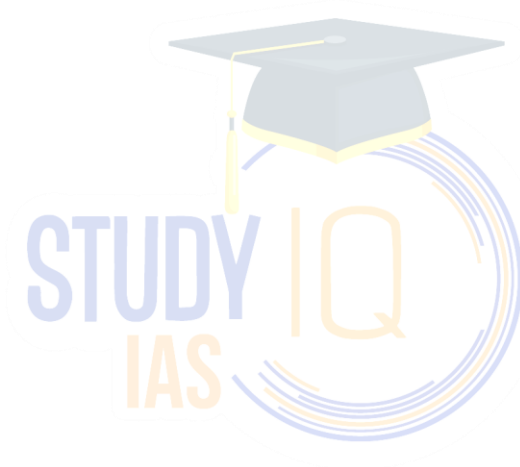
Challenges Faced by the MEA

- **Inadequate Staffing:** The MEA has approximately 850 Indian Foreign Service (IFS) officers, which is insufficient compared to countries like the U.S. with 14,500 officers. The current intake rate means it could take decades to reach an optimal workforce of 1,500 officers.
- **Fragmented Structure:** The MEA's internal organization is overly fragmented, with multiple small divisions managing similar regions, leading to inefficiencies and oversight risks.
- **Support Disparities:** Officers abroad receive substantial support, whereas those in Delhi face inadequate housing and limited financial incentives, making domestic postings less attractive.
- **Balancing Generalist and Specialist Roles:** The rotational posting system undermines language training and specialist expertise, which are crucial for effective diplomacy.
- **Technological Capacity:** As technology becomes integral to foreign policy, the MEA lacks sufficient domain specialists in areas like cybersecurity and artificial intelligence.

Way Forward

- **Increase Recruitment:** The MEA should consider lateral hiring from other government services and engage consultants for specialized roles to enhance its workforce.
- **Reorganize Internal Structure:** Consolidating divisions within the MEA can improve coordination and efficiency in managing foreign relations.
- **Enhance Domestic Support:** Improving housing, medical coverage, and financial incentives for officers in India can boost morale and effectiveness.
- **Focus on Language and Specialization:** Assigning language-trained officers to embassies and encouraging specialization can enhance diplomatic negotiations.
- **Invest in Technological Expertise:** Hiring domain specialists can ensure the MEA effectively addresses modern challenges in foreign policy.

Sources: [The Hindu: The reforms needed in the MEA](#)



Vice Chancellor Selection: Draft UGC

Context

- The University Grants Commission (UGC) introduced draft regulations, “**Minimum Qualifications for Appointment and Promotion of Teachers and Academic Staff in Universities and Colleges and Measures for Maintenance of Standards in Higher Education**”, aligning with the objectives of the National Education Policy (NEP).
- These regulations aim to address ambiguities in the Vice-Chancellor (VC) selection process, open the post to non-academics, and improve higher education standards.

The Role of a Vice-Chancellor (VC)

- **Academic and Administrative Leadership:** Chairs key university bodies like the university council, board of faculties, and finance committee.
 - Represents the university domestically and internationally.
 - Ensures a robust financial base to fulfill the university's mission.
- **Core Mandate:** Knowledge creation, as embodied in the term “university.”
 - As Peter Mathieson, VC of the University of Edinburgh, stated, universities should focus on “creating knowledge, questioning the status quo, and making the world a better place through research and education.”

Current Appointment Process for VCs

- Under the UGC regulations established in 2018, a **search-cum-selection committee** is responsible for shortlisting candidates for the VC position.
- This committee generally comprises eminent individuals from higher education and is tasked with recommending 3-5 candidates through public notification or nomination.
- The Chancellor then appoints the VC from this shortlist.
- **State Universities:** For state and private universities, one member of the search-selection committee is nominated by the UGC Chairman, while other members are determined by state law.
 - **Example:** According to the Kerala University Act of 1974, the VC is appointed by the Chancellor based on a unanimous recommendation from a three-member committee.

Proposed Changes in 2025 Regulations

The new draft regulations introduce several key changes:

- **Composition of Search Committee:** The **Governor-Chancellor** or Visitor now directly nominates a representative, removing ambiguity.
 - The UGC nominee continues to be part of the committee.
 - The third member is nominated by the university's apex body (e.g., Management Council or Senate), which may include politically affiliated representatives.
 - This shift gives central nominees a majority in the selection process.
- **Expanded Eligibility:** The new rules allow candidates from diverse fields such as public administration, industry, and public policy to be eligible for VC positions, provided they have significant academic contributions and at least ten years of senior-level experience.
- **Appointment Terms:** VCs will serve terms of five years or until they reach 70 years of age.

State Concerns Over Federalism

Several states have expressed strong objections to these provisions, arguing that they undermine federalism by increasing central control over state universities:

- **Kerala:** The Kerala Assembly passed a Bill to replace the Governor with eminent educationists as Chancellors. This Bill is pending presidential assent.

- Tensions escalated when former Governor Arif Mohammad Khan claimed he was compelled to act against his conscience regarding VC appointments.
- **West Bengal:** The state government is challenging a Calcutta High Court ruling that upheld unilateral appointments made by Governor C V Ananda Bose.
 - The West Bengal Assembly has passed a Bill to appoint the Chief Minister as Chancellor instead of the Governor.
- **Karnataka:** In December 2024, Karnataka's Assembly passed a Bill to replace the Governor with the Chief Minister as Chancellor. Similar legislation is being considered for other state universities.
- **Maharashtra:** A Bill passed during Uddhav Thackeray's government aimed to limit the Governor's powers regarding VC appointments but was later withdrawn under new leadership.
- **Tamil Nadu:** The DMK-led government passed Bills allowing state control over VC appointments; however, these have not received approval from the Governor.

Global Practices in VC Selection

- **United States:** Search committees include **provosts, deans, faculty representatives, staff, students (occasionally), and trustees/board members.**
 - No regulatory body like the UGC oversees standards; the process is inclusive and transparent.
 - **Example:** Institutions like MIT and Stanford use boards of trustees for forming criteria, consulting stakeholders, and conducting interviews.
- **United Kingdom:** Search committees involve **university governors/trustees, senior leaders, faculty representatives, and external advisors.**
 - Faculty and student participation ensures inclusivity.

Forward-Looking Provisions in the Draft Regulations

- **Revised Entry-Level Qualifications for Assistant Professors:** UGC-NET is no longer mandatory for assistant professor posts in technical institutions.
 - Candidates with **ME/MTech degrees** and at least **55% marks** are eligible.
 - **Lifting the Cap on Contract Teacher Appointments**
 - Aligns with the NEP's objectives to address significant faculty shortages in universities.
- **Challenges and Considerations for New VC Appointments:** Industry or service sector representatives may lack familiarity with university ethos.
 - However, they could contribute by:
 - Bringing professional perspectives.
 - Creating endowments to support financially starved universities.

Key Challenges for VCs Today

- **Raising Research Standards:** Enhancing the quality and impact of research output.
- **Promoting Internationalisation:** Improving the global standing of Indian universities by encouraging international collaborations and partnerships.

Reform Necessity

- **Fragmented Funding and Resource Constraints:** Indian universities suffer from insufficient funding, hampering their ability to meet global standards.
- **Lessons from Global Universities:** Institutions like MIT and Stanford thrive due to professional leadership and robust funding models.

Sources:

- **Indian Express: The Leaders Our Universities Need**
- **Indian Express: What are UGC's new draft rules on Vice-Chancellor appointments and why are states upset?**

Detailed Coverage

Draft Digital Personal Data Protection Rules 2025

Context

The Union government has released the draft **Digital Personal Data Protection (DPDP) Rules, 2025**, to enforce the provisions of the **DPDP Act, 2023**.

Key Provisions of the Draft Rules

- **Data Fiduciaries' Responsibilities:**
 - **Data Fiduciary:** A Data Fiduciary is any person, company, or organization that determines the **purpose and means of processing personal data**.
 - They can be businesses, government bodies, or even individuals that collect, store, or use data for various operations.
 - **Significant Data Fiduciaries (SDFs)** are those processing high volumes or sensitive data which can impact national sovereignty, security or public order.
 - Fiduciaries must inform users about:
 - The type of data collected.
 - The purpose of data collection.
 - Details necessary for users to provide informed and specific consent.
 - **Data Protection:** Fiduciaries must implement technical and operational safeguards to prevent data breaches.
 - Any breach must be reported to the **Data Protection Board of India** (yet to be established) **within 72 hours**.
- **Consent Managers:** Consent managers will assist fiduciaries in collecting user consent in a specified format.
- **Government Exemptions:** The government and its instrumentalities may collect data for providing subsidies and benefits.
- **Data Retention and Deletion:**
 - If users do not use services like e-commerce platforms, social media or gaming for an extended period, their data **must be deleted**.
 - A **48-hour advance notice** will be provided before deletion.
- **Parental consent for children's data:**
 - **Verification required:** Social media and online platforms must obtain verifiable parental consent before children create accounts.
 - **Identity validation:** Parents' age and identity must be validated through government-issued identity proof.

Pros of the Draft Digital Personal Data Protection (DPDP) Rules

- **Principles-Based Framework:** The rules adopt a pragmatic approach, focusing on simplicity and clarity for notice and consent, **reducing "consent fatigue"** faced by users.
- **Flexibility and Autonomy:** Unlike prescriptive regulations like EU's General Data Protection Regulation (GDPR), the DPDP rules respect business autonomy and innovation by not dictating specific user interface designs or methods for enabling user rights.
- **Sector-Specific Exemptions:** Industries like education, healthcare, and childcare are exempt from stringent parental consent requirements for activities like tracking and monitoring, provided guardrails are adhered to.
- **Outcome-Oriented Approach:** Emphasis is placed on the practical utility of regulations, ensuring users' empowerment without unnecessary complexities for businesses.

- **Reduced Regulatory Burden:** Avoids heavy-handed regulations that could stifle small enterprises, fostering a more business-friendly environment.

The **EU's General Data Protection Regulation (GDPR)**, once **hailed as a gold standard** by privacy experts, now **faces criticism for unintended consequences** — favouring well-resourced corporations, stifling smaller enterprises, and failing to significantly enhance public trust in the Internet.

Facts

- Supreme Court highlighted "**Privacy as a fundamental right**" in: **KS Puttaswamy Case**

Why DPDP Rules Are Needed

- **Rising Costs of Data Breaches:** Data breaches in India cost businesses an average of ₹19.5 crore (\$2.35 million) in 2024, highlighting the urgent need for robust data protection laws to safeguard business reputation and continuity.
- **Emerging Technologies:** The convergence of the Internet of Things (IoT), 5G, and artificial intelligence (AI) has enabled unprecedented levels of data collection, necessitating a privacy framework beyond traditional consent mechanisms.
- **Balancing Privacy with Innovation:** To protect citizens' privacy without stifling economic growth and technological innovation, India needs a flexible and adaptive data protection framework.
- **Preserving Individual Rights:** A well-designed framework can ensure the protection of individual rights while maintaining industry-specific accommodations to foster innovation and economic competitiveness.
- **Global Best Practices with Local Adaptation:** The DPDP Rules aim to address these issues by prioritizing flexibility, simplicity, and an industry-focused approach to regulation.

Concerns Related to Draft Digital Data Protection Rules

- **Executive Overreach:** The rules grant broad discretion to the government under vague phrases like "as may be prescribed," leading to concerns about unchecked authority.
 - Rule 22's vague language on government access to sensitive personal or business data creates risks of surveillance, trade secret violations, and data misuse by unauthorized parties.
- **Lack of Transparency in Consultation:** The consultation process on the draft rules is restricted to submissions through the **MyGov platform**, limiting broader participation.
 - Government submissions are treated as fiduciary, precluding public scrutiny, and counter-comments, resembling corporate consultations rather than public ones.
- **Ambiguities in Compliance and Enforcement:**
 - **Consent Notices:** Rules require "clear and plain language" but do not define these terms, creating inconsistency in compliance and interpretation across India's linguistically diverse population.
 - **Data Breach Notifications:** No specific timelines for notifying users about data breaches, leaving individuals vulnerable in urgent situations.
 - Vague requirements for disclosure of data categories (e.g., metadata, inferred data) may result in either over-generic or overly simplified notices, omitting critical details.
- **Weak Institutional Structure:** The **DPB lacks autonomy** due to dependence on central government employees for appointments and operational guidelines.
- **Exemptions Without Safeguards:** Rule 5 exempts data processing for subsidies (e.g., Aadhaar-linked welfare) from consent requirements, raising questions about accountability and abuse.
 - Community organizations and individuals seeking redress for issues like ration-related data correction may find it challenging to secure timely resolutions.
- **Absence of an Independent Regulator:** The Act and draft rules do not establish an independent regulatory body, consolidating power within the Union Government, which undermines the credibility of data protection enforcement.

- Long-standing recommendations for independent regulatory structures, such as those in the **2006 Planning Commission consultation paper**, have been ignored.
- **Inadequate Protection for Children’s Data:** The rules require parental consent for children under 18 but lack specific mechanisms to verify parental identity or relationship with the child.
 - They fail to address practical challenges, such as children lying about their age or shared device usage in Indian households, leaving implementation questions unanswered.
- **Impact on Individual Rights:** The framework lacks adequate provisions for protecting individual rights, such as ensuring procedural integrity when users request information about data processing or seek correction of records.

Way Forward

- **Comprehensive Rulemaking:** Develop detailed, actionable, and practical guidelines for implementing user rights, protecting children’s data, and addressing data breaches.
- **Robust Framework for Children’s Data Protection:** Develop age-verification tools and methods to identify false age claims and address challenges arising from shared device usage in Indian households.
- **Independent Regulatory Authority:** Establish an independent Data Protection Authority insulated from government influence to ensure impartial oversight and effective enforcement of the Act.
- **User-Centric Implementation Guidelines:** Create user-friendly procedures for individuals to exercise their rights, such as submitting requests for data correction or erasure.
- **Clear Timelines for Implementation:** Publish a phased timeline for the implementation of the DPDP Act and associated rules, providing businesses and data processors with sufficient time to comply.
- **Addressing Data Protection for Vulnerable Groups:** Incorporate user education campaigns to raise awareness about data rights and privacy among these groups.
- **Support for Small Enterprises:** Ensure that the rules remain adaptable to small and medium enterprises (SMEs) to foster innovation and economic growth.
- **Inclusive Public Consultations:** Continue engaging with industry stakeholders, civil society, and technical experts to refine rules and address ambiguities without diluting the principles of flexibility and pragmatism.

Sources:

- [The Hindu: India’s data protection rules need some fine-tuning](#)
- [The Hindu: Draft digital data protection rules and authoritarianism](#)
- [The Hindu: How the draft rules for implementing data protection falls short](#)