MUST HAVE PDF

VISHNU IAS
MODERN GURUKUL FOR CIVIL SERVICES
TGPSC G 1 | UPSC - CSE | APPSC G 1

DAILY CURRENT AFFAIRS

USEFUL FOR UPSC | TGPSC | APPSC

12th November 2026

Headlines:

- Terrorist Attack on CRPF Personnel in Jammu & Kashmir: Persistent Challenges to Internal Security
- Karnataka's SC/ST Reservation Hike: Constitutional Limits and the Debate over Social Justice
- Turning Battery Waste into Strategic Mineral Wealth: India's Critical Mineral Security and Circular Economy
- Artificial Intelligence and the Future of Society: Balancing Technological Innovation with Human Values
- Widespread Air Pollution During Deepavali: Challenges to India's Environmental Governance



सत्यमेव जयते

WWW.VISHNUIAS.COM
https://t.me/vishnuiasmentor
9000400939

1. Terrorist Attack on CRPF Personnel in Jammu & Kashmir: Persistent Challenges to Internal Security

GS Paper III – Internal Security | Linkages between Development and Spread of Extremism | Role of Security Forces and Intelligence Agencies

Context

- Three CRPF personnel were injured in a close-range terrorist attack at a security checkpoint in Kulgam district of South Kashmir.
- The incident highlights the continuing threat of terrorism in Jammu & Kashmir despite sustained counter-terrorism operations.
- The Lieutenant Governor condemned the attack and assured strict action against those responsible.

Key Internal Security Challenges

- **Terrorist tactics:** Close-range attacks expose vulnerabilities in checkpoint security and force protection mechanisms.
- **Intelligence gaps:** Difficulties in tracking terrorist movements highlight the need for stronger Human Intelligence (HUMINT) and Technical Intelligence (TECHINT).
- **Cross-border terrorism:** External support, infiltration attempts and transnational terrorist networks continue to pose challenges to regional security.
- **Changing security dynamics:** Targeted attacks on security personnel can sustain fear and challenge the security establishment.
- **Geographical challenges:** Difficult terrain and densely populated settlements complicate surveillance and counter-terrorism operations.
- **Terror financing:** Illegal funding networks and financial support mechanisms sustain terrorist activities and recruitment.

Role of Security Forces and Institutions

- **CRPF:** Plays a crucial role in counter-insurgency operations, area domination and maintaining internal security.
- **J&K Police:** Provides local intelligence and assists in identifying terrorist networks.
- **Multi-agency coordination:** Cooperation among the Army, CRPF, J&K Police and intelligence agencies is essential for effective counter-terrorism operations.
- **Financial intelligence agencies:** Strengthen efforts to identify suspicious transactions and disrupt illegal terror-financing networks.
- **Lieutenant Governor:** Reviews the security situation and coordinates administrative responses within the Union Territory's governance framework.

VISHNU IAS Academy

Way Forward

- **Intelligence-led operations:** Strengthen HUMINT, TECHINT and real-time information-sharing mechanisms.
- **Border management:** Enhance border surveillance, anti-infiltration mechanisms and monitoring of cross-border terrorist networks.
- **Technology-driven security:** Deploy AI-enabled surveillance, drones, CCTV networks and data analytics, subject to privacy safeguards and legal oversight.
- **Counter-terror financing:** Strengthen financial intelligence, monitor suspicious transactions and improve coordination among enforcement agencies.
- **Community engagement:** Build public trust, encourage information-sharing and prevent local recruitment into terrorist networks.
- **Human rights protection:** Ensure counter-terrorism operations adhere to constitutional values and the rule of law while minimising civilian casualties and collateral damage.
- **Capacity building:** Improve checkpoint security, personnel protection, specialised training and emergency medical response.
- **Whole-of-government approach:** Combine security measures with employment generation, inclusive development and effective governance.

Counter-terrorism in Jammu & Kashmir requires a comprehensive approach combining strong security mechanisms, intelligence coordination, disruption of terror financing, cross-border vigilance and community participation.

Sustainable peace depends not merely on eliminating terrorist threats but also on strengthening public trust, upholding constitutional values and addressing conditions that facilitate extremism.

2. Karnataka's SC/ST Reservation Hike: Constitutional Limits and the Debate over Social Justice

GS Paper II – Polity and Constitution | Government Policies and Interventions | Social Justice and Empowerment | Separation of Powers and Judicial Review

Context

- The Karnataka government has filed a Special Leave Petition (SLP) before the Supreme Court challenging the High Court's decision to quash the enhancement of SC reservation from 15% to 17% and ST reservation from 3% to 7%.
- The enhancement under the Karnataka SC/ST Reservation Act, 2022, increased total reservations from 50% to 56%.
- The High Court held that the enhancement violated the general 50% ceiling established in Indra Sawhney v. Union of India (1992).

Constitutional and Legal Dimensions

- **50% Reservation Ceiling:** The Indra Sawhney judgment (1992) established a general 50% ceiling on reservations under Articles 15(4) and 16(4), allowing exceptions in extraordinary circumstances.
- **Fundamental Rights:** Article 14 guarantees equality before law, while Articles 15(4) and 16(4) enable affirmative action for disadvantaged communities.
- **Educational Reservations:** Article 15(5) enables special provisions for the advancement of socially and educationally backward classes, SCs and STs in educational institutions, including private institutions, except minority educational institutions.
- **Reservation in Promotions:** Article 16(4A) enables reservation in promotions for SCs and STs in public employment, subject to constitutional requirements.
- **Ninth Schedule Protection:** Karnataka seeks inclusion of the legislation in the Ninth Schedule under Article 31B to provide protection against certain constitutional challenges.
- **Judicial Review:** In I.R. Coelho v. State of Tamil Nadu (2007), the Supreme Court held that Ninth Schedule laws inserted after April 24, 1973, remain subject to judicial review if they violate the Basic Structure.
- **EWS Reservation:** In Janhit Abhiyan v. Union of India (2022), the Supreme Court upheld the 103rd Constitutional Amendment, providing 10% EWS reservation under Articles 15(6) and 16(6).

Key Issues and Challenges

- **Social Justice vs Equality:** Balancing historical disadvantages and adequate representation with equality of opportunity.
- **Formal vs Substantive Equality:** While formal equality ensures equal treatment, substantive equality recognises historical disadvantages and promotes equitable representation through affirmative action.
- **Constitutional Validity:** Whether empirical evidence establishes extraordinary circumstances justifying reservation beyond the 50% ceiling.
- **Federal Dimension:** Balancing State autonomy in designing affirmative-action policies with constitutional limitations and judicial precedents.
- **Judicial Oversight:** Ensuring that legislative measures remain consistent with constitutional principles and the Basic Structure Doctrine.

Way Forward

- **Evidence-based Policy:** Use credible socio-economic data and representation studies to justify reservation policies.
- **Substantive Equality:** Ensure affirmative action addresses structural inequalities and historical exclusion.

VISHNU IAS Academy

- **Constitutional Compliance:** Respect judicial precedents while exploring constitutionally sustainable policy measures.
- **Periodic Review:** Conduct regular assessments of representation and socio-economic conditions to ensure reservation policies remain targeted, effective and constitutionally sustainable.
- **Complementary Measures:** Improve access to quality education, skill development and employment opportunities so that reservation is supported by broader structural reforms.
- **Institutional Accountability:** Ensure transparent implementation, effective monitoring and periodic evaluation of reservation policies.

Reservation is an instrument of substantive equality and social justice, not merely a numerical exercise. A balanced approach respecting constitutional limitations, empirical evidence and affirmative-action principles is essential to achieve inclusive development and equal opportunities.

3. Turning Battery Waste into Strategic Mineral Wealth: India's Critical Mineral Security and Circular Economy

GS Paper III – Indian Economy | Science & Technology | Environmental Conservation | Energy Security and Sustainable Development

Context

- Rising adoption of Electric Vehicles (EVs) and renewable energy technologies is increasing global demand for critical minerals such as lithium, nickel and cobalt.
- China's dominance in critical mineral processing and India's import dependence create strategic vulnerabilities.
- Recycling end-of-life (EoL) lithium-ion batteries offers an opportunity to recover valuable minerals and strengthen domestic resource security.

Significance of Battery Recycling

- **Strategic Autonomy:** Reduces dependence on imported critical minerals and strengthens India's domestic resource security.
- **Supply-chain Resilience:** Reduces exposure to geopolitical tensions, export restrictions and resource nationalism by developing domestic secondary sources of critical minerals.
- **Circular Economy:** Converts discarded batteries into valuable secondary resources through reuse, repurposing and recycling.
- **Economic Benefits:** Promotes domestic mineral processing, green industries, employment generation and investment opportunities.
- **Environmental Sustainability:** Reduces landfill waste, toxic pollution and pressure on virgin mineral extraction.

- **Energy Transition:** Supports EV manufacturing, renewable energy storage and India's clean-energy objectives.
- **Urban Mining:** Enables recovery of valuable minerals from discarded batteries and electronic waste.
- **Second-life Applications:** Retired EV batteries with sufficient residual capacity can be repurposed for stationary energy storage, solar power systems and backup electricity before final recycling.

Key Challenges

- **Informal Recycling:** Unsafe and inefficient practices result in low material recovery and environmental contamination.
- **Technological Constraints:** Diverse battery chemistries make mineral recovery complex and economically challenging.
- **Infrastructure Deficit:** Inadequate collection networks, recycling facilities and testing infrastructure.
- **Financial Constraints:** High initial investment, long gestation periods and uncertain profitability discourage private investment.
- **Environmental and Health Risks:** Improper battery dismantling can cause toxic chemical leakage, fire hazards, soil and groundwater contamination, and occupational health risks.
- **Consumer Participation:** Lack of convenient collection and buy-back mechanisms limits formal recycling.

Government Initiatives

- **Battery Waste Management Rules, 2022:** Establish Extended Producer Responsibility (EPR) for battery producers.
- **National Critical Mineral Mission (2025):** Promotes domestic exploration, processing, recycling and international partnerships.
- **PLI Scheme for ACC Batteries:** Encourages domestic advanced battery manufacturing.

Way Forward

- **Strategic Resource Planning:** Incorporate recycled minerals into India's critical mineral stockpile.
- **R&D Investment:** Develop cost-effective technologies ensuring higher mineral recovery and purity.
- **Standardisation:** Establish standards for battery quality, recycling and second-life applications.
- **Producer Accountability:** Strengthen EPR through take-back and buy-back mechanisms.

VISHNU IAS ACADEMY

- **Financial Support:** Provide patient capital and incentives for recycling infrastructure.
- **Public Participation:** Integrate informal waste collectors into formal recycling networks.
- **Global Partnerships:** Strengthen cooperation through initiatives such as the Minerals Security Partnership (MSP) to diversify critical mineral supply chains, access advanced recycling technologies and promote sustainable sourcing.

Battery recycling can transform end-of-life waste into strategic mineral wealth. Integrating resource security, technological innovation and circular economy principles is essential for building a sustainable and self-reliant EV ecosystem in India.

4. Artificial Intelligence and the Future of Society: Balancing Technological Innovation with Human Values

GS Paper III – Science & Technology | GS Paper II – Governance and Digital Regulation | GS Paper IV – Ethics, Human Values and Accountability

Context

- Rapid advancements in Artificial Intelligence (AI) are transforming knowledge production, scientific research, communication and economic activities.
- However, increasing AI dependence has raised concerns regarding misinformation, declining critical thinking, technological concentration and erosion of public trust.
- The growing influence of AI highlights the need for human-centric governance that balances technological innovation with societal interests.

Opportunities of Artificial Intelligence

- **Scientific Advancement:** Accelerates scientific research, healthcare innovation, mathematical discoveries and industrial productivity.
- **Economic Growth:** Enhances automation, efficiency, innovation and global competitiveness across sectors.
- **Knowledge Accessibility:** Improves access to information, education and digital public services.
- **Public Service Delivery:** Enables better decision-making in healthcare, agriculture, education and governance.

Key Challenges

- **Information Disorder:** AI-generated misinformation, deepfakes and manipulated content undermine information integrity and public trust.
- **Cognitive Dependence:** Excessive reliance on AI may weaken independent reasoning, creativity and critical thinking.

- **Employment Disruption:** Automation may displace workers in routine and repetitive occupations, widening skill gaps and income inequality.
- **Digital Divide:** Unequal access to AI infrastructure, digital literacy and computing resources may deepen socio-economic and regional inequalities.
- **Technological Concentration:** Dominance of a few technology corporations raises concerns about monopolies and unequal access to technological capabilities.
- **Ethical Concerns:** Algorithmic bias, lack of transparency and accountability may reinforce existing social inequalities.
- **Data Protection and Privacy:** Large-scale collection and processing of personal data raise concerns regarding consent, surveillance and misuse of sensitive information.
- **Democratic Integrity:** AI-driven misinformation, deepfakes and algorithmic manipulation can influence public opinion, electoral processes and informed democratic participation.
- **Security Risks:** Malicious use of AI can facilitate cyberattacks, surveillance and information manipulation.

Government Initiatives and Global Best Practices

- **IndiaAI Mission:** Promotes AI infrastructure, innovation, skill development and responsible AI adoption.
- **Digital India:** Strengthens digital infrastructure and digital empowerment.
- **NITI Aayog's Responsible AI Principles:** Emphasise safety, transparency, equality, inclusivity and accountability.
- **UNESCO Recommendation on the Ethics of AI (2021):** Emphasises human rights, transparency, fairness and accountability in AI development and deployment.
- **EU AI Act (2024):** Introduces a risk-based regulatory framework to govern AI systems and address potential harms.

Way Forward

- **Human-centric AI:** Ensure AI complements rather than replaces human intelligence, creativity and decision-making.
- **Risk-based Regulation:** Establish transparent, accountable and proportionate regulatory frameworks based on the potential risks of AI applications.
- **Digital Literacy:** Strengthen citizens' ability to identify misinformation and critically evaluate digital content.
- **Reskilling and Upskilling:** Promote digital education, vocational training and lifelong learning to prepare workers for AI-driven changes in the labour market.
- **Ethical AI:** Ensure fairness, privacy protection, explainability and meaningful human oversight.

Vishnu IAS Academy

- **Independent Auditing:** Introduce regular algorithmic audits and impact assessments to identify bias, discrimination and accountability gaps.
- **Global Cooperation:** Develop common standards for responsible AI and cross-border technology governance.

AI should remain a tool for human progress rather than an unchecked force shaping society. Balancing technological innovation with human autonomy, democratic values, social inclusion and ethical accountability is essential for sustainable and inclusive development.

5. Widespread Air Pollution During Deepavali: Challenges to India's Environmental Governance

GS Paper III – Environment and Ecology | Environmental Pollution and Degradation | Conservation | Urbanisation and Sustainable Development

Context

- Recent CPCB data revealed that nearly 70% of reporting air-quality monitoring stations across India recorded peak PM2.5 levels in the severe category (250 $\mu g/m^3$ or above) during Deepavali.
- Several States, including Maharashtra, Uttar Pradesh, Rajasthan, Haryana, Madhya Pradesh, Gujarat and Andhra Pradesh, witnessed severe pollution levels.
- Monitoring gaps during peak pollution episodes raised concerns about the reliability, transparency and effectiveness of India's air-quality monitoring system.

Major Environmental and Health Concerns

- **Public Health:** PM2.5 penetrates deep into the lungs and bloodstream, increasing respiratory and cardiovascular diseases and premature mortality.
- **Nationwide Pollution:** Air pollution is no longer confined to Delhi-NCR but has emerged as a widespread urban and regional challenge.
- **Firecracker Emissions:** Firecrackers contribute to particulate matter and gaseous pollutants, while the effectiveness of green crackers requires further scientific evaluation.
- **Secondary Pollutants:** Ground-level ozone and secondary particulate matter can form through atmospheric chemical reactions involving precursor pollutants such as NOx, SO_2 and VOCs.
- **Environmental Degradation:** Air pollution affects ecosystems, reduces visibility and contributes to broader environmental and climate-related concerns.
- **Economic Impact:** Air pollution reduces labour productivity, increases healthcare expenditure, causes workdays lost and adversely affects tourism and economic activity.

Key Governance Challenges

- **Monitoring Gaps:** Several Continuous Ambient Air Quality Monitoring Stations (CAAQMS) stopped reporting during peak pollution episodes.
- **Technical Limitations:** Instrument measurement limits and automated data validation can create data gaps during extreme pollution events.
- **Data Transparency:** Incomplete monitoring data and unexplained reporting gaps weaken public trust, scientific assessment and evidence-based policymaking.
- **Urbanisation:** Vehicular emissions, industrial activities, construction dust and waste burning aggravate pollution.
- **Institutional Coordination:** Fragmented efforts among States and urban local bodies weaken pollution-control strategies.

Government Initiatives

- **National Clean Air Programme (NCAP), 2019:** Aims to reduce particulate pollution through city-level action plans.
- **Graded Response Action Plan (GRAP):** Introduces graded emergency pollution-control measures in Delhi-NCR.
- **Commission for Air Quality Management (CAQM) Act, 2021:** Provides an institutional framework for coordinated air-quality management in Delhi-NCR and adjoining areas.
- **National Ambient Air Quality Standards (NAAQS), 2009:** Establishes permissible limits for major ambient air pollutants to protect public health and the environment.
- **National Air Quality Monitoring Programme (NAMP):** Monitors ambient air quality across India.

Way Forward

- **Monitoring Infrastructure:** Upgrade CAAQMS with higher measurement ranges, reliable sensors and transparent real-time reporting.
- **Scientific Enforcement:** Strengthen emission standards and enforce restrictions on pollution-intensive activities.
- **Clean Mobility:** Promote public transport, electric vehicles and cleaner fuels.
- **Airshed-based Management:** Address pollution across entire geographical airsheds rather than restricting interventions to individual cities or administrative boundaries.
- **Source Apportionment Studies:** Identify the contribution of transport, industries, construction dust, biomass burning and other sources to design targeted interventions.
- **Public Participation:** Encourage responsible celebrations and awareness regarding pollution hazards.

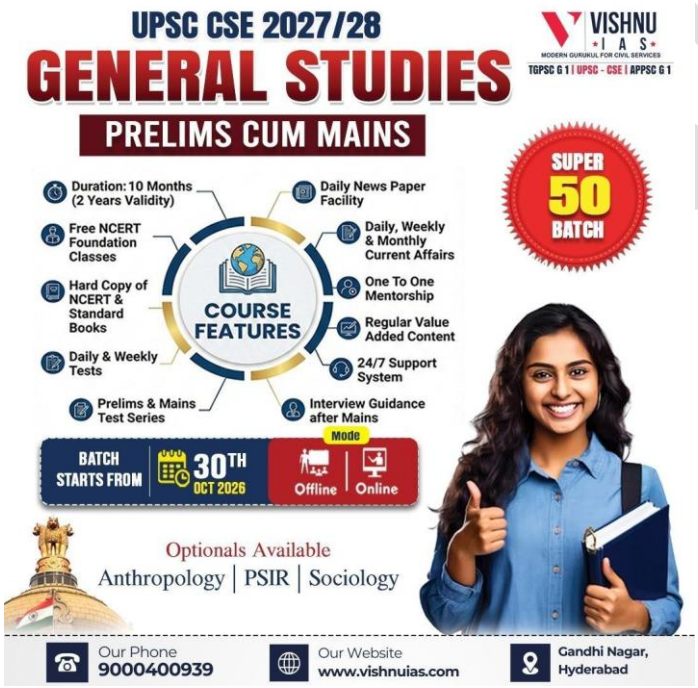
Vishnu IAS Academy

- **Regional Cooperation:** Promote coordinated pollution-control strategies across State boundaries.

Tackling air pollution requires a shift from reactive emergency measures to preventive, science-based and coordinated environmental governance. Reliable monitoring, source-specific interventions, strict enforcement and public participation are essential for achieving clean and healthy air.







FOLLOW US ON SOCIAL MEDIA

Telegram Whatsapp Instagram Youtube

VISHNU IAS ACADEMY | UPSC | TGPSC | APPSC | OPTIONALS: ANTHROPOLOGY | PSIR | SOCIOLOGY 9000350939