



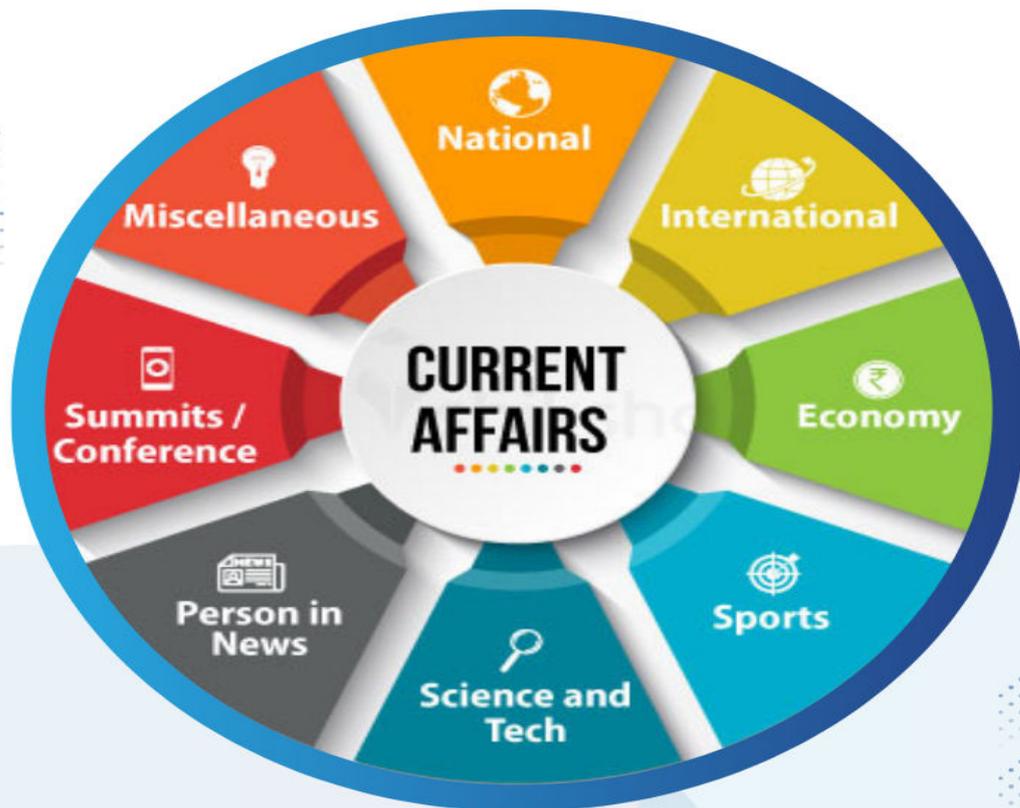
“ We help you reach for the star ”

VIDHVATH IAS KAS ACADEMY & STUDY CENTRE

DAILY CURRENT AFFAIRS

FOR UPSC CIVIL SERVICE EXAMINATION

DATE: 14/01/2026 (WEDNESDAY)



 **9972258970 & 9740702455**

**#317/A SKB Arcade, D. Subbaiah Road,
Ramaswamy Circle, Mysuru-570004**



Table of Contents

1. SC Scrutiny of Electoral Roll Deletions and Citizenship Verification	2
2. Discontinuation of 10-Minute Delivery Mandates for Gig Workers.....	3
3. Supreme Court Split Verdict: Section 17A of the PC Act	5
4. Drug Abuse: A Threat to India's Demographic Dividend.....	6
5. Delhi Government's Carbon Credit Monetisation Framework	8
6. IAF Intervention in Valley of Flowers Forest Fire	9
7. Ancient Gold Discovery in Lakkundi: Historical and Legal Scrutiny	11
8. Socio-Political Crisis in Iran: Genesis and Systemic Vulnerabilities	12
9. Environmental Impact of Artificial Intelligence: The Hidden Carbon Footprint	14
10. The Symbolism of Blue: From Peasant Resistance to Dalit Empowerment	15
11. Smartphone Source Code Disclosure: Security vs. Proprietary Rights.....	17
12. Small Towns: The Frontier of India's Urban Transformation.....	18



1. SC Scrutiny of Electoral Roll Deletions and Citizenship Verification

The Supreme Court (SC) has raised critical questions regarding the Election Commission's (EC) power to delete names from electoral rolls based on citizenship inquiries during the Special Intensive Revision (SIR) exercise. The core of the debate lies in whether an Electoral Registration Officer (ERO) can effectively "strip" the presumption of citizenship before the Central Government makes a formal determination under the Citizenship Act.

- **Judicial Concern on Executive Overreach:** The SC questioned if an ERO's "inquisitorial" inquiry into citizenship could trigger a chain reaction leading to deportation or investigations into a person's right to remain in India without a final call from the Union Government.
- **Scale of Deletions:** The issue gained urgency following the deletion of approximately 6.5 crore names across nine states and three Union Territories (including West Bengal and UP) during the second phase of the SIR process.
- **Separation of Powers:** The Bench highlighted a potential conflict between the EC's mandate to maintain accurate rolls and the Centre's exclusive jurisdiction to determine citizenship status for deportation purposes.
- **Due Process and Right to Appeal:** While the EC maintains that excluded voters have a right to appeal, the Court is examining whether the loss of voting rights (under Article 326) can precede a formal citizenship trial by the competent authority.
- **Nature of ERO Inquiry:** The Court is probing whether the findings of an ERO, primarily meant for electoral purity, can be legally "referred" to the Centre as a basis for stripping an individual of the "color of citizenship."
- **Distinction between Inclusion and Deportation:** Senior advocates argued that while the EC verifies citizenship for the purpose of voting, the decision on residency and deportation remains strictly within the purview of the Union Government.

Key Definitions

- **Special Intensive Revision (SIR):** A rigorous process conducted by the EC to update electoral rolls, involving house-to-house verification to remove entries related to deceased, shifted, or ineligible (non-citizen) voters.
- **Electoral Registration Officer (ERO):** A statutory official appointed under the Representation of the People Act, responsible for the preparation and revision of electoral rolls for an assembly constituency.
- **Inquisitorial Enquiry:** A legal proceeding where the presiding official (in this case, the ERO) takes an active role in investigating the facts of the case, rather than just acting as an impartial adjudicator between two parties.

Constitutional and Legal Provisions

- **Article 326:** Grants the right to be registered as a voter to every Indian citizen not less than 18 years of age, unless disqualified under the Constitution or any law on grounds of non-residence, unsoundness of mind, crime, or corrupt practice.
- **Article 11:** Empowers the Parliament to regulate the right of citizenship by law, leading to the enactment of the Citizenship Act, 1955.



- **Representation of the People Act, 1950 (Section 16):** Specifies that a person shall be disqualified for registration in an electoral roll if he is not a citizen of India.
- **Registration of Electors Rules, 1960:** Provides the procedural framework for EROs to include or delete names and handle objections during the revision of rolls.

Conclusion

The Supreme Court's intervention underscores the delicate balance between ensuring a "clean" electoral roll and protecting the fundamental rights of individuals. While the Election Commission is constitutionally mandated to ensure only citizens vote, the summary deletion of millions of names raises "due process" concerns. If an administrative inquiry by an ERO is allowed to serve as a proxy for a citizenship trial, it risks bypassing the rigorous legal protections afforded under the Citizenship Act and the Foreigners Act.

UPSC Relevance

- **GS Paper II (Polity):** Structure, organization, and functioning of the Election Commission; Statutory bodies; Comparison of the Indian Constitutional scheme with that of other countries.
- **GS Paper II (Governance):** Issues relating to the exercise of rights and the role of the judiciary in protecting civil liberties.
- **Prelims:** Powers of the ERO, Articles 324-329, provisions of the Representation of the People Acts (1950 & 1951), and the Citizenship Act.

2. Discontinuation of 10-Minute Delivery Mandates for Gig Workers

The Union Ministry of Labour and Employment has intervened to address the safety and health concerns surrounding the ultra-fast delivery model used by major quick-commerce platforms. Following a strike by gig workers and subsequent high-level meetings, major players like Blinkit, Swiggy, and Zepto have begun transitioning away from the 10-minute branding to ensure better working conditions and road safety.

- **Government Intervention:** Union Labour Minister Mansukh Mandaviya urged aggregators to prioritize worker welfare over aggressive branding, leading companies to revise their taglines and delivery promises.
- **Worker Welfare and Safety:** The move follows a nationwide one-day strike by gig workers who highlighted that the 10-minute mandate leads to increased road accidents, mental stress, and physical health issues.
- **Operational Defense vs. Reality:** While platforms claimed that "dark stores" (localized warehouses) enabled fast delivery without pressuring riders, the government noted that the branding itself created an environment of high-pressure expectations.
- **Shift in Branding:** Blinkit has already transitioned its tagline from "delivered in 10 minutes" to "delivered at your doorstep," signaling a shift from speed-centric competition to service-centric models.
- **Regulatory Oversight:** This development marks a significant step toward active government regulation of the gig economy, moving beyond a hands-off approach to direct intervention in work practices.





- **Global Precedent:** The decision aligns with global trends where governments are increasingly scrutinizing the "instant delivery" model for its socio-economic impact on urban traffic and labor rights.

Key Definitions

- **Gig Economy:** A labor market characterized by the prevalence of short-term contracts or freelance work as opposed to permanent jobs.
- **Platform Workers:** Individuals whose work is mediated through an online platform (like an app) that connects them with customers to provide specific services.
- **Dark Stores:** Micro-fulfillment centers or small warehouses located in densely populated urban areas, closed to the public and used solely to fulfill online orders quickly.
- **Aggregators:** Digital intermediaries that connect service providers (delivery partners) with consumers (customers) via a mobile application or website.

Constitutional and Legal Provisions

- **Article 21:** The Right to Life and Personal Liberty, which the Supreme Court has interpreted to include the right to health and safe working conditions.
- **Article 42 (DPSP):** Directs the State to make provisions for securing just and humane conditions of work.
- **Code on Social Security (2020):** This is the first central legislation in India to explicitly define "gig workers" and "platform workers," providing a framework for their social security, though its full implementation via rules is still pending.
- **Motor Vehicle (Amendment) Act, 2019:** Relevant in the context of road safety regulations that apply to commercial delivery partners.

Conclusion

The decision to roll back 10-minute delivery services signifies a crucial pivot from "hyper-growth at any cost" to a more sustainable and humane business model. By addressing the structural pressures placed on delivery partners, the government is acknowledging the vulnerabilities of the gig workforce. However, long-term stability for these workers will require the formal notification of the Social Security Code and a robust mechanism for grievance redressal that balances consumer convenience with labor dignity.

UPSC Relevance

- **GS Paper II (Governance):** Welfare schemes for vulnerable sections; Government policies and interventions for development in various sectors and issues arising out of their design and implementation.
- **GS Paper III (Economy):** Issues relating to planning, mobilization of resources, growth, development, and employment; Effects of liberalization on the economy (e-commerce and gig economy).
- **Ethics (GS Paper IV):** Corporate Governance and the ethical dilemma between profit-making (speed) and the well-being of the workforce.



3. Supreme Court Split Verdict: Section 17A of the PC Act

The Supreme Court recently delivered a split verdict on the constitutional validity of **Section 17A of the Prevention of Corruption (PC) Act, 1988** (inserted via the 2018 Amendment). Because the two-judge bench disagreed, the matter has been referred to the Chief Justice of India (CJI) to be heard by a larger bench.

1. Understanding Section 17A

- **The Mandate:** No police officer can conduct an "enquiry, inquiry, or investigation" into a public servant's official decisions without prior approval from the competent government authority.
- **The Timeline:** Authorities must decide on sanction requests within **three months** (extendable by one month).
- **The Intent:** To protect honest officials from frivolous or malicious prosecution for bona fide policy decisions.

2. The Judicial Divide: Justice Nagarathna vs. Justice Viswanathan

Feature	Justice B.V. Nagarathna (Dissent)	Justice K.V. Viswanathan (Defense)
Verdict	Unconstitutional	Constitutional / Valid
Core Argument	It acts as a "shroud" for corrupt officials and violates Article 14 .	It acts as a "shield" for honest officials against "policy paralysis."
Precedent	Viewed it as a resurrection of Section 6A (DSPE Act) , which was struck down in 2014.	Warned against "throwing the baby out with the bathwater."
Philosophy	Honest officers do not need statutory insulation; the law should not create barriers to justice.	Disrepute in the age of social media is "worse than death" for an official's career.
Recommendation	Total strike-down of the provision.	Shift sanctioning power to independent bodies (Lokpal/Lokayukta) to avoid executive bias.

3. Key Legal & Constitutional Context

- **Article 14 (Equality before Law):** The central debate is whether Section 17A creates an "arbitrary classification" by giving public servants a protection not available to ordinary citizens.
- **Section 6A of the DSPE Act:** A predecessor to Section 17A that required prior sanction for officers of Joint Secretary rank and above. It was struck down in the *Subramanian Swamy case (2014)* for being discriminatory.
- **Vineet Narain Judgment (1997):** A landmark ruling that sought to insulate investigative agencies (like the CBI) from executive interference.



4. Critical Concepts

- **Policy Paralysis:** A state where administrators stop making decisions or taking risks due to the fear of being investigated years later for a "bad outcome," even if the intent was honest.
- **Mala Fide Prosecution:** Legal action initiated with "bad faith" or malicious intent to harass an official.
- **Puisne Judge:** A term referring to any judge of the court other than the Chief Justice.



5. Conclusion & Way Forward

The split verdict highlights the "shield vs. shroud" dilemma. While the protection prevents the weaponization of law, it also risks delaying justice in genuine corruption cases. The larger bench will now determine if the executive should hold the "keys" to an investigation or if that power should reside with an independent ombudsman like the Lokpal.

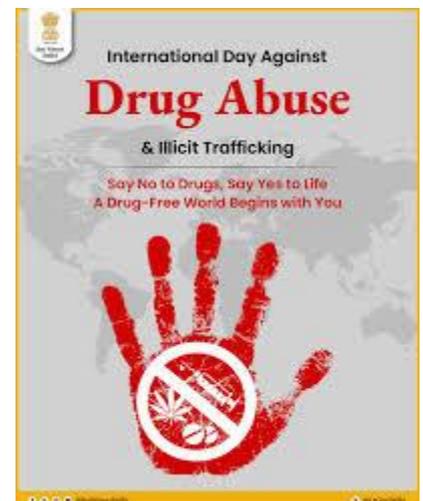
UPSC Relevance Summary

- **GS Paper II (Polity):** Constitutional validity of laws, Article 14, and the role of statutory bodies (Lokpal).
- **GS Paper IV (Ethics):** The dilemma between administrative accountability and the freedom to act in public interest.
- **Prelims:** Provisions of the PC (Amendment) Act 2018 and landmark SC judgments (Vineet Narain, Subramanian Swamy).

4. Drug Abuse: A Threat to India's Demographic Dividend

Vice-President C.P. Radhakrishnan has identified substance abuse as a critical social and national security challenge that jeopardizes India's "demographic dividend." Speaking at Delhi University, he emphasized that the vision of a *Viksit Bharat* (Developed India) is contingent upon a healthy and purpose-driven youth. To combat this, the government has intensified the 'Nasha Mukta Parisar Abhiyaan' (Drug-Free Campus Campaign), highlighting that addiction is not merely a personal struggle but a systemic threat to economic productivity and national sovereignty.

- **Erosion of Human Capital:** Substance abuse directly targets the working-age population (15-64 years), leading to physical and mental health degradation, reduced academic performance, and a loss of workforce productivity.
- **National Security & Narco-Terrorism:** The Vice-President highlighted the dangerous nexus between drug trafficking and terrorism. Profits from illicit drug networks are often diverted to fund extremist activities, undermining internal security and national sovereignty.
- **Launch of Digital Tools:** Under the 'Nasha Mukta Parisar Abhiyaan', a dedicated mobile application and e-pledge platform (pledge.du.ac.in) were launched to facilitate reporting, awareness, and peer support across educational institutions.





- **Integration with NEP 2020:** The campaign aligns with the National Education Policy 2020, which prioritizes student well-being, mental health, and life skills, aiming to create safe and nurturing learning environments.
- **Holistic Approach to De-addiction:** Emphasis is being placed on moving from "curiosity-driven experimentation" to "wisdom-driven help-seeking," supported by national helplines for tobacco and substance cessation.
- **Global Cooperation:** The Vice-President acknowledged international efforts to dismantle drug mafias, suggesting that a unified global front is essential to protect the youth from international drug networks.

Key Definitions

- **Demographic Dividend:** The economic growth potential resulting from a shift in a population's age structure, specifically when the share of the working-age population is larger than the non-working-age share.
- **Narco-Terrorism:** The organized nexus between drug traffickers and terrorist groups, where the illicit drug trade is used to fund and sustain terrorist activities and insurgencies.
- **Nasha Mukh Bharat Abhiyaan (NMBA):** A flagship campaign launched by the Ministry of Social Justice and Empowerment to tackle substance abuse through community outreach and institutional intervention.

Constitutional and Legal Provisions

- **Article 47 (DPSP):** Mandates the State to endeavor to bring about the prohibition of the consumption (except for medicinal purposes) of intoxicating drinks and drugs which are injurious to health.
- **Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985:** The primary legal framework that prohibits the manufacture, sale, and consumption of narcotic drugs while providing for stringent punishment for traffickers.
- **Section 71 of NDPS Act:** Imposes a duty on the government to establish centers for the identification, treatment, and rehabilitation of drug addicts.
- **Article 21:** The Right to Life and Personal Liberty, which includes the right to a healthy environment and protection from activities (like narco-terrorism) that threaten life.

Conclusion

The fight against drug abuse is no longer just a healthcare priority but a prerequisite for India's economic and strategic goals. By addressing the "silent war" of narco-terrorism and fostering drug-free campuses, the state aims to protect its most valuable asset—the youth. However, success depends on transforming these campaigns into a "Jan Andolan" (People's Movement) where students act as ambassadors of change, supported by robust rehabilitation infrastructure and strict enforcement of anti-trafficking laws.

UPSC Relevance

- **GS Paper II (Social Justice):** Issues relating to development and management of Social Sector/Services relating to Health and Education; Government policies and interventions for development.



- **GS Paper III (Internal Security):** Linkages of organized crime with terrorism (Narco-terrorism); Role of external state and non-state actors in creating challenges to internal security.
- **GS Paper IV (Ethics):** Challenges of substance abuse among youth; Role of family, society, and educational institutions in providing ethical guidance.

5. Delhi Government's Carbon Credit Monetisation Framework

The Delhi Cabinet has approved a pioneering 'Carbon Credit Monetisation Framework' to transform the city's environmental efforts into a sustainable revenue stream. By scientifically quantifying greenhouse gas (GHG) reductions from green projects, the Delhi government aims to trade these 'carbon credits' in national and international markets. This move positions the National Capital Territory (NCT) as a frontrunner in climate finance, following the lead of entities like the Indore Municipal Corporation.

- **Revenue Generation Model:** The framework identifies emission reductions from flagship projects—such as the massive rollout of electric buses, urban forestry (plantation drives), and waste-to-energy plants—and converts them into tradable financial assets.
- **Consolidated Fund Integration:** Unlike ad-hoc grants, the revenue generated from these sales will be deposited directly into the **Consolidated Fund of the State**, ensuring the funds are utilized for public welfare schemes and pollution mitigation.
- **Zero Upfront Cost:** The implementation follows a "revenue-sharing model." Specialized expert agencies will be engaged on a "success-fee" basis, meaning they are paid only after the credits are successfully traded, ensuring no financial risk to the exchequer.
- **Nodal Authority:** The **Department of Environment, Forests and Wildlife** will act as the nodal agency to oversee project identification, registration under global standards (like VERRA or Gold Standard), and subsequent trading.
- **Scaling Green Infrastructure:** By monetizing existing achievements, the government creates a self-sustaining cycle where revenue from current green initiatives funds future climate-resilient infrastructure.
- **Scientific Verification:** The policy mandates a robust Monitoring, Reporting, and Verification (MRV) system to meet rigorous international audit standards, ensuring the credibility of the credits generated.



Key Definitions

- **Carbon Credit:** A tradable permit or certificate that provides the holder the right to emit one metric tonne of carbon dioxide (CO₂) or an equivalent amount of different greenhouse gases (CO₂e).
- **Monetisation:** The process of converting an asset or a non-revenue generating activity (like planting trees or reducing tailpipe emissions) into legal tender or a tradable financial instrument.
- **Greenhouse Gas (GHG) Offsetting:** The practice of compensating for emissions made in one area by funding or supporting projects that reduce or remove an equivalent amount of emissions elsewhere.



Constitutional and Legal Provisions

- **Article 48A (DPSP):** Directs the State to protect and improve the environment and safeguard the forests and wildlife of the country.
- **Article 51A(g) (Fundamental Duties):** It shall be the duty of every citizen of India to protect and improve the natural environment.
- **Energy Conservation (Amendment) Act, 2022:** Provides the foundational legal framework for the **Indian Carbon Market (ICM)** and empowers the Central Government to specify a carbon credit trading scheme.
- **Environment Protection Act, 1986:** Provides the broad legislative umbrella under which various pollution control and environmental conservation rules are notified.
- **Section 47 of the GNCTD Act:** Relevant to the financial management and the flow of revenue into the Consolidated Fund of the NCT of Delhi.

Conclusion

Delhi's Carbon Credit Monetisation Framework is a landmark shift from viewing environmental protection as a "cost center" to a "revenue generator." By linking climate action with fiscal management, the policy incentivizes departments to achieve higher efficiency in green projects. As India moves toward its **Net Zero 2070** target, such sub-national initiatives will be crucial in building a robust domestic carbon market and mobilizing the vast capital needed for a green transition.

UPSC Relevance

- **GS Paper II (Governance):** Government policies and interventions for development in various sectors; Issues arising out of their design and implementation.
- **GS Paper III (Environment & Economy):** Conservation, environmental pollution, and degradation; Environmental Impact Assessment; Mobilization of resources and growth.
- **Prelims:** Concepts of Carbon Markets, the Paris Agreement (Article 6), the Energy Conservation Act, and the role of the Bureau of Energy Efficiency (BEE) as the market administrator.

6. IAF Intervention in Valley of Flowers Forest Fire

The Uttarakhand government has sought the assistance of the Indian Air Force (IAF) to combat a persistent forest fire in the **Valley of Flowers range**, a UNESCO World Heritage site. The fire, raging for five days in the high-altitude Painkhanda forests of Nanda Devi National Park, has proven inaccessible to ground teams due to steep terrain and a lack of trekking routes. This unusual winter blaze highlights a growing trend of "off-season" forest fires in the Himalayan region, attributed to a severe lack of winter precipitation and snowfall.

- **High-Altitude Crisis:** The fire is active at an altitude of approximately 3,300 to 4,200 metres (11,500+ feet). At this elevation, oxygen levels are low and the terrain is characterized by steep rock faces, making manual firefighting impossible.
- **UNESCO Site at Risk:** The Valley of Flowers is globally renowned for its 600+ exotic flower varieties and rare wildlife like the snow leopard and musk deer. The blaze threatens these fragile endemic species and medicinal plants.





- **Winter Fire Phenomenon:** Forest fires in Uttarakhand typically peak between February and June. Experts note that a nearly 100% deficit in winter snowfall has left the forest floor dry, turning leaf litter into highly flammable fuel.
- **IAF Aerial Support:** The state has requested **Bambi Bucket** operations, where IAF Mi-17 V5 helicopters discharge large volumes of water sourced from nearby rivers (Alaknanda or Lakshman Ganga) or lakes onto the inferno.
- **Climate Change Indicators:** Data from the Forest Survey of India (FSI) shows a surge in fire alerts as early as December. Reduced soil moisture and "vapour pressure deficit" due to rising temperatures are creating a "tinder-box" effect in the Himalayas.
- **Multi-Agency Response:** The operation involves the State Disaster Response Force (SDRF), the Forest Department, and the District Administration, emphasizing the need for a coordinated disaster management framework for high-altitude ecological zones.

Key Definitions

- **Bambi Bucket:** A specialized, collapsible aerial firefighting tool suspended beneath a helicopter that releases a concentrated column of water to douse fires in inaccessible terrain.
- **Demographic Dividend (Contextual):** While usually an economic term, in the environmental context, the "Ecological Dividend" of the Himalayas (water, biodiversity) is under threat from recurring wildfires.
- **Deciduous Litter:** Dead organic matter (dry leaves and twigs) on the forest floor that acts as "primary fuel" for surface fires.

Constitutional and Legal Provisions

- **Article 48A (DPSP):** Mandates that the State shall endeavor to protect and improve the environment and safeguard the forests and wildlife of the country.
- **Article 51A(g):** Imposes a Fundamental Duty on every citizen to protect and improve the natural environment, including forests, lakes, rivers, and wildlife.
- **Wildlife Protection Act, 1972:** Provides the legal framework for the protection of National Parks and Sanctuaries (like Nanda Devi) and prohibits activities that damage their habitat.
- **Disaster Management Act, 2005:** Empowers the state to seek help from the Armed Forces (IAF) for disaster relief and emergency response.

Conclusion

The raging fire in the Valley of Flowers is a clarion call for reassessing Himalayan disaster preparedness. As winter precipitation becomes increasingly erratic due to climate change, the traditional "fire season" is expanding. Relying on the IAF for aerial dousing is a necessary short-term fix, but long-term resilience requires better early-warning systems, community-based "Fire Lines" management, and a deeper understanding of the changing moisture regimes in high-altitude UNESCO sites.

UPSC Relevance

- **GS Paper I (Geography):** Important Geophysical phenomena (forest fires); Geographical features and their location-changes in critical geographical features.



- **GS Paper III (Environment & Disaster Management):** Conservation, environmental pollution, and degradation; Disaster and disaster management (specifically aerial firefighting and Himalayan ecology).
- **Prelims:** Nanda Devi National Park, Valley of Flowers, UNESCO World Heritage Sites in India, FSI Fire Alerts, and the role of the IAF in internal security/disaster relief.

7. Ancient Gold Discovery in Lakkundi: Historical and Legal Scrutiny

A significant cache of gold ornaments and a copper container, estimated to be over a century old, was unearthed during residential excavation in Lakkundi village, Gadag district. The find has sparked a debate between local heritage enthusiasts and the Archaeological Survey of India (ASI) regarding its classification as "treasure" versus "ancestral household property." While initial archaeological assessments suggest the ornaments were likely buried for safety by previous generations, the discovery underscores the immense historical wealth of Lakkundi, a prominent center of the Kalyana Chalukya dynasty.

- **Archaeological Context:** Lakkundi (ancient *Lokkigundi*) was a flourishing commercial and cultural hub between the 10th and 12th centuries. It is renowned for its "Lakkundi school" of architecture, featuring nearly 50 temples, including the Brahma Jinalaya and Kasivisvesvara Temple.
- **Nature of the Find:** Approximately 470 grams of gold, including intricate chains and bangles, were found inside a copper pot at a depth of five feet. Archaeologists noted that many pieces appear broken, suggesting they were common household jewellery rather than a royal hoard.
- **Legal Protocol:** The discovery triggered the provisions of the **Indian Treasure Trove Act, 1878**. Following the mandatory *panchnama* (legal record of observation), the items were secured in the government treasury to determine their age and ownership.
- **Historical Significance:** While ASI officials initially downplayed the "treasure" label due to a lack of coins, local historians argue that any item of value hidden in the soil for over 100 years qualifies as treasure and could belong to the Chalukya or Hoysala eras.
- **Civic Honesty:** The find was reported by a young student, Prajwal Ritti, whose family was building the house. His integrity has been officially recognized by the district administration, highlighting the role of public awareness in heritage preservation.
- **Current Status:** A detailed investigation by the State Archaeology Department is underway to ascertain the exact period of the ornaments, which will determine if they are "antiquities" under central government jurisdiction.



Key Definitions

- **Antiquity:** Under the *Antiquities and Art Treasures Act, 1972*, any object (coin, sculpture, manuscript, etc.) that has been in existence for not less than 100 years.
- **Treasure Trove:** Traditionally defined as any money, gold, silver, or bullion found hidden in the earth or a private place, the owner of which is unknown.
- **Kalyana Chalukya (Later Chalukyas):** A prominent South Indian dynasty (10th-12th Century CE) known for their sophisticated temple architecture and for making Lakkundi a major minting center.



Constitutional and Legal Provisions

- **Indian Treasure Trove Act, 1878:** Governs the discovery of any "treasure" hidden in the soil worth more than 10 rupees. It mandates the finder to notify the District Collector.
- **Section 4 & 5 (Treasure Trove Act):** Requires the finder to deposit the treasure or provide security. The Collector then issues a notification to claimants to appear for an inquiry.
- **Antiquities and Art Treasures Act, 1972:** Regulates the export and internal trade of antiquities to prevent smuggling and preserve national heritage.
- **Article 49 (DPSP):** It is the obligation of the State to protect every monument or place of artistic or historic interest declared to be of national importance.
- **Article 51A(f) (Fundamental Duties):** To value and preserve the rich heritage of the country's composite culture.

Conclusion

The Lakkundi discovery highlights the friction between colonial-era laws (1878 Act) and modern heritage conservation needs. Whether classified as "ancestral property" or "ancient treasure," such finds are vital pieces of India's cultural puzzle. For a region like Lakkundi, which once served as a Hoysala capital and a Chalukyan mint, every subsurface discovery offers a potential link to its prosperous medieval past. Ensuring a transparent and fair "reward-sharing" mechanism is essential to encourage citizens to report such finds rather than selling them in the grey market.

UPSC Relevance

- **GS Paper I (Art & Culture):** Indian culture will cover the salient aspects of Art Forms, literature and Architecture from ancient to modern times (specifically Temple Architecture of Karnataka).
- **GS Paper II (Governance):** Laws and institutions for the protection of heritage; Role of the Archaeological Survey of India (ASI).
- **Prelims:** Specifics of the Treasure Trove Act, 1878; Features of Chalukya/Hoysala architecture; Location-based questions on Lakkundi and Gadag.

8. Socio-Political Crisis in Iran: Genesis and Systemic Vulnerabilities

The current unrest in Iran, triggered by a historic currency collapse in late 2025, represents a significant shift in the country's internal dynamics. Unlike previous waves of dissent, this crisis began with a "Bazaari" (merchant) strike, signaling a breakdown in the traditional alliance between the commercial class and the clerical regime. For India, the stability of Iran is not merely a foreign policy concern but a strategic necessity linked to energy security, regional connectivity, and domestic social ties.

- **Economic Trigger:** The crisis was ignited on December 28, 2025, by the staggering devaluation of the rial. While the official rate was 42,000 to a dollar, the market rate plunged to nearly **1.45 million**, a **20,000-fold decline** since 1979. This made essential imports unviable and sparked nationwide anti-government protests.
- **The "Official Playbook":** Iranian authorities typically manage unrest through a four-stage strategy: (1) immediate police containment, (2) a "good-cop, bad-cop" routine offering token concessions like monthly cash handouts (~\$7), (3) a period of attrition and pro-government rallies, and (4) final rounds of harsh sentencing or executions.





- **Breakdown of the Bazaar-Clergy Nexus:** Historically, the Bazaar merchants were the backbone of the 1979 Revolution. However, their recent strike highlights a cooling relationship caused by "maximum pressure" sanctions and the encroachment of the **Islamic Revolutionary Guard Corps (IRGC)** into private trade and manufacturing.
- **Systemic Resource Diversion:** Persistent social angst stems from the leadership's prioritization of nuclear programs and regional proxies over domestic welfare. Over **two-thirds of Iranians** were born after the Revolution and seek economic parity with their Gulf neighbors, rejecting the "gerontocratic-theocratic" status quo.
- **Foreign and Geopolitical Dynamics:** While U.S. and Israeli leadership have encouraged the agitators, Iran's history of "glorifying martyrdom" and unifying against foreign aggression makes military intervention risky. Tehran maintains a "retaliatory capability," including the threat to close the geoeconomically sensitive **Strait of Hormuz**.
- **Impact on India:** India's interests are deeply intertwined with Iran through: (1) access to **Chabahar Port** and Central Asia, (2) stability in the Gulf affecting 9 million Indian diaspora members, and (3) social resonance among India's **25 million Shias**, the second-largest such population in the world.

Key Definitions

- **Bazaar:** The influential merchant class in Iran's traditional marketplaces (Bazaars), historically a key political bellwether.
- **Bonyads:** Wealthy, ostensibly charitable parastatal foundations in Iran that control an estimated **20% of the GDP** and are unaccountable to standard government oversight.
- **Pasdaran (IRGC):** The Islamic Revolutionary Guard Corps, a powerful military branch that also functions as a massive business conglomerate within the Iranian economy.
- **Rial Devaluation:** The systematic loss of the national currency's value, which saw a **45% decline** in 2025 alone, fueling hyper-inflation.

Constitutional and Legal Provisions

- **Theocratic Governance:** Under the Iranian Constitution, the **Supreme Leader** holds ultimate authority over the military, judiciary, and state media, often limiting the powers of the moderate elected President.
- **Sanctions Regime:** International "Secondary Sanctions" targeting countries trading with Iran continue to shape the nation's economic isolation and fiscal policy.
- **Islamic Republic's Legal Playbook:** The use of broad "security charges" for protesters, often leading to capital punishment under the state's revolutionary courts.

Conclusion

While the Iranian establishment has shown resilience through its coercive apparatus and elite cohesion, the 2025–26 unrest reveals a widening gap between a youth-led population and an aging leadership. The economic "root causes"—sanctions, corruption, and resource diversion—remain unaddressed. For India, a stable Iran is a prerequisite for a secure energy corridor and a strategic bypass to Pakistan via the International North-South Transport Corridor (INSTC).



UPSC Relevance

- **GS Paper II (International Relations):** Effect of policies and politics of developed and developing countries on India's interests; Indian diaspora.
- **GS Paper III (Economy & Security):** Energy security; Impact of global economic sanctions; Linkages between economic distress and internal security unrest.

9. Environmental Impact of Artificial Intelligence: The Hidden Carbon Footprint

While Artificial Intelligence (AI) is lauded for its transformative potential in healthcare and agriculture, its ecological cost is often overlooked. Reports from international bodies like the OECD and UNEP highlight that the rapid deployment of large-scale AI models consumes massive amounts of energy and water, contributing significantly to global greenhouse gas (GHG) emissions. As India strives for technological leadership, integrating environmental accountability into AI development has become a critical necessity for sustainable growth.

- **Rising Energy Demands:** Training a single Large Language Model (LLM) can generate nearly 3,00,000 kg of carbon emissions. A single ChatGPT query is estimated to consume 10 times more electricity than a standard Google search.
- **Water Scarcity Risks:** Data centers require vast amounts of water for cooling hardware. UNEP forecasts that AI servers could utilize up to 6.6 billion cubic meters of water by 2027, potentially exacerbating global water stress.
- **Inconsistent Data Reporting:** Information regarding AI's carbon footprint is often self-reported by tech giants and may be incomplete. Critics argue that low electricity consumption claims by corporations often ignore the full lifecycle impact of hardware manufacturing.
- **Global Regulatory Trends:** The U.S. and EU have initiated legislative measures, such as the *AI Environmental Impacts Act of 2024*, to mandate transparency in energy use. UNESCO's 2021 recommendations also provide a global ethical framework for "Green AI."
- **The Indian Context:** India currently mandates Environmental Impact Assessments (EIA) for physical infrastructure under the *EIA Notification, 2006*. Experts suggest expanding this scope to include the digital "compute" footprint of AI algorithms.
- **Sustainable Pathways:** Mitigation strategies include using pre-trained models to avoid redundant energy expenditure, transitioning data centers to renewable energy, and adopting ESG (Environmental, Social, and Governance) disclosure standards.



Key Definitions

- **AI Compute:** The specialized hardware (like GPUs) and software "stacks" required to process complex AI workloads and train large models.
- **Large Language Models (LLMs):** AI systems trained on massive datasets to understand and generate human-like text; they are the most resource-intensive forms of modern AI.
- **Carbon Footprint:** The total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions—in this case, by the lifecycle of an AI model.



- **Bambi Bucket (Concept Analogy):** Just as aerial firefighting uses specialized tools for crisis, "Green AI" uses specialized metrics to "douse" the rising heat generated by data centers.

Constitutional and Legal Provisions

- **Article 48A (DPSP):** Directs the State to protect and improve the environment. This can be interpreted to include regulating digital industries that significantly contribute to carbon emissions.
- **Article 51A(g):** Fundamental Duty of citizens to protect the natural environment, which extends to responsible technology consumption and development.
- **EIA Notification, 2006:** Issued under the *Environment (Protection) Act, 1986*, it provides the legal basis for assessing the impact of new projects. Integrating AI compute into this framework would strengthen digital governance.
- **Energy Conservation Act, 2001:** Could be utilized to set energy-efficiency standards for data centers hosting AI infrastructure in India.

Conclusion

AI should be a part of the solution for global sustainability, not a contributor to its degradation. While the technology can optimize power grids and track deforestation, the "cost of compute" must be measured accurately. India needs to transition from purely "using AI for climate" to "developing climate-conscious AI." By establishing clear measuring standards and including AI impacts in ESG disclosures, India can ensure its digital revolution does not come at the cost of its environmental commitments.

UPSC Relevance

- **GS Paper III (Environment & Science/Tech):** Conservation, environmental pollution, and degradation; Awareness in the fields of IT, Space, Computers, and AI.
- **GS Paper II (Governance):** Government policies and interventions for development in various sectors and issues arising out of their design and implementation.
- **Prelims:** Specifically focuses on the UNESCO Ethics of AI, UNEP reports, and the nuances of the EIA Notification 2006.

10. The Symbolism of Blue: From Peasant Resistance to Dalit Empowerment

The color blue in India transcends mere aesthetics, serving as a powerful socio-political symbol of resistance for the marginalized. Spanning from the **Indigo Revolt of 1859** in Bengal to the **Champaran Satyagraha** of 1917 and eventually the **Dalit movement** led by Dr. B.R. Ambedkar, blue has represented both the struggle against colonial exploitation and the quest for social equality. Today, its presence at the heart of the Indian flag through the **Ashoka Chakra** serves as a permanent reminder of the nation's commitment to peace, justice, and the dignity of the working class.

- **The Indigo Revolt (1859-60):** Triggered in Bengal when peasants refused to sow indigo after a magistrate's notice made it non-obligatory. It was the first mass strike against European planters, characterized by both non-cooperation and defensive violence against planter-led militias.
- **Champaran Satyagraha (1917):** Mahatma Gandhi's first experiment with civil disobedience in India. It targeted the **Tinkathia system**, where tenants were legally forced to grow indigo on 3/20th of their land, proving that non-violent resistance could mobilize the rural masses.



- **Ambedkarite Symbolism:** Dr. Ambedkar's choice of the blue suit and the blue flag for the **Scheduled Caste Federation (1942)** redefined the color. It symbolizes the expanse of the sky (limitlessness and equality) and challenges traditional varna-based color hierarchies.
- **Social Statement of the Suit:** For Dalits, memorializing Ambedkar in a Western suit represents the "storming of an upper-caste citadel," breaking from traditional dress codes that historically signified poverty and subjugation.
- **The Blue Ashoka Chakra:** Located at the center of the National Flag, it represents the "Wheel of Dharma" and the spirit of civil disobedience. It mirrors the right to assemble peaceably and the ongoing struggle to include those forgotten by society.
- **Universal Representation:** Beyond caste, blue is often recognized as the color of the **working class** and the "non-discriminatory sky," aligning it with global movements for equality and human rights.

Key Definitions

- **Tinkathia System:** A colonial land tenure system in Bihar requiring peasants to cultivate indigo on 3 out of every 20 *kathas* (units) of their land for European landlords.
- **Satyagraha:** A method of non-violent resistance or "soul force" developed by Gandhi to confront injustice through truth and self-sacrifice.
- **Varna-Color Correlation:** Ancient texts (like the Puranas/Mahabharata) associated specific colors with social functions: Brahmins (White), Kshatriyas (Red), Vaishyas (Yellow), and Shudras (Black/Dark shades). Blue acts as a modern subversion of this hierarchy.

Constitutional and Legal Provisions

- **Article 19(1)(b):** Guarantees the right to assemble peaceably and without arms, a core value reflected in the Ashoka Chakra's symbolism.
- **Article 14 & 15:** Provide for equality before the law and prohibition of discrimination, fulfilling the "limitless sky" vision associated with Ambedkar's blue.
- **Champaran Agrarian Act, 1918:** The legal outcome of Gandhi's first Satyagraha, which abolished the exploitative Tinkathia system.
- **Indigo Commission (1860):** Formed after the 1859 revolt; its report led to the government declaring that ryots could not be compelled to grow indigo, effectively ending the trade in Bengal.

Conclusion

The evolution of "Blue" in India tracks the trajectory of the Indian freedom struggle—moving from local agrarian resistance to a nationwide civil disobedience movement and finally into a symbol of constitutional empowerment. By reclaiming a color often associated with the "lowest rung" or "otherness," leaders like Ambedkar transformed it into a badge of dignity and resilience. The blue chakra on our flag ensures that the spirit of the marginalized remains central to the Indian democratic identity.

UPSC Relevance

- **GS Paper I (Modern History):** Peasant movements and tribal uprisings in the 18th and 19th centuries; The Champaran Satyagraha and the rise of Gandhi.
- **GS Paper I (Art & Culture/Social Issues):** Symbolism in Indian society; Contributions of Dr. B.R. Ambedkar to social reform.



- **GS Paper II (Polity):** Evolution of the Indian Constitution and its symbols; Fundamental Rights and social justice.

11. Smartphone Source Code Disclosure: Security vs. Proprietary Rights

In early January 2026, reports surfaced that the Indian government was considering a mandate for smartphone manufacturers to disclose their proprietary source code to third-party testing agencies. The proposal, part of a broader cybersecurity overhaul aimed at curbing data breaches and fraud, also suggested that companies must notify the government before pushing major software updates. While the Ministry of Electronics and Information Technology (MeitY) has refuted claims of a formal "source code demand," the discussions have triggered a significant debate between national security interests and global technology manufacturing standards.

- **Cybersecurity Rationale:** The government's intent is to strengthen the domestic mobile security framework, identify potential "backdoors" or systemic vulnerabilities, and prevent malicious background usage of cameras and microphones.
- **Proprietary and Security Concerns:** Source code is a closely guarded trade secret. Manufacturers like Apple and Samsung argue that disclosure creates massive security risks; if a system's inner workings are exposed to reviewers, any leak of that information could provide a roadmap for cyber attackers to exploit zero-day vulnerabilities.
- **The ITSAR Framework:** The controversy stems from the **Indian Telecom Security Assurance Requirements (ITSAR)**, a set of 83 security standards drafted by the National Centre for Communication Security (NCCS). It includes proposals for 12-month log retention, malware scanning, and advanced software update notifications.
- **Global Precedent:** Industry bodies like MAIT and ICEA have pointed out that no major democratic jurisdiction (EU, USA, or Australia) mandates source code disclosure for consumer smartphones, warning that such "highly intrusive" demands could stifle innovation and delay critical security patches.
- **Regulatory Shift:** Oversight for smartphone security is transitioning from the Department of Telecommunications (DoT) under the **MTCTE (Mandatory Testing and Certification of Telecommunication Equipment)** framework to MeitY, leading to ongoing consultations to balance regulatory needs with the "Ease of Doing Business."
- **Transparency Issues:** Digital rights groups like the Internet Freedom Foundation (IFF) have criticized the "closed-door" nature of these consultations, urging the government to release draft ITSAR documents for public scrutiny to ensure they do not facilitate state surveillance.



Authorities contemplate mandating smartphone companies to share source code for better security

Technology firms have raised objections regarding the collection of 83 security requirements, which would potentially involve notifying the state about significant software release points.

Key Definitions

- **Source Code:** The fundamental set of human-readable instructions written by programmers that tells a software program or operating system how to function. It is the "blueprint" of the digital system.
- **Zero-Day Vulnerability:** A software security flaw that is known to the software vendor but has no immediate patch available, leaving the system vulnerable to exploitation from the "zero day" it is discovered.



- **Backdoor:** A covert method of bypassing normal authentication or encryption in a computer system, often used for unauthorized access or surveillance.
- **MTCTE Framework:** A mandatory certification regime requiring telecom equipment to be tested in Indian labs to ensure they meet essential technical and safety requirements.

Constitutional and Legal Provisions

- **Telecommunications Act, 2023:** The primary legislation governing the telecom sector, which empowers the government to set standards for "telecommunication identifiers" and equipment security.
- **Indian Telegraph (Amendment) Rules, 2017:** The legal basis for the MTCTE framework, mandating that telecom gear undergo testing prior to sale or import.
- **Article 19(1)(g):** The fundamental right to practice any profession or to carry on any occupation, trade, or business, which tech companies cite when challenging intrusive proprietary disclosures.
- **Right to Privacy (Article 21):** Established as a fundamental right in *Justice K.S. Puttaswamy v. Union of India*; critics argue that government access to source code could potentially facilitate mass surveillance, violating the principle of proportionality.

Conclusion

The standoff over source code disclosure represents a classic tension in the digital age: the State's duty to protect its citizens from cyber threats versus the industry's need for intellectual property protection and cybersecurity through secrecy. While the government has downplayed the immediate threat of mandatory code sharing, the underlying standards in the ITSAR reflect a move toward deeper regulatory penetration. A balanced approach would involve adopting global best practices—such as risk-based independent audits—rather than blanket source code access, ensuring that India remains a secure but attractive destination for global tech giants.

UPSC Relevance

- **GS Paper III (Internal Security & IT):** Basics of cybersecurity; Challenges to internal security through communication networks; Role of media and social networking sites.
- **GS Paper II (Governance):** Government policies and interventions for development in various sectors; Issues arising out of their design and implementation.
- **Prelims:** Specifics of the Telecommunications Act 2023, the role of MeitY vs. DoT, and concepts like Open Source vs. Proprietary software.

12. Small Towns: The Frontier of India's Urban Transformation

While public discourse and policy often focus on megacities like Delhi and Mumbai, a critical structural shift is occurring in India's nearly 9,000 towns. The majority of these are small towns (population below 1,00,000) that serve as the primary destination for rural migrants and surplus labor. Born out of "metropolitan over-accumulation"—where large cities have become too expensive and congested—these small towns have emerged as vital nodes for logistics, agro-processing, and informal services. However, this growth is often a "urbanization of rural poverty" rather than inclusive development, characterized by weak regulation, poor infrastructure, and informal labor.



- **Metropolitan Saturation:** India's megacities have reached a state of "over-accumulation" where high land prices and crumbling infrastructure make them unsustainable for new industries and working-class populations.
- **Small Towns as "Spatial Fixes":** Towns like Hassan (Karnataka) or Barabanki (UP) now act as logistics and service hubs. They offer capital cheaper land, pliable labor, and weaker regulatory oversight compared to metros.
- **Urbanization of Poverty:** Unlike the emancipatory promise of traditional cities, small-town growth is dominated by informal labor—construction workers, home-based piece-workers, and insecure gig workers.
- **Governance and Policy Gap:** Flagship programs like AMRUT and the Smart Cities Mission remain largely metro-centric, leaving small municipalities underfunded, understaffed, and dependent on fragmented infrastructure schemes.
- **Ecological and Social Stress:** The lack of planned water and sewerage systems leads to "tanker economies" and indiscriminate groundwater mining, while new local hierarchies (contractors and micro-financiers) tighten control over land and labor.
- **Reimagining Urban Planning:** To secure a sustainable future, planning must move away from "metropolitan templates" and focus on integrating housing, local livelihoods, and ecological resilience at the town level.



Key Definitions

- **Over-accumulation:** A crisis in capitalism where capital (money, land, goods) can no longer be reinvested profitably in a particular site (like a megacity) due to soaring costs and saturated markets.
- **Spatial Fix:** A term used in geography to describe how capitalism solves its internal crises by moving production and investment to new geographical areas (e.g., shifting from Mumbai to a small town).
- **Census Town:** An area that is not statutorily notified as a town but has a minimum population of 5,000, at least 75% of the male main working population engaged in non-agricultural pursuits, and a density of at least 400 persons per sq. km.

Constitutional and Legal Provisions

- **74th Constitutional Amendment Act, 1992:** Mandates the devolution of powers to Urban Local Bodies (ULBs). However, small towns often lack the "functional autonomy" to levy taxes or manage local planning.
- **Article 243ZD:** Provides for the constitution of **District Planning Committees (DPCs)** to consolidate plans prepared by Panchayats and Municipalities, a crucial but underutilized tool for small-town integration.
- **AMRUT 2.0:** While it aims for universal water coverage, its implementation in small towns is hampered by the lack of technical capacity and a reliance on external consultants.



- **Central Sector Schemes (PMAY-U / SBM-U):** These provide basic housing and sanitation but often fail to address the complex "livelihood-ecology" nexus unique to small-town economies.

Conclusion

India's urban future lies not in its a few massive metros but in the thousands of small towns currently undergoing "quiet" transformations. If left to market forces alone, these towns will likely replicate the squalor and inequality of megacities without their institutional strengths. The path forward requires political recognition of small towns as a distinct urban frontier, empowered local governance, and a planning logic that prioritizes labor rights and environmental sustainability over mere capital accumulation.

UPSC Relevance

- **GS Paper I (Social Issues & Geography):** Effects of urbanization, their problems and their remedies; Settlements and urban hierarchy.
 - **GS Paper II (Governance):** Devolution of powers and finances up to local levels and challenges therein; Welfare schemes for vulnerable sections.
 - **GS Paper III (Economy & Environment):** Inclusive growth; Infrastructure; Environmental impact assessment and sustainable development.
 - **Prelims:** Definition of Census Towns vs. Statutory Towns; 74th Amendment provisions; NITI Aayog reports on urban planning reforms.
-