Prelims Exam Topics

GANDHI AND TAGORE'S DEEPEST DISAGREEMENTS

Context

On the birth anniversary of Rabindranath Tagore, discussions revisited his intellectual disagreements with Mahatma Gandhi, especially over nationalism, charkha and socio-political ideas.

Disagreements between Tagore and Gandhi

Dimension	Tagore's View	Gandhi's View
Charkha (Spinning Wheel)	Criticised as mechanical, ritualistic and promoting blind conformity	Saw it as symbol of self-reliance, dignity of labour and moral discipline
Nationalism	Opposed aggressive nationalism; favoured universal humanism	Promoted mass nationalism for freedom struggle
Modernity & Technology	Supported science, openness and global exchange	Preferred limited use of machinery; emphasis on village economy
Mass Movements	Feared Non-Cooperation may lead to blind following and unrest	Considered mass mobilisation essential for independence
Education Philosophy	Advocated creative, liberal and holistic education (Shantiniketan model)	Emphasised basic education linked to productive work (Nai Talim)
Social Philosophy	Individual freedom and diversity of thought important	Collective discipline and moral reform through simplicity
View on Natural Events	Rejected linking disasters to moral causes (rational view)	Sometimes linked events (e.g. Bihar earthquake) to moral/social sins

TACTICAL ADVANCED RANGE AUGMENTATION(TARA) WEAPON

Context

India successfully conducted the maiden flight trial of **Tactical Advanced Range Augmentation (TARA)** on May 7, 2026, marking a key milestone in precision-strike capability.

About TARA

- **I**ndia's first indigenous glide kit that converts conventional unguided bombs into precision-guided weapons *(enhances accuracy and range)*.

- **Developed By:** DRDO (Research Centre Imarat, Hyderabad) in collaboration with the Indian defence industry.
- **Working Mechanism:** Uses aerodynamic lift and onboard guidance to **glide towards target instead of free fall**, enabling stand-off precision strikes *(modern air warfare concept)*.

Key Features

- **Extended Range:** Glide capability increases strike distance *(Expected range about150–180 km)*
- **Stand-off Capability:** Allows aircraft to strike without entering enemy air defence range
- **High Accuracy:** Improved targeting of ground-based targets.(Expected Circular Error Probable (CEP) <5 metres)
- **Modular Design:** Compatible with existing bomb inventory *(operational flexibility)*
- **Platform Integration:** Can be deployed from Indian Air Force aircraft *(easy adoption)*

MUMBAI–AHMEDABAD HIGH-SPEED RAIL (MAHSR) CORRIDOR

Context

The Mumbai–Ahmedabad High-Speed Rail (MAHSR) project, popularly known as the Bullet Train, is in its peak construction phase.

About the Corridor

- The Mumbai–Ahmedabad High-Speed Rail (MAHSR) is **India's first bullet train project,** covering **508 km between Mumbai (Maharashtra) and Ahmedabad (Gujarat).**
- **Implemented by:** National High-Speed Rail Corporation Limited (NHSRCL) with Japanese technical and financial assistance.

Key Features of Mumbai–Ahmedabad High-Speed Rail (MAHSR) Corridor

- **Route (508 km):** Covers 348 km in Gujarat, 156 km in Maharashtra, 4 km in Dadra & Nagar Haveli, ensuring regional connectivity and balanced development.
- **Speed (320 kmph):** Operational speed of 320 kmph (design speed 350 kmph) reduces Mumbai–Ahmedabad travel time from 6–7 hours to just over 2 hours.
- **Technology:** Employs Japanese Shinkansen (E5/E10 series) with advanced signalling, automatic train control, and high safety standards, ensuring global-class service.
- **Tracks:** Unlike traditional Indian railway tracks that use loose stones (ballast), the Bullet Train utilizes the Japanese "J-slab" ballastless track system.
    - "J-slab" ballastless track is a high-speed railway system that replaces traditional loose stones with a solid, multi-layered concrete structure to provide the extreme stability, safety, and precision

K-SHAPED ECONOMY

Context

The war in West Asia is disrupting global fuel and fertiliser supplies, driving up prices and cost of living and has created a K-shaped economic divide, where the rich maintain their real consumption while the poor end up consuming less despite spending more.

Features of K-shaped Economy

- A **K-shaped Economy** refers to a post-recession scenario where different sectors recover at vastly different speeds, scales, or times.
- **Characteristics**
  - **Divergent Paths**: When charted, economic sectors split into two directions, resembling the letter "K".
  - **Upper Arm**: Represents sectors or demographics that rebound rapidly.
  - **Lower Arm**: Represents groups that struggle or recover much slower, leading to permanent structural changes in society.

Reasons:

- **Pre-existing Disparities**: Existing inequalities often widen when a recession hits various groups disproportionately.
- **Creative Destruction**: The emergence of new technologies during a downturn can favor modern industries while permanently damaging older ones.
- **Policy Bias**: Specific fiscal or monetary government interventions may inadvertently benefit certain industries over others.
- **Real Economic Shocks**: If a recession is coupled with a negative shock to a specific sector, it can cause lasting damage to that part of the economy while others remain unaffected.

MGNREGS 2025–26: SHARP CONTRACTION IN COVERAGE & EMPLOYMENT

Context

Recently a report released by **NREGA Sangharsh Morcha, prepared by LibTech India** covers the final operational year of MGNREGS before its replacement.

Key Findings

- **Employment Decline**
  - 44 lakh fewer households employed (↓8.2%)
  - 67 lakh fewer workers found employment (↓9.1%)
  - Total persondays fell by 21.5% — from 268.44 crore to 210.73 crore
  - Average persondays per household dropped from 50.18 to 42.92 (↓14.5%)

- **100-Day Guarantee Gap:** Households completing 100 days of work fell by 40.5% — from 0.37 crore to 0.22 crore
- **Income Loss**
    - Average household income fell from ₹12,681 to ₹11,460
    - Estimated average income loss: ₹1,221 per household
    - Total wage expenditure dropped by ₹11,570 crore
- **State-wise Performance**
    - Worst declines: Tamil Nadu (42.8%), Haryana (41.7%), Himachal Pradesh (41%), Telangana (40.2%)
    - Best performers: Jharkhand (+12.9%), J&K (+7.3%), Odisha (+6.7%)
    - 15 out of 20 states recorded a fall in person-days

Transition Concern

- MGNREGS being replaced by Viksit Bharat – Gramin Act 2025 (passed December 2025)
- Only ₹30,000 crore allocated for the transitional period
- New scheme introduced with no public consultation — activists urge uninterrupted employment during transition.

MGNREGA Vs. Viksit Bharat – Gramin Act 2025

Feature	MGNREGA (Old Framework)	Viksit Bharat -Gramin Act (New)
Work Guarantee	100 days	125 days
Wage Funding	100% Central (Unskilled)	Shared (60:40 / 90:10)
Budgetary Nature	Purely Demand-Driven	Normative / Allocation-Based
Accountability	Centrally Managed	Shared Fiscal Responsibility

NITI AAYOG FAGS LOW STUDENT RETENTION AND LEARNING OUTCOMES

Context

A recent report by NITI Aayog titled “School Education System in India - Temporal Analysis and Policy Roadmap for Quality Enhancement” has highlighted major structural and quality-related concerns in India’s school education system.

Findings of the Report

- **High Secondary Dropout Rates**: Nearly 40% of students fail to complete higher secondary education.
- **Institutional Fragmentation**: Only 5.4% of schools offer continuous schooling across all grades, forcing students to change institutions and lowering retention.

- **Uneven School Distribution**: Rural and tribal areas lack adequate secondary facilities, leading to long travel distances and higher dropout risks.
- **Zero-Enrolment Schools**: Approximately 7,993 schools have no students, with the highest concentrations in West Bengal and Telangana.
- **Infrastructure Gaps**: Over 1.19 lakh schools lack functional electricity, and one-third remain without internet connectivity.
- **Practical Learning Deficit**: Nearly half of government secondary schools lack science laboratories, while findings from PARAKH indicate a heavy reliance on rote memorization over conceptual application.
- **Declining Learning Outcomes**: Only 45.8% of Grade 8 students can solve basic division, and less than 30% of Grade 6 students understand fractions.
- **AI Concerns**: Excessive early-age AI use may weaken critical thinking; there is a notable lack of teacher training and ethical safeguards for AI in classrooms.
- **Underfunding**: Public spending on education is at 4.6% of GDP, falling short of the 6% target recommended by the Kothari Commission.

Key recommendations

- **Cylindrical Schooling**: Transition to "composite schools" that provide uninterrupted education from Grade 1 through Grade 12 within a single structure.
- **School Complexes**: Implement the NEP 2020 hub-and-spoke model where a secondary school supports nearby primary schools and Anganwadis within a 5-10 km radius.
- **Digital Public Infrastructure (DPI)**: Create inclusive, interoperable DPI by converging initiatives like PM eVIDYA, BharatNet, and PM Gati Shakti.
- **Administrative Recruitment**: Conduct time-bound drives to fill vacancies for Block Education Officers and Cluster Resource Coordinators.
- **Outcome-Based Learning**: Focus on foundational literacy, numeracy, and the ethical, balanced use of AI tools to move beyond rote learning.
- **Fiscal Expansion**: Increase public investment to upgrade infrastructure, expand digital access, and recruit qualified teachers.

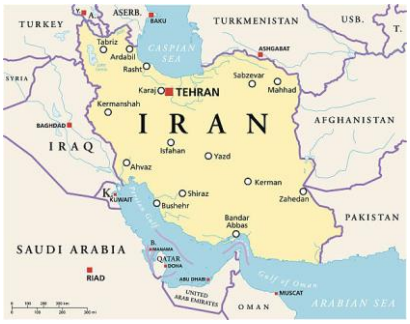
PLACES IN NEWS: B1 (BILQAN) BRIDGE

Context

The **B1 Bridge in Karaj** was struck during the US–Israel conflict with Iran

About the Bridge

- **Location:** Situated in **Karaj (west of Tehran)** over the Karaj River, forming part of the major B1 corridor (key urban-industrial linkage).



- **Connectivity:** Connects **Tehran with north and northwest Iran** (Qazvin, Tabriz, Caspian region) and extends towards trade routes linking Iran with Russia and Central Asia.
- **Regional Importance:** Located along a corridor connecting **Azeri-populated regions of north-west Iran** (Karaj and Tabriz region), making it socially and politically significant.
- **Economic Significance:** Karaj acts as **Iran's largest industrial suburb**, and the bridge supports movement of **industrial goods, logistics and daily traffic (~200,000 vehicles)**.

Mains Exam Topics

DATA STANDARDISATION IN GOVERNANCE

Context

Despite rapid growth in data generation, India's governance architecture continues to face major challenges.

Data Standardisation

- Data standardisation refers to the process of collecting, storing, processing, and presenting information in a uniform format across institutions and departments.
- It ensures that data generated by different agencies follows common:
    - Definitions
    - Formats
    - Classification systems
    - Reporting methodologies

Poor data systems and governance related challenges

- **Lack of interoperability:** Different Ministries and departments often maintain isolated databases with little coordination leading to administrative duplication, weak policy coordination, delayed implementation and inefficient service delivery
    - Eg: Separate databases for healthcare, nutrition, and immunisation may record overlapping information for the same beneficiary.
- **Duplication of Beneficiaries:** Weak verification mechanisms can result in duplicate or fake entries and lead to fiscal leakages, misallocation of resources, inflated welfare expenditure
    - Eg: Fake LPG connections removed under PAHAL
    - Eg: Ineligible beneficiaries removed from PM-KISAN
- **Conflicting Official Estimates**: Different departments may report contradictory statistics for the same issue..
    - Eg: Childhood tuberculosis cases may be separately recorded in Health Management Information Systems (HMIS), Disease surveillance systems and Immunisation databases leading to the same patient being counted multiple times.
- **Weak Evidence-Based Policymaking:** Inconsistent and unreliable data weakens scientific policymaking, poor targeting of beneficiaries and weakens development planning.
- **Excessive Dependence on Parliamentary Questions:** Basic administrative information is often unavailable in standardised public formats which reflects in weak public data infrastructure, poor transparency and lack of real-time governance dashboards

Impact of Data Standardisation

- **Improving Welfare Efficiency**: Standardised databases improve targeting and reduce duplication.
    - **Eg: Direct Benefit Transfer (DBT) systems** linked with Aadhaar have reduced leakages in welfare schemes.
- **Report Reference:** According to government estimates, DBT reforms have contributed to significant savings by eliminating duplicate beneficiaries.
- **Strengthening Fiscal Discipline**: Reliable databases reduce wasteful expenditure and improve auditing processes.
    - Eg: Digitisation and beneficiary verification have improved efficiency in food subsidy and LPG subsidy systems.
- **Better Public Service Delivery:** Integrated digital systems improve responsiveness and coordination.
    - **Eg: The CoWIN platform** demonstrated the importance of interoperable and real-time digital infrastructure during COVID-19 vaccination management.
- **Supporting Economic Growth**: Efficient data systems improve productivity and investment planning.
    - **Eg: Studies by organisations such as the OECD and World Bank** suggest that improved public-sector data sharing enhances economic efficiency and governance outcomes.
- **Enhancing Transparency and Public Accountability:** Open-data systems strengthen democratic oversight.
    - **Eg: Platforms such as data.gov.in** enable researchers, journalists, and citizens to access government dataset.

Global best practices

- **Estonia's X-Road Digital Governance System**: Estonia has developed one of the world's most advanced interoperable digital governance systems with secure data-sharing architecture, interconnected public databases, and real-time digital governance.
- **Singapore's Smart Nation Initiative:** Singapore has integrated data systems across sectors to improve urban governance and public service delivery.
- **United Kingdom's Open Data Framework:** It promotes standardised and publicly accessible government datasets.
- **European Union's General Data Governance Framework:** The European Union promotes harmonised standards for data sharing and digital governance for consistency and comparability across member states.

Way Forward

- **Comprehensive National Data Standardisation Framework**: India should create a legally enforceable national framework that prescribes uniform standards for data collection, classification, storage, and reporting across all Ministries and States to strengthen evidence-based governance.

- **Strengthen Institutional Mechanisms for Data Governance:** The proposed India Data Management Office (IDMO) should function as the central coordinating authority for public-sector data governance to harmonise methodologies, and facilitate coordination between the Union and State governments.
- **Interoperable Digital Infrastructure:** Government departments should build interoperable digital systems that enable secure and seamless exchange of information across sectors such as health, education, agriculture, and welfare.
- **Open Data and Public Accessibility:** India should strengthen platforms such as data.gov.in by ensuring real-time updates, standardised machine-readable formats, and district-level datasets for wider public access.
- **Technical and Statistical Capacity within Government:** Continuous training programmes should be introduced for government officials in areas such as data management, statistical analysis, digital governance, cybersecurity, and data protection.
- **Institutionalise Accountability:** Data quality should become an important parameter in governance assessments and administrative performance reviews.

A WATERSHED MOMENT IN INDIA'S DEFENCE POSTURE

Context

Operation Sindoor signalled a clear shift from **strategic restraint to calibrated coercion** to deter terrorism while consciously operating **below the nuclear threshold**.

Shift in Defence Strategy after Operation Sindoor

- **Proactive Doctrine:** India now undertakes **pre-emptive and immediate punitive strikes to shape adversary behaviour** (earlier: delayed, reactive responses after attacks).
- **Rapid Strike Capability:** India has moved towards **fast, flexible and precision-based "Cold Strike" operations** (earlier: Cold Start doctrine with slower mobilisation and limited execution).
- **State Accountability:** India treats **terror groups and their state sponsors as a single threat, enabling direct targeting of support structures**.
- **Escalation Management:** India demonstrated ability to **operate below nuclear threshold while maintaining escalation dominance** (earlier: nuclear overhang restricted military options).
- **Non-Contact Warfare:** Shift towards **drones, precision missiles, cyber and electronic warfare to strike.** (earlier: conventional troop and artillery-based operations).
- **Multi-Domain Operations:** Operations now integrate **air, land, cyber, space and electronic warfare in a coordinated manner** (earlier: isolated, service-specific responses).

Significance of Operation Sindoor

- **Credible Deterrence by Punishment:** By imposing **direct and visible costs on adversary territory**, India strengthened deterrence and increased the price of proxy warfare.

- **Dilution of Nuclear Blackmail:** Demonstrates that **limited conventional options remain viable**, weakening reliance on nuclear signalling as a shield.
- **Technology-Led Warfare Maturation:** Validates the centrality of **precision-guided munitions, drones, EW and cyber**, enabling **high-impact, low-casualty** operations with better deniability control.
- **Intelligence-to-Strike Compression:** Highlights the need to **compress the sensor-to-shooter loop**—real-time ISR fusion, AI-assisted targeting, and faster command decisions.
- **Strategic Signalling:** Signals that **depth and deniability no longer guarantee safety**, altering adversary planning and **deterring escalation by clarity of intent**.

Diplomatic Signalling of Operation Sindoor

- **Strain in India–US Relations:** US tilt towards Pakistan and mediation attempts showed that **great power partnerships are transactional**, limiting India's diplomatic manoeuvrability during crises.
- **Assertion of Strategic Autonomy:** India resisted third-party mediation, reinforcing its principle of **bilateralism and independent decision-making**, especially in regional conflicts.
- **Shift Towards Multi-Alignment:** The crisis highlighted the need to **diversify partnerships (US, Russia, Europe, Global South)** to avoid overdependence on any one power.
- **Complex Geopolitical Environment:** China–Pakistan coordination and US role indicate a **multi-actor conflict environment**, increasing risk of two-front or hybrid warfare scenarios

Structural Issues in Defence

- **Incomplete Jointness (No Full Theatre Commands)**: Fragmented command structures **slow multi-domain synchronisation**, limiting the full payoff of integrated operations.
- **Capability Gaps in New-Age Domains:** Shortfalls in **counter-drone, layered air defence, EW and ISR** reduce both **defensive resilience and offensive reach**.
- **Intelligence Integration Deficits:** Insufficiently unified architecture leads to **delays and duplication**, weakening rapid precision strike capability.
- **Information Warfare Weakness:** Lack of a unified doctrine and rapid-response mechanism allows **adversaries to shape narratives first**, impacting diplomacy.
- **Force Structure Imbalance: Fighter squadron shortages** and absence of a dedicated **long-range rocket/missile force** constrain sustained deterrence and deep-strike options.

Way Forward

- **Institutionalise Jointness:** Fast-track **Integrated Theatre Commands** and create a **dedicated long-range fires (rocket/missile) command** to enable seamless, rapid operations.
- **Build Advanced Technology Ecosystem:** Invest in drones, cyber, AI, EW and space systems to **prepare for future non-contact, multi-domain conflicts**.
- **Strengthen Intelligence Architecture:** Develop real-time intelligence fusion systems to **reduce decision lag and enable rapid precision strikes**.

- **Develop Information Warfare Doctrine:** Create unified communication strategy to ensure **truth-based, fast and coordinated narrative dominance globally**.
- **Enhance Indigenous Defence Production:** Promote domestic manufacturing to ensure **supply chain security and sustained war capability**.
- **Pursue Strategic Multi-Alignment:** Balance relations across major powers to maintain **strategic autonomy while securing technological and diplomatic support**.