

# CURRENT AFFAIRS

For Integrated Preparation of CSE Prelims + Mains + Interview



Special Feature

Monthly MCQs

NOVEMBER

from

THE HINDU



The Indian EXPRESS

JOURNALISM OF COURAGE

\*MCQs on Prelims Latest Pattern

- Taal Volcano
- Exercise Trishul
- Constitution Day 2025
- Understanding Mental Health
- PLI Scheme for Specialty Steel
- WMO's Early Warnings for All Report

- Employability Crisis
- Delhi Car Blast 2025
- Global Hunger Index 2025
- Classical Languages in India
- Bankim Chandra Chatterjee
- India-Canada on Trade and Investment

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### GOVERNMENT IMPLEMENTS FOUR NEW LABOUR CODES: LANDMARK LABOUR LAW REFORM

**Why in News:** On 21 November 2025, the Government of India formally implemented four new Labour Codes—the Code on Wages, 2019; Industrial Relations Code, 2020; Code on Social Security, 2020; and Occupational Safety, Health and Working Conditions Code, 2020—consolidating and replacing 29 existing central labour laws with a modernised regulatory framework.

#### Key features of the reform:

- Minimum wage guarantee and timely wage payment provisions for workers.
- Social security expansion covering over 40 crore workers with formal recognition for gig & platform workers.
- Gratuity for fixed-term employees after one year of employment.
- Unified code structure to simplify compliance for employers and align with global labour standards.

#### Why is it important?

This overhaul represents one of the most comprehensive labour governance reforms in independent India, aiming to modernise archaic legislation, enhance social security, and balance worker protection with ease of doing business.

#### Criticism

Despite government claims of modernization, trade unions and certain political figures have criticised the codes for eroding worker rights, citing easier lay-off norms and weakened collective bargaining powers.

#### Significance

- Demonstrates the state's role in balancing social welfare with economic liberalisation.
- Highlights federal dynamics since implementation and rule-making will depend on Centre-State coordination under the Constitution's Concurrent List.

#### Way Forward

- Ensure effective Centre-State coordination in framing rules, as labour is on the Concurrent List.
- Strengthen social dialogue with trade unions to address concerns regarding job security.

- Develop robust digital platforms for grievance redressal and social security delivery.
- Conduct regular impact assessments to ensure worker welfare is not diluted.

#### Conclusion

The implementation of the four Labour Codes marks a historic shift in India's labour governance framework by simplifying laws, expanding social security, and aligning labour regulations with economic realities. However, the true success of the reform will depend on its fair implementation and acceptance by workers and states.

#### EXPECTED QUESTIONS FOR UPSC CSE

##### Prelims MCQ

- Q. With reference to the new Labour Codes implemented in 2025, consider the following statements:
1. They consolidate 29 central labour laws into four codes.
  2. Gig and platform workers are excluded from social security provisions.
  3. Labour is a subject under the Concurrent List of the Constitution.

Which of the statements given above is/are correct?

- (a) 1 and 3 only                      (b) 1 only  
(c) 2 and 3 only                      (d) 1, 2 and 3

Answer: (a)

##### Descriptive Question

- Q. "The new Labour Codes aim to balance ease of doing business with workers' rights." Critically examine this statement in the context of India's labour governance reforms. (10 marks/ 150 words)

### CONSTITUTION DAY 2025

**Why in News:** India observed Constitution Day on 26 November 2025, commemorating the adoption of the Indian Constitution by the Constituent Assembly in 1949. The day featured national programmes, speeches by dignitaries, and release of the Constitution in multiple Indian languages.

#### Highlights of the observance

- National event presided over by the President of India with participation of key constitutional functionaries.

- Release of the Constitution in 9 Indian languages as part of broader awareness initiatives.
- Calls from leadership emphasising equality, dignity, and freedom as core constitutional values.

**Background**

Constitution Day is celebrated on 26 November each year to mark the adoption of the Constitution in 1949; it later came into effect on 26 January 1950 (Republic Day).

**Why is it important?**

- Reinforces the spirit of constitutional democracy in India’s governance structure.
- Encourages citizen awareness about fundamental rights and duties and the broader framework of governance.

**Key constitutional linkage**

- Emphasises the living nature of the Constitution within Indian polity and governance, continually shaping rights, governance, and democratic ethos.

**Way Forward**

- Integrate constitutional education more deeply into school and higher-education curricula.
- Promote vernacular dissemination of constitutional values to enhance public awareness.
- Encourage institutions to uphold constitutional morality, especially in governance and policymaking.
- Use technology and digital platforms to make the Constitution more accessible.

**Conclusion**

Constitution Day 2025 reaffirmed the foundational values of democracy, justice, liberty, equality, and fraternity, reminding citizens and institutions alike that constitutional morality is essential for sustaining India’s democratic governance.

**EXPECTED QUESTIONS FOR UPSC CSE**

**Prelims MCQ**

Q. Constitution Day in India is celebrated on 26 November because:

(a) The Constitution came into force on that day

(b) The Constituent Assembly first met on that day

(c) The Constitution was adopted on that day

(d) The first general elections were announced on that day

Answer: (c)

**Descriptive Question**

Q. Discuss the relevance of Constitution Day in strengthening constitutional values and democratic governance in contemporary India. (10 marks/ 150 words)

**JAMMU & KASHMIR STATEHOOD DEMAND**

**Why in News:** Three Rajya Sabha MPs from the Jammu & Kashmir National Conference (NC) submitted a memorandum emphasized that “a Kashmiri is a human being and an Indian citizen, deserving of dignity, justice, and compassion.”

**Key Details:**

The Memorandum submitted to Union Home Minister urging the Government of India to:

- Restore full statehood to Jammu and Kashmir.
- Notify the Transaction of Business rules to clarify powers between elected government and Raj Bhawan.
- Review the policy of housing J&K prisoners in distant prisons, facilitating their shift back to the Union Territory.

**Background Context**

**1. Constitutional Status of J&K**

- Post-2019, Article 370 was abrogated and the State of Jammu & Kashmir was reorganised into two Union Territories: J&K and Ladakh.
- Many local parties have since pressed for restoration of full statehood.

**2. Transaction of Business Rules**

- These rules define how administrative powers are distributed between the elected government and the Lieutenant Governor’s office (Raj Bhawan).
- Delay in notification has fuelled turf clashes impacting governance.

**3. Prisoner Issue**

- Families argue that logistical and financial hurdles prevent visits to prisons located far from J&K, calling it a denial of dignity.

**4. Political Dynamics**

- The NC raised these issues after successful assembly elections and formation of a local government.
- The PDP’s critique reflects broader political competition over Kashmir policy narratives.

**Importance**

- **Governance & Democratic Rights:** Restoration of statehood is tied to democratic representation and federalism. Clarity on business rules addresses democratic functioning between local and central institutions.
- **Human Rights & Rule of Law:** Repatriation of prisoners touches on human dignity, access to justice, and constitutional guarantees for citizens.
- **Political Stability:** The NC’s demands reflect pressures on mainstream parties to balance security, constitutional guarantees, and local aspirations.

### Significance

- **National Integration:** Addressing these demands is seen as pivotal to fulfilling constitutional promises and strengthening integration in the region.
- **Centre-State Relations:** The memorandum highlights structural governance issues within Union Territories with elected legislatures — a key point for constitutional law and federalism.
- **Judicial and Political Expectations:** The reference to Supreme Court assurances underscores the growing role of judiciary in political administration in J&K.

### Challenges

- **Political Sensitivity:** Restoring statehood may have security, administrative and political implications, especially given past insurgency and geopolitical stakes.
- **Centre vs. Local Authority:** Business rules debate reflects challenges around power sharing and the role of Raj Bhawan vis-à-vis elected representatives.
- **Security Concerns:** Repatriating prisoners must be balanced against national security considerations, especially for those convicted of serious offences.
- **Public Perceptions:** Political opposition may frame such memos as strategic retreats or ideological compromises, complicating consensus.

### Conclusion

The memorandum by National Conference MPs marks a significant development in Jammu & Kashmir’s political discourse, centring on constitutional dignity, administrative clarity, and human rights. While rooted in specific demands — statehood restoration, business rules notification, and prisoner repatriation — it also underscores broader issues of governance, federalism, and citizen rights post the 2019 reorganisation. How the Centre responds will influence not only governance in J&K but also the wider narrative of democratic decentralisation and integration in India.

#### EXPECTED QUESTION FOR UPSC CSE

##### Prelims MCQ

- Q. With reference to the recent memorandum consider the following statements:
1. Restoration of full statehood to Jammu and Kashmir is constitutionally possible only through a Presidential Order under Article 370.
  2. Notification of “Transaction of Business Rules” primarily determines the distribution of executive authority between the Lieutenant Governor and the Council of Ministers in a Union Territory with legislature.
  3. The Supreme Court has clarified that prisoners from J&K lodged outside the UT can file petitions under Article 32.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 2 only  
 (c) 2 and 3 only                      (d) 1, 2 and 3

Answer: (b)

## CONSTITUTION (131ST AMENDMENT) BILL, 2025

**Why in News:** The Government of India announced its intention to introduce the Constitution (131st Amendment) Bill, 2025 in the Winter Session of Parliament.

### Key Details

- The Bill proposes to include the Union Territory of Chandigarh under Article 240 of the Indian Constitution, enabling the President of India to frame regulations and legislate directly for Chandigarh, similar to how laws are made for other Union Territories without legislatures.

### Other Details

- **Proposal:** The Constitution (131st Amendment) Bill, 2025 aims to bring Chandigarh under the ambit of Article 240 of the Constitution.
- **Article 240:** Empowers the President of India to make regulations for Union Territories that do not have their own legislature, which would carry the force of law.
- **Change in Administration:** The move could allow for the appointment of an independent Administrator or Lieutenant Governor for Chandigarh, altering the current arrangement where the Governor of Punjab acts as its Administrator.
- **Political Opposition:** Parties in Punjab have vociferously opposed the proposal, calling it against Punjab’s interests.
- **Government Clarification:** The Ministry of Home Affairs (MHA) clarified that no final decision has been taken and there is no intention to bring the Bill in the upcoming session at present.

### Chandigarh’s Current Administrative Framework

- Chandigarh is a Union Territory and serves as the joint capital of Punjab and Haryana since the Punjab Reorganisation Act, 1966.
- Currently, the Governor of Punjab holds additional charge as the Administrator of Chandigarh, though the city’s governance is under the Union Government.

### Article 240

- Article 240 of the Indian Constitution allows the President to make regulations for Union Territories without legislatures, giving the executive quasi-legislative powers in such regions.

- Examples include Andaman & Nicobar Islands, Lakshadweep, Dadra & Nagar Haveli and Daman & Diu, and Puducherry (when its Assembly is not in place).

**Significance**

- **Governance of UTs:** If passed, the amendment would align Chandigarh’s legislative framework with Article 240 U.T. model, where the President legislates directly without a local legislature.
- **Federal Implications:** Any change in governance structure may be viewed as shifting power balance towards the Centre, especially given Chandigarh’s unique dualstate role.
- **Precedent:** This could set a precedent for other Union Territories or administrative arrangements, influencing future debates on Union Territory governance.

**Way Ahead**

- **Consultative Process:** Engage with Punjab and Haryana governments, stakeholders, civil society before formalising constitutional changes.
- **Clear Communication:** Avoid ambiguity and misinformation; articulate objectives and safeguards thoroughly.
- **Legal and Policy Impact Study:** Conduct impact assessments on constitutional, federal and administrative dimensions before re-introducing the Bill.
- **Protect Federal Principles:** Ensure that any amendment respects the spirit of federalism and autonomy while achieving administrative uniformity.

**Conclusion**

The proposed Constitution (131st Amendment) Bill, 2025, to bring Chandigarh under Article 240, highlights tensions between federal governance and regional identity. While it aims to streamline administration, political backlash, especially from Punjab, underscores the sensitivity of Chandigarh’s status. Careful consultation and constitutional clarity are essential before any amendment is introduced.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. Which of the following statements about Chandigarh and Article 240 is correct?

1. Article 240 allows the President to make regulations for Union Territories without legislatures.
2. Chandigarh is currently administered by the Governor of Punjab.
3. Bringing Chandigarh under Article 240 allows the Centre to appoint an independent Administrator.

**Options:**

(a) 1 and 2 only                      (b) 1 and 3 only

(c) 2 and 3 only                      (d) 1, 2 and 3

(b) : Answer

**ALLAHABAD HC ON SC/ST BENEFIT CONVERSION ISSUE:**

**Why in News:** The Allahabad High court took note of broader issues of false claims of Scheduled Caste/Scheduled Tribe (SC/ST)/OBC benefits by converts to other religions, terming such actions a “fraud on the Constitution”.

**Key Highlights**

- HC underscored that conversion merely to avail reservation benefits is unconstitutional and amounts to a fraud on the Constitution.
- Directions were issued to the Cabinet Secretary (GoI), Chief Secretary (UP), and District Magistrates (UP) to act within timelines to prevent fraudulent claims.
- Court referenced the Constitution (Scheduled Caste) Order, 1950 — only Hindus, Sikhs & Buddhists can be deemed SC.
- It directed government authorities to ensure compliance with constitutional provisions on reservation and religious identity.

**Details of the Case**

- The case originated in Maharajganj district (Eastern UP) where the accused was charged for allegedly using abusive language about Hindu deities at a gathering.
- He was also alleged to be a Christian convert who still claimed reservation benefits and falsely described himself as Hindu in court submissions.

**Legal Framework**

- Indian Penal Code (IPC) – Sections on promoting enmity and outraging religious feelings.
- Constitution (Scheduled Caste) Order, 1950 – SC status limited to Hindus, Sikhs & Buddhists.
- Related orders by Supreme Court affirming that retaining caste status after conversion for reservation is unconstitutional.

**Criticisms**

- **Minority rights tensions:** Associating conversion with reservation misuse can be controversial, potentially stigmatizing religious minorities if administrative enforcement lacks safeguards.

**Importance**

- **Legal & Constitutional Importance:** Clarifies the application of constitutional and statutory provisions

on who can legitimately avail reservation benefits post-conversion. Sets procedural expectations for executive compliance.

- **Socio-Political Importance:** Addresses public concerns over misuse of affirmative action schemes. Impacts discourse around freedom of religion and equality before law.

### Challenges

- **Administrative Coordination:** Ensuring district magistrates execute verification without bias or delay.
- **Sensitive Implementation:** Preventing misuse of legal provisions against religious speech or conversions that are genuine. (Reflecting mixed jurisprudence on related free speech cases)
- **Public Perception Management:** Avoiding communal polarization when legal actions involve religious sentiments.

### Impacts / Consequences

- **Legal Precedent:** Reaffirms that charges in sensitive cases may stand if investigation and evidence are robust.
- **Administrative Reform:** Expected verification drives to ensure correct reservation status enforcement.
- **Public Discourse:** Sparks discussions on balancing freedom of expression with public order and respect for religious sentiments.

### Suggestions / Way Ahead

- **Clearer Guidelines on Religious Speech:** Law Commission or Parliament could clarify limits of speech without compromising fundamental rights.
- **Balanced Reservation Policy Implementation:** Periodic review of reservation norms vis-à-vis religious identity, supported by transparent criteria.
- **Capacity Building for Administrators:** Training for magistrates and police on sensitive handling of religious and conversion cases.
- **Public Awareness Campaigns:** Educate citizens about legal boundaries of speech, rights to conversion, and reservation eligibility.

### Conclusion

The High Court's order underscores constitutional safeguards around reservation benefits and the sanctity of religion-linked legal provisions, while simultaneously reaffirming the rule of law in cases involving religious sentiments. The ruling balances strict scrutiny of fraudulent claims with enforcement of the law, but also raises broader questions on free expression and sensitive administration — reaffirming that legal interventions in matters of faith require careful jurisprudential balance.

### EXPECTED QUESTION FOR UPSC CSE

#### Descriptive Question

- Q. Critically examine the position of the Indian judiciary on the scope and limits of freedom of speech and expression in cases involving religious sentiments, in the context of the recent Allahabad High Court order refusing to quash a chargesheet against a person accused of insulting Hindu deities. (15 marks/ 250 words)

## NATIONAL BLOCKCHAIN FRAMEWORK

**Why in News:** The Ministry of Electronics and Information Technology (MeitY) has launched the National Blockchain Framework (NBF) — a unified, secure and scalable blockchain architecture to accelerate blockchain adoption across public services and governance.

### Why Blockchain Matters for India

- Blockchain is a distributed, encrypted ledger technology that maintains permanently verifiable records without central intermediaries — ensuring tamper-proof, transparent and reliable data.
- Unlike traditional centralized systems, blockchain's decentralized design significantly reduces fraud, prevents unauthorized tampering and promotes trust in digital transactions and records.
- With rising digitalization under Digital India and expanding online public services, India aims to modernize governance mechanisms and strengthen citizen-centric delivery through secure digital infrastructure.

### Components of the National Blockchain Framework (NBF)

The NBF's architecture is made up of several key components, each aimed at enabling diverse applications:

- **Vishvasya Blockchain Stack:** An indigenous modular blockchain stack providing Blockchain-as-a-Service (BaaS) to government and enterprise users without requiring bespoke infrastructure. It is hosted across NIC data centers in Bhubaneswar, Pune and Hyderabad to ensure distributed resilience and scalability.
- **NBFLite Sandbox:** A sandbox environment for startups, academia and innovators to prototype blockchain use cases, supported with pre-built templates for digital certificates and supply chain solutions.
- **Praamaanik:** A blockchain-powered solution to verify the authenticity of mobile applications, combating malicious apps and cyber fraud.
- **National Blockchain Portal:** A central platform promoting standardization, cross-sector collaboration, and strategic adoption of blockchain technology across government and industry.

### Blockchain Use Cases Already Transforming Public Services

India's blockchain strategy is already producing results across governance and service delivery with multiple practical applications:

- 1. Certificate & Document Chains:** Central and state agencies are issuing and storing educational certificates, caste, income, driving licences, birth/death certificates, and more on the blockchain. Over 34 crore documents — including 48,000 document records — have been securely verified on the blockchain as of October 21, 2025.
- 2. Logistics Chain:** Blockchain is used to track movement in real-time across supply chains. For example, the Aushada Medicine Supply System in Karnataka records drug movements from manufacturers to hospitals, ensuring traceability, quality checks and public safety against spurious drugs.
- 3. Judiciary & ICJS:** The Judiciary Chain provides secure, timestamped storage for court data and electronic delivery of notices, summons and orders. Integrated with the Inter-Operable Criminal Justice System (ICJS), it has verified over 39,000 documents, strengthening trust in judicial data exchange.
- 4. Property Chain:** Blockchain captures immutable records of property transactions, helping users verify title histories, rights and obligations — crucial for reducing disputes and speeding up land deals. Over 34 crore property documents have been verified on the blockchain.

### Ecosystem Support & Strategic Partnerships

To propel blockchain adoption further:

- **Centre of Excellence** in Blockchain Technology (CoE) at NIC offers consultancy, training and pilot project support using open-source industry platforms.
- **Regulatory integration:** Telecom Regulatory Authority of India (TRAI) uses blockchain for end-to-end tracking of SMS messages to reduce spam and enforce compliance.
- **Financial pilots:** The Reserve Bank of India (RBI) is testing Digital Rupee (e₹) pilots, demonstrating blockchain-enabled instant payments with traceability.
- **Capital markets:** NSDL has launched blockchain-based debenture covenant monitoring to enhance transparency in investor records and asset tracking.

### Human Capital & Skill Development

The government has also launched robust capacity-building programs to nurture blockchain expertise:

- Skill training for thousands of government officials.
- Post Graduate Diploma in FinTech & Blockchain Development (PG-DFBD) — a 900-hour course covering blockchain, FinTech, AI/ML and cybersecurity.
- BLEND online course for students and early professionals.
- FutureSkills PRIME initiative to upskill IT workforce on cutting-edge technologies including blockchain.

### Way Forward

India's National Blockchain Framework reflects a strategic

long-term vision toward trusted digital governance, going beyond isolated pilots toward an integrated blockchain ecosystem. With practical applications across certification, justice, logistics, property and financial services — the technology is powering transparency, accountability and efficiency in public delivery.

By fostering innovation, regulatory synergy, and human capital development, India is positioning itself as a global leader in responsible and scalable blockchain adoption — paving the way for a more secure, transparent and digitally empowered governance model.

### EXPECTED QUESTIONS FOR UPSC CSE

#### Prelims MCQ

- Q. With reference to the National Blockchain Framework (NBF) of India, consider the following statements:
1. The National Blockchain Framework has been launched by the Ministry of Electronics and Information Technology (MeitY).
  2. Vishvasya Blockchain Stack provides Blockchain-as-a-Service (BaaS) through NIC data centres.
  3. Praamaanik is a blockchain-based platform for verifying the authenticity of mobile applications.
  4. The National Blockchain Framework is limited only to cryptocurrency-related applications.

Which of the statements given above are correct?

- (a) 1, 2 and 3 only                      (b) 1 and 4 only  
(c) 2 and 3 only                        (d) 1, 2, 3 and 4

(a) Answer

#### Descriptive Question

- Q. The National Blockchain Framework (NBF) is a significant step towards strengthening digital governance in India. Discuss its objectives, key features and potential impact on transparency and service delivery. Also examine the challenges associated with its implementation and suggest a way forward. (15 Marks/ 250 Words)

## CONTROLLER GENERAL OF DEFENCE ACCOUNTS

**Why in News:** Shri Vishvajit Sahay Assumes Charge as Controller General of Defence Accounts (CGDA) on 1 November 2025.

#### About Vishvajit Sahay

- He is an experienced Indian Defence Accounts Service (IDAS) officer of the 1990 batch, formally assumed charge as Controller General of Defence Accounts (CGDA)—the senior most position in the Defence Accounts Department under the Ministry of Defence.

- He brings over three decades of experience in defence finance and public administration.
- He has served in key roles such as Additional Secretary & Financial Adviser in the Department of Science and Technology, Joint Secretary in the Department of Heavy Industry, and Finance Manager, Acquisition Wing in the Ministry of Defence.
- Within the Defence Accounts Department, his earlier assignments include Principal Controller of Defence Accounts (Pensions), Prayagraj, Joint CGDA and Special CGDA.
- International engagements include training at Cambridge University, UK and the George C. Marshall European Centre for Security Studies, Germany.

### About CGDA

The Controller General of Defence Accounts (CGDA) is the head of the Defence Accounts Department (DAD), functioning under the Ministry of Defence (MoD). The CGDA plays a critical role in ensuring financial propriety, accountability, and transparency in India's defence expenditure.

### Organisational Position

- CGDA is a senior civil servant from the Indian Defence Accounts Service (IDAS).
- The office functions under the executive authority of the Ministry of Defence, not as a constitutional or statutory body.
- It supports the civilian control over the military through financial oversight.

### Functions & Responsibilities

#### 1. Financial Accounting

- Maintenance of accounts of: Army, Navy, Air Force
- Ordnance factories and defence establishments
- Compilation of defence expenditure for parliamentary approval.

#### 2. Internal Audit

- Conducts internal audit of defence expenditure.
- Ensures compliance with financial rules and procedures.
- Acts as a preventive mechanism against financial irregularities.

#### 3. Defence Pensions

- Administration and disbursement of: Service pensions, Family pensions, Disability pensions
- Implementation of pension-related schemes such as One Rank One Pension (OROP).

#### 4. Financial Advice

- Provides financial advice to: Defence Services, Inter-Service organisations, Acquisition and procurement wings
- Assists in cost evaluation and financial vetting of defence projects.

### Importance of CGDA

- **High defence expenditure:** India has one of the world's largest defence budgets, requiring robust financial governance.
- **Rising pension burden:** Defence pensions form a substantial share of defence spending.
- **Procurement complexity:** Modern defence acquisitions involve long-term contracts and foreign vendors.
- **Parliamentary accountability:** CGDA ensures accurate financial reporting to Parliament.

### Challenges

#### 1. Increasing Pension Liabilities

- Growing number of retirees.
- Fiscal sustainability concerns.

#### 2. Complex Procurement Ecosystem

- Multi-vendor contracts.
- Technology-intensive defence platforms.

#### 3. Digital Transformation

- Need for end-to-end digital accounting and auditing systems.
- Cybersecurity concerns.

#### 4. Coordination Issues

- Balancing operational requirements of armed forces with financial discipline.

### Reforms & Initiatives

- Introduction of Integrated Financial Management Systems (IFMS).
- Streamlining pension processing through digital platforms.
- Capacity building and training of defence accounts personnel.

### Other Similar Initiatives

To provide broader context, the Government of India has been strengthening institutional frameworks through leadership and digital initiatives. Examples include:

- PIB Fact Check Unit expansions, tackling misinformation related to government policy and defence affairs.
- Public financial management reforms across ministries, as seen in National e-Governance Division partnerships.
- Defence dialogues like Chanakya Defence Dialogue 2025 for policy engagement and strategic discourse.

### Way Ahead

With Shri Vishvajit Sahay at the helm, the Defence Accounts Department is expected to:

- Advance digital financial management
- Strengthen audit and compliance frameworks
- Enhance transparency in defence expenditures

- Align defence financial systems with national strategic priorities

**Conclusion**

The assumption of charge by Shri Vishvajit Sahay as Controller General of Defence Accounts marks a significant moment in India’s defence financial administration. Backed by extensive experience and institutional knowledge, his leadership is critical to steering the department through evolving global dynamics and internal modernisation imperatives.

This appointment is not just an administrative milestone but also a strategic signal of India’s commitment to robust, transparent and efficient defence finance management in an era of heightened geopolitical and technological challenges.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. With reference to the Controller General of Defence Accounts (CGDA), consider the following statements:

- CGDA functions as the head of the Defence Accounts Department.
- The Defence Accounts Department works under the administrative control of the Ministry of Defence.
- CGDA is responsible for policy formulation related to national defence strategy.

Which of the statements given above is/are correct?

(a) 1 and 2 only            (b) 2 and 3 only  
(c) 1 only                    (d) 1, 2 and 3

(a) Answer:

**RIGHT TO VOTE VS. FREEDOM OF VOTING**

**Why in News:** The Supreme Court of India is set to examine a crucial constitutional question — whether the “right to vote” differs from the “freedom of voting”.

**Right to Vote Vs. Freedom of voting**

Feature	Right to Vote	Freedom of Voting
Legal Nature	Statutory Right	Fundamental Right (under Art. 19(1)(a))
Primary Source	Representation of the People Act, 1951	Article 19(1)(a) (Freedom of Expression)
Condition	Exists for every eligible enrolled citizen	Exists only when an actual poll is conducted
Scope	Eligibility to be registered and cast a ballot	Ability to express preference or dissent (including NOTA)

**Context/ Background**

- In a petition challenging provisions of the Representation of the People Act, 1951 that allow candidates to be declared elected in uncontested elections without holding a poll.
- Petitioners argue this practice curtails voters’ ability to express dissatisfaction through the None of the Above (NOTA) option.

**Key Highlights & Details**

- The government told the Supreme Court that the right to vote is a statutory right conferred by the Representation of the People Act, 1951, while the freedom of voting—how a voter chooses to cast their ballot—is part of the fundamental right to freedom of speech and expression (Article 19(1)(a)).
- The legal challenge targets Section 53(2) of the 1951 Act and associated election rules which direct that if the number of candidates equals seats available, the Returning Officer must declare them elected without a poll.
- Petitioners including Vidhi Centre for Legal Policy and the Association for Democratic Reforms argue that this denies citizens the chance to express dissent through NOTA.
- The Election Commission of India (ECI) supports the Centre’s position that NOTA does not qualify as a candidate under the current statute, and treating it as one would require legislative amendment.
- The Supreme Court hearing was listed before a Bench but postponed amid ongoing electoral activities in Bihar.

**Why it matters**

- The case raises deep questions about the essence of democratic participation. If the act of voting — even in its expressive form — is a part of free speech, then policies that avoid elections altogether may risk diluting democratic expression.
- The issue touches on constitutional interpretation, statutory electoral provisions, and voter rights — making it relevant to governance, political rights, and judicial review.

## Key Distinctions

- **Statutory vs. Fundamental Status:** The “Right to Vote” is a statutory right created by law (RPA 1951) and can be limited or regulated by Parliament. Conversely, the “Freedom of Voting” is an extension of the Fundamental Right to Freedom of Speech and Expression, protecting the act of choice from coercion.
- **The “Uncontested Election” Conflict:** In 2025–2026, this distinction became pivotal during challenges to Section 53(2) of the RPA 1951. The government argued that if there is only one candidate (uncontested), no poll occurs; therefore, the “Freedom of Voting” (and the right to use NOTA) is never triggered because there is no expressive act to perform.
- **Role of NOTA:** NOTA is legally classified as an “expression” rather than a “candidate”. Because it is an expression, it falls under the Freedom of Voting. Critics argue that skipping polls in uncontested seats denies voters this fundamental expressive right.

## Judicial Precedents

- **PUCL vs. Union of India (2003):** Established that the act of casting a vote is a form of expression under Article 19(1)(a).
- **Anoop Baranwal (2023):** Reaffirmed the statutory nature of the Right to Vote while acknowledging its deep constitutional underpinnings.

### Types of Rights

#### 1. Natural Rights

- Rights inherent to all human beings by virtue of being human.
- Not granted by the State; exist independently of laws.
- Examples: Right to life, Right to liberty, Right to dignity

#### 2. Constitutional Rights

- Rights guaranteed and protected by the Constitution of India.
- Enforceable by courts.

#### (a) Fundamental Rights (Part III)

- ✓ Guaranteed to individuals/citizens.
- ✓ Enforceable under Article 32 (Supreme Court) and Article 226 (High Courts).

#### Six Fundamental Rights:

- ✓ Right to Equality (Articles 14–18)
- ✓ Right to Freedoms (Article 19)
- ✓ Right against Exploitation (Articles 23–24)
- ✓ Right to Freedom of Religion (Articles 25–28)
- ✓ Cultural and Educational Rights (Articles 29–30)
- ✓ Right to Constitutional Remedies (Article 32)

#### (b) Other Constitutional Rights

- ✓ Not included in Part III but mentioned elsewhere.

- ✓ Example: Right to property (Article 300A)

#### 3. Legal / Statutory Rights

- Created by laws passed by Parliament or State Legislatures.
- Can be modified or withdrawn by the legislature.
- Examples: Right to Vote, Right to Information (RTI Act), Rights under Consumer Protection Act

#### 4. Civil Rights

- Rights protecting individual freedom from arbitrary State interference.
- Focus on liberty and equality.
- Examples: Freedom of speech, Freedom from discrimination, Right to fair trial

#### 5. Political Rights

- Rights enabling participation in the political process.
- Examples: Right to vote, Right to contest elections, Right to form political parties

#### 6. Human Rights

- Universal rights recognized internationally.
- India recognizes them through: Constitution, Protection of Human Rights Act, 1993
- Examples: Right to life, Right against torture, Right to equality before law

#### 7. Moral Rights

- Based on ethical principles rather than law.
- Not legally enforceable.
- Examples: Right to be treated fairly, Right to dignity in social relations

#### 8. Economic Rights

- Ensure material well-being and livelihood.
- Examples: Right to work, Right to fair wages, Right to livelihood (derived from Article 21)

#### 9. Social Rights

- Aim at social justice and welfare.
- Examples: Right to education (Article 21A), Right to health (derived from Article 21), Right to social security

#### 10. Collective / Group Rights

- Rights of groups rather than individuals.
- Examples: Minority rights, Tribal rights, Cultural rights under Articles 29–30

#### 11. Negative and Positive Rights

##### Negative Rights

- Require State non-interference.
- Example: Freedom of speech

**Positive Rights**

- Require State action.
- Example: Right to education

**12. Enforceable vs Non-Enforceable Rights**

- Enforceable: Fundamental Rights
- Non-Enforceable: Directive Principles (Part IV)

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. With reference to rights in India, consider the following statements:

1. All constitutional rights are fundamental rights.
2. Legal rights can be amended or repealed by the legislature.
3. Fundamental rights are enforceable only against the State.

Which of the statements given above is/are correct?

- (a) 2 only                                      (b) 1 and 3 only  
 (c) 2 and 3 only                              (d) 1, 2 and 3

Answer: (a)

**AMENDMENTS TO IT RULES, 2021 TO REGULATE SYNTHETIC INFORMATION (DEEPAKES & AI-GENERATED CONTENT)**

**Why in News:** The Ministry of Electronics and Information Technology (MeitY) has released a draft Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2025, aimed at addressing challenges posed by synthetically generated information — including deepfakes and AI-generated media — under the IT Rules, 2021.

**Background**

- The IT Rules, 2021 regulate intermediaries — platforms that host or transmit third-party content, such as social media, messaging services and digital platforms.
- Rapid advancements in generative AI have made it easier to produce highly convincing fake content (images, videos, audio) that can be misused for misinformation, fraud, reputation damage, and political manipulation.
- MeitY has previously issued advisories and amended the IT Rules in 2022 and 2023; the latest amendments provide a clearer legal basis specific to synthetic content.

**Key Features of the Proposed Amendments**

1. Definition of “Synthetically Generated Information”
  - The amendment introduces a formal definition for content created or altered using computers/AI that appears authentic.
  - It ensures that such information falls under due diligence obligations applicable to intermediaries.
2. Mandatory Labelling & Metadata Requirements
  - Intermediaries and platforms enabling creation/modification of synthetic media must ensure clear labelling or embedded metadata on such content.
  - Visual content labels may need to cover a portion of the display, while audio labels must appear early in playback, aiding user awareness.
3. Enhanced Due Diligence for Platforms
  - Significant Social Media Intermediaries (SSMIs) are required to:
    - Obtain user declarations on synthetic content uploads.
    - Deploy reasonable technical measures to verify content declarations and ensure compliance.
4. Protection for Good-Faith Content Removal
  - The amendment includes a proviso protecting intermediaries from losing safe harbour protection while removing harmful synthetic content under user grievance mechanisms.

**Significance**

- **User Protection & Transparency:** Mandatory labelling and metadata tagging help users distinguish between human-created and AI-generated content, enhancing digital literacy and reducing deception.
- **Platform Accountability:** Enhanced due diligence will make platforms more accountable in detecting and managing synthetic content, aligning online governance with digital safety goals.
- **Legal Certainty:** Providing statutory backing for synthetic content regulation strengthens India’s cyber- regulatory architecture, responding to policy concerns raised in Parliament and real-world misinformation incidents.

**Issues & Challenges**

- **Balancing Innovation & Freedom of Expression:** Regulatory requirements like mandatory declarations and labelling may impose compliance burdens on platforms and raise freedom of speech concerns if not calibrated properly.
- **Technical Feasibility:** Verification of user declarations using current technology may be imperfect due to limitations in AI detection tools, potentially leading to overflagging or false positives.
- **Scope of Definition:** A broad definition of synthetic information could catch benign creative or AI-assisted content, necessitating clearer operational guidelines.

### Conclusion

The IT (Intermediary Guidelines & Digital Media Ethics Code) Amendment Rules, 2025 represent India's first statutory attempt to directly address synthetic and AI-generated media within the digital governance framework. While they enhance transparency and accountability, careful calibration is needed to balance innovation, digital rights and effective enforcement.

### EXPECTED QUESTION FOR UPSC CSE

#### Descriptive Question

Q. "The draft IT (Intermediary Guidelines & Digital Media Ethics Code) Amendment Rules, 2025, aim to regulate synthetic and AI-generated information. Critically examine the potential benefits and challenges of these amendments for digital governance in India." (10 Marks/ 150 words)

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## INTERNATIONAL RELATIONS

## HIGH SEAS TREATY

**Why in News:** The High Seas Treaty, formally known as the Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ), crossed the threshold of 60 ratifications, paving the way for its entry into force on 17 January 2026.

## Key Highlights

- This marks the first time a legally binding global framework will govern the high seas—areas beyond national jurisdiction—covering nearly two-thirds of the world’s oceans, historically lacking comprehensive legal protection.

## About Treaty, Highseas and its importance

- The high seas begin beyond the 200 nautical mile Exclusive Economic Zones (EEZs) of coastal states and are treated as international waters under the United Nations Convention on the Law of the Sea (UNCLOS).
- These waters are crucial for biodiversity, climate regulation, global fisheries, marine biotechnology, food security, oxygen production, carbon sequestration, and global trade.
- Until now, no dedicated legal mechanism existed for protecting marine life and ecosystems in the high seas, resulting in a “governance vacuum” where activities like overfishing, pollution, seabed mining, and unregulated exploitation persisted with limited oversight.
- The treaty complements UNCLOS by addressing gaps in conservation and enabling marine protected areas (MPAs), environmental impact assessments (EIAs), equitable sharing of marine genetic resources, industry governance, and scientific cooperation.

## Key Features and Highlights

- **Legal Framework for Conservation:** The treaty establishes the first global legal architecture aimed at conserving and sustainably using biodiversity beyond national jurisdiction.
- **Marine Protected Areas (MPAs):** Enables nations to propose and establish MPAs on the high seas—acting like “international parks”—to safeguard vulnerable ecosystems and species.
- **Environmental Impact Assessments (EIAs):** Parties must assess potential environmental harm from

proposed activities, promoting precautionary planning and environmental stewardship.

- **Equitable Benefit-Sharing of Marine Genetic Resources (MGRs):** Provides a framework for the fair and equitable sharing of benefits derived from marine genetic resources, addressing concerns of “biopiracy” and imbalanced access.
- **Technology Transfer & Capacity Building:** Supports scientific collaboration, capacity enhancement for developing states, and sharing of sustainable marine technologies.
- **Implementation Mechanisms:** Institutional bodies like the Conference of Parties (COP), Scientific & Technical Body, Clearinghouse Mechanism, and Compliance Committees will guide enforcement and cooperation.

## Challenges and Issues

Despite its historic nature, significant challenges could impede effective implementation:

1. Conceptual and Legal Ambiguity
  - The treaty navigates a balance between “common heritage of humankind” and “freedom of the high seas.”
  - This duality creates uncertainty in defining rights and obligations, especially for Marine Genetic Resources (MGRs) and benefit distribution.
2. Participation and Ratification Gaps
  - Non-ratification by key maritime powers like the United States, China, and Russia weakens the universal legitimacy and enforcement potential of the treaty.
3. Implementation and Monitoring Constraints
  - Enforcement on the high seas is inherently complex due to vast distances, lack of jurisdiction, limited monitoring infrastructure, and high costs.
4. Institutional Coordination
  - Overlaps with existing regimes (e.g., Regional Fisheries Management Organisations, International Seabed Authority) risk fragmented governance and regulatory conflicts if not harmonised.
5. Equity and Technology Gap
  - Developing nations may struggle to participate equitably due to limited access to marine science, tech, and finance—despite treaty provisions for support.

## 6. Scientific and Data Gaps

- Effective MPA design and EIAs require robust scientific knowledge; data scarcity about deep-sea ecosystems remains a major hurdle.

### Consequences and Impacts

- **Environmental:** The treaty creates a framework to protect biodiversity hotspots in international waters and aids global goals like the “30 30” target—protecting 30% of oceans by 2030.
- **Economic:** Sustainable management of high seas resources could stabilise fish stocks and bolster marine biotechnology sectors, while equitable benefit-sharing helps reduce dependency disparities.
- **Geopolitical:** The treaty strengthens multilateral cooperation on ocean governance, although geopolitical tensions (e.g., territorial disputes in the South China Sea) could complicate MPA negotiations.
- **Policy and Global Commons:** It represents a rare instance of collective action to govern a global commons, setting precedents for other transboundary resources.

### Government Initiatives and Global Momentum

- **India:** India has signed the treaty and is in the process of ratification, reaffirming its commitment to marine conservation and sustainable use as part of its Blue Economy vision.
- **International Coalitions:** The BBNJ High Ambition Coalition, led by the EU, Palau, Seychelles, and others, champions swift ratification and ambitious implementation of treaty commitments.
- **UN System and Capacity Support:** UN Trade and Development (UNCTAD) and other UN bodies emphasise capacity building, EIA obligations, and technology sharing to support developing states.

### Way ahead and reforms needed

- **Expanding Ratification:** Major powers must ratify to strengthen global adherence and enforcement.
- **Strengthening Institutional Frameworks:** Clear mechanisms for compliance, dispute resolution, and harmonisation with existing ocean governance regimes are essential.
- **Science and Technology Investment:** Expanded research, data networks, and monitoring systems will enhance decision-making.
- **Financial and Technical Aid:** Dedicated funding channels will ensure equitable participation of Global South nations.
- **Cooperation with Regional Bodies:** Synergies among fisheries, shipping, and seabed regulatory bodies can prevent overlaps and enforcement gaps.

### Conclusion

The High Seas Treaty marks a historic step in safeguarding global ocean commons by addressing governance gaps beyond

national jurisdiction. Its success will depend on universal ratification, effective enforcement, scientific cooperation, and equitable capacity building to ensure sustainable use and long-term conservation of marine biodiversity.

### EXPECTED QUESTION FOR UPSC CSE

#### Descriptive Question

- Q. The recently adopted High Seas Treaty seeks to address long-standing governance gaps in areas beyond national jurisdiction. Discuss its significance for global ocean governance and biodiversity conservation. What are the major challenges in its effective implementation, especially for developing countries? (15 marks, 250 words)

## INDIA–SRI LANKA BILATERAL TIES

**Why in News:** Prime Minister of Sri Lanka, undertook her first official visit to India from 16–18 October 2025 since assuming office in September 2024.

### Key Details

- The visit aimed at strengthening bilateral cooperation across strategic, economic, educational and cultural domains, deepening India–Sri Lanka ties under India’s Neighbourhood First and MAHASAGAR visions.

### Background and Importance

- Sri Lanka occupies a pivotal position in the Indian Ocean Region (IOR)—geographically close to India’s Tamil Nadu coast across the Palk Strait, and historically tied through culture, religion and trade.
- Robust India–Sri Lanka relations have been maintained through frequent high-level exchanges, economic cooperation, security partnerships and people-to-people connections.
- Amid shifting geopolitical interests in the IOR, maintaining a stable and cooperative relationship with Sri Lanka is crucial for India’s regional security, maritime interests and economic engagement, especially in the context of rising external influence in the neighbourhood.

### Key Highlights of the Visit

- Both nations focusing on strengthening bilateral cooperation in education, technology, trade, and welfare of fishermen.
- She delivered the keynote address at the NDTV World Summit 2025 in Delhi, engaging on global and regional issues and emphasising cooperation for economic resilience and sustainable development.
- Visits to IIT Delhi, NITI Aayog, and Sarvodaya Co-Ed School highlighted potential areas for cooperation in higher education, vocational training, research, innovation and school collaboration, including the proposed Delhi–Colombo Education Bridge.

- PM Amarasuriya visited her alma mater, Hindu College, Delhi University, reinforcing cultural and educational linkages between the two nations.

**Impacts and Outcomes**

- The visit reaffirmed strong diplomatic engagement between India and Sri Lanka and emphasised mutual cooperation across multiple sectors.
- It provided a platform for Sri Lanka to attract Indian investments and explore collaborative ventures in education, skill development, innovation and technology.
- The educational and cultural exchanges foster a long-term people-to-people ecosystem, strengthening grassroots ties.

**Way Ahead**

- **Deepen Economic Ties:** Focus on bilateral trade, investment facilitation, and infrastructure partnerships to support Sri Lanka’s economic stability and growth.
- **Enhanced Security Cooperation:** Regularise maritime security dialogues and collaborative frameworks for fisheries management, anti-smuggling operations and search-and-rescue cooperation.
- **Educational Collaborations:** Implement structured institutional agreements on student exchange, research, faculty cooperation, and vocational training initiatives.
- **Regional Integration:** Strengthen multilateral platforms such as IORA and BIMSTEC to embed India and Sri Lanka in wider regional cooperation mechanisms.

**Conclusion**

The visit of Sri Lankan Prime Minister to India underscores a renewed commitment to deepening bilateral ties anchored in shared history, strategic interests and economic cooperation. It reflects both nations’ resolve to enhance collaboration across education, technology, trade and cultural domains, reinforcing India’s leadership in the Indian Ocean Region and Sri Lanka’s role as a key partner in stability and prosperity.

**Dr. Harini Amarasuriya**

- **Current Position:** Prime Minister of the Democratic Socialist Republic of Sri Lanka
- **Political Affiliation:** National People’s Power (NPP)
- **Education:**
  - ✓ Studied Sociology at Hindu College, University of Delhi (India)
  - ✓ Master’s degree from Macquarie University, Australia
  - ✓ PhD in Social Anthropology & International Health and Development from the University of Edinburgh / Queen Margaret University
- **Academic Career:**
  - ✓ Former Senior Lecturer in Sociology at the Open University of Sri Lanka
  - ✓ Research focus on education, inequality, gender, child protection, and social justice

- **Political Career:**
  - ✓ Entered Parliament in 2020 as an NPP Member of Parliament
  - ✓ Became one of the few women Prime Ministers of Sri Lanka
- **Key Policy Focus Areas:**
  - ✓ Education reform and skills development
  - ✓ Social equity and inclusive governance
  - ✓ Youth, women, and human rights issues
  - ✓ Significance for India–Sri Lanka Relations:
    - ✓ Strong people-to-people and educational link with India
    - ✓ Advocates cooperation in education, research, and development partnerships
- **Leadership Style:** Known for a reform-oriented, evidence-based and people-centric approach to governance

**EXPECTED QUESTION FOR UPSC CSE**

**Descriptive Question**

Q. The visit of Sri Lankan Prime Minister to India reflects the evolving nature of India–Sri Lanka relations in the Indian Ocean Region. Examine the strategic significance of Sri Lanka for India and discuss the key challenges and opportunities in strengthening bilateral cooperation. (15 marks, 250 words)

**INDIA–BRAZIL EXPAND MERCOSUR TRADE PACT**

**Why in News:** India and Brazil have agreed to expand the scope of the existing Preferential Trade Agreement (PTA) with the MERCOSUR bloc to deepen economic ties, enhance trade and investment flows, and boost bilateral trade cooperation.

**MERCOSUR bloc**

- MERCOSUR (Mercado Común del Sur) is a South American trade bloc established in 1991 by Argentina, Brazil, Paraguay, and Uruguay to create a common market for free movement of goods, services, capital, and people, evolving into a customs union with a common external tariff, and now includes Bolivia as a full member with Venezuela suspended, alongside associate members like Chile, Colombia, Ecuador, Guyana, Peru, and Suriname, aiming for regional economic integration and development.

**Preferential Trade Agreement (PTA)**

- A Preferential Trade Agreement (PTA) is a pact between two or more countries to lower tariffs on specific goods, creating

preferred access for certain products, rather than eliminating all barriers like a Free Trade Agreement (FTA).

- PTAs operate on a “positive list” of items, granting reduced duties (e.g., 10-100% cuts) to boost trade between partners, acting as an initial step towards deeper economic integration, like the India-MERCOSUR PTA.

### Key Highlights of the expanded agreement

- **Wider Tariff & Non-Tariff Coverage:** The scope will be broadened beyond the existing 450 tariff lines to include more goods and possibly non-tariff issues, enhancing preferential access for Indian and MERCOSUR products.
- **Ambitious Trade Target:** India and Brazil aim to boost bilateral trade from about USD 12–17 billion currently to USD 20 billion by 2030.
- **Economic Complementarities:** The partnership taps into complementary strengths—such as pharmaceuticals, IT services, engineering goods from India and agriculture, energy and minerals from MERCOSUR countries.
- **Potential Technology & Digital Cooperation:** Discussions include expanding cooperation into digital partnerships, AI, technology startups, and clean energy collaborations.

### Challenges

- **Agricultural Protectionism:** MERCOSUR’s strong agricultural sectors and protectionist policies limit mutual market access for sensitive goods like sugar, dairy, and pulses.
- **Economic Asymmetry:** India’s diversified manufacturing and services economy does not align neatly with MERCOSUR’s commodity export-oriented profile, complicating tariff reciprocal concessions.
- **Non-Tariff Barriers (NTBs):** Differences in standards, regulatory norms, and compliance procedures can restrict trade even with tariff concessions.
- **Logistics & Connectivity:** Physical distance and supply chain constraints between India and South America can increase costs, affecting competitiveness.
- **Consensus Requirements:** MERCOSUR trade decisions require all member states to agree on expanded lines, potentially slowing negotiation timelines.

### Consequences & Impacts

#### 1. Economic Impacts:

- Enhanced preferential access can make Indian industries (e.g., pharmaceuticals, chemicals, textiles) more competitive in South America.
- Broadening the export base supports export diversification

and job creation, and invites greater investment flows between India and MERCOSUR economies.

#### 2. Strategic Impacts:

- Strengthened ties with Brazil and MERCOSUR complement India’s South-South cooperation and diplomatic outreach, enhancing its role in emerging global markets.
- Trade expansion with Latin America helps India balance global trade alliances alongside engagements with ASEAN, EU, and the Indo-Pacific.

### Way Ahead

- **Complete Expansion Negotiations:** Finalise negotiations for broader tariff coverage and enhanced non-tariff cooperation within a defined timeframe.
- **Diversify Product Sectors:** Identify and include high-value sectors such as IT, renewables, auto components, digital commerce in tariff concession lists.
- **Address NTBs:** Harmonise standards, streamline customs procedures, and boost digital trade facilitation.
- **Strengthen Connectivity:** Explore logistics solutions to improve trade routes between India and Latin America.

### Conclusion

The expansion of India’s trade pact with Brazil and the MERCOSUR bloc signifies a strategic push to deepen economic engagement and diversify trade links beyond traditional partners. By broadening preferential access, the initiative aims to unlock higher trade volumes, strengthen South-South cooperation, and foster resilient, mutually beneficial economic relations amid an evolving global trade environment.

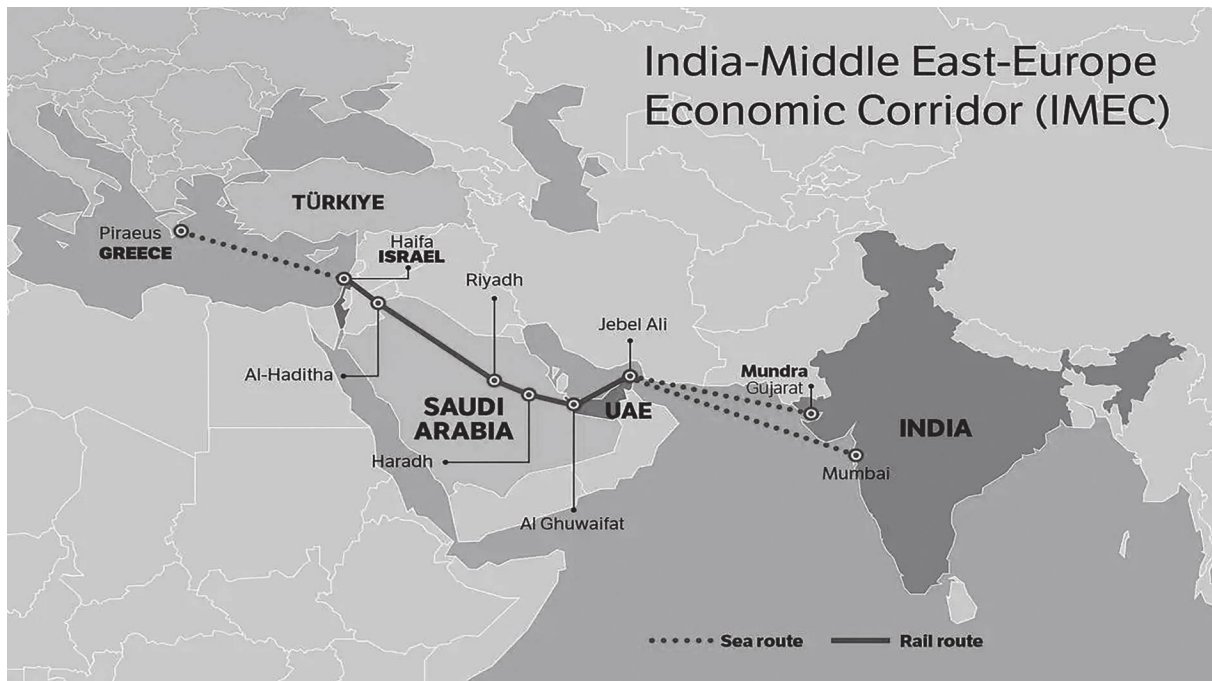
### EXPECTED QUESTION FOR UPSC CSE

#### Descriptive Question

- Q. India and Brazil have agreed to expand the scope of the existing Preferential Trade Agreement between India and the MERCOSUR bloc. Discuss the significance of this move for India’s trade diversification and South-South cooperation. What challenges must be addressed to realise its full potential? (15 marks, 250 words)

## INDIA-MIDDLE EAST-EUROPE ECONOMIC CORRIDOR (IMEC)

**Why in News:** The India-Middle East-Europe Economic Corridor (IMEC) is a flagship multi-modal connectivity initiative launched during the G20 Summit in New Delhi (September 2023)—is under renewed scrutiny due to geopolitical tensions in the Middle East and evolving global trade dynamics.



### What is IMEC?

- IMEC is a proposed trans-continental corridor intended to link India with Europe through the Arabian Gulf and West Asia using multimodal transport networks—including upgraded sea lanes and highspeed rail—alongside emerging infrastructure such as energy pipelines, undersea digital cables and clean energy grids. It was conceptualised to cut transit times by up to 40% and reduce costs by around 30% compared with the traditional Suez Canal route.
- Participants signing the initial Memorandum of Understanding include India, the United States, the United Arab Emirates, Saudi Arabia, the European Union, France, Germany and Italy. The corridor integrates two segments: the Eastern Corridor (India to the Gulf) and the Northern Corridor (Gulf to Europe).

### Importance and Strategic Significance

#### 1. Economic Connectivity and Trade Diversification

- IMEC proposes a reliable alternative to traditional maritime routes—particularly the Suez Canal—which has shown vulnerabilities during Red Sea disruptions caused by regional conflicts and Houthi attacks. An alternate corridor would diversify global supply chains, bolster efficiency, and promote economic integration across Asia, West Asia and Europe.

#### 2. Counterbalance to Existing Connectivity Frameworks

- The corridor is seen as part of broader Western-led infrastructure diplomacy, providing a potential alternative to China's Belt and Road Initiative (BRI). It emphasises transparent, rules-based connectivity, avoiding debt dependence for participating nations.

#### 3. Energy and Infrastructure Integration

- IMEC goes beyond trade: it envisages electronics, digital, power and renewable energy linkages, enhancing economic cooperation and technology transfer opportunities among member states.

### Challenges Facing IMEC

#### 1. Geopolitical Tensions

Ongoing conflicts like the IsraelGaza war have significantly complicated the corridor's prospects, especially the northern rail segment involving Israel, Jordan and Saudi Arabia. Instability and strained diplomatic relations reduce the feasibility of crossborder infrastructure agreements.

#### 2. Regional Security and Logistics Risks

Frequent disruptions along critical maritime routes (e.g., the Red Sea) highlight the very vulnerabilities IMEC aims to address, but they also stress the corridor's reliance on relative peace in the Arabian Peninsula and Mediterranean region—a challenging precondition.

#### 3. Infrastructure and Coordination Gaps

Harmonising legal, regulatory and technical standards across multiple countries, as well as coordinating investments for rail, port and digital infrastructure, remains a complex task requiring sustained diplomatic effort.

### Consequences and Impacts

- **Economic Impacts:** If realised, IMEC could transform AsiaEurope trade, attract foreign direct investment into infrastructure and logistics sectors, and make Indian exports more competitive by lowering transit costs and times. Estimates suggest notable growth in export volumes and stronger access to global markets.

## US-INDIA MAJOR DEFENCE PARTNERSHIP

- **Strategic Impacts:** The corridor could strengthen India’s geoeconomic influence, deepen ties with Gulf states and European partners, and contribute to regional stability by embedding economic interdependence into geopolitical frameworks.

### Government Initiatives and Diplomatic Engagements

- India and partner nations continue to discuss concrete steps to operationalise the IMEC, including agreements with the European Union to streamline logistics, customs, regulatory linkages, and infrastructure planning. The government emphasises its strategic significance for resilient supply chains and enhanced economic cooperation.
- India’s “Connectivity Diplomacy” and participation in frameworks such as I2U2 (India, Israel, UAE, USA) and G20 platforms reinforce the political support for IMEC.

### Way Ahead

- **Sustained Diplomatic Engagement:** Building consensus among corridor partners on peace, security, and mutual investment frameworks is critical.
- **Infrastructure Investment:** Mobilising public and private capital for rail, port, digital and energy components will determine operational viability.
- **Regional Cooperation Mechanisms:** Institutional mechanisms for dispute resolution and regulatory harmonisation will support seamless connectivity.
- **Adaptability and Resilience:** The corridor must incorporate alternative routes and adaptive planning to mitigate geopolitical disruptions.

### Conclusion

The IMEC is a visionary initiative with transformative potential for global connectivity, trade and economic integration, particularly linking India with the Middle East and Europe. Its success, however, hinges on geopolitical stability, coordinated diplomacy, robust infrastructure and collective will among participating nations. While current tensions pose real challenges, IMEC’s essence—as a diversified, resilient corridor for the future—remains strategically vital in an era of changing global trade and security dynamics.

#### EXPECTED QUESTION FOR UPSC CSE

##### Descriptive Question

Q. Discuss the strategic significance of the India–Middle East–Europe Economic Corridor (IMEC) in the context of India’s economic and geopolitical interests. What are the major challenges to its implementation and how can India navigate these challenges to realise IMEC’s objectives? (10 Marks/ 150 words)

**Why in News:** India and the United States signed a 10-year “Framework for the US-India Major Defence Partnership” agreement on October 31, 2025 in Kuala Lumpur, Malaysia during the 12th ASEAN Defence Ministers’ Meeting-Plus (ADMM-Plus).

### Key Features of the Agreement

- **Duration:** 10 years (2025–2035) — provides long-term policy direction.
- **Strategic Focus:** Strengthening defence relations through enhanced coordination, information sharing, and technological cooperation.
- **Military Collaboration:** It reinforces ongoing and future joint exercises, training, operational cooperation, and interoperability.
- **Technology & Industry:** Promotes defence technology sharing, co-development, defence industry linkages, and capacity building.
- **Regional Security:** Strengthens Indo-Pacific security architecture and contributes to a free, open, and rules-based order.

### Strategic & Geopolitical dimensions

- **Strengthening Indo-Pacific Security:** The agreement aligns with both countries’ strategic interests in the Indo-Pacific, emphasizing cooperation to counter regional threats and uphold a rules-based order.
- **Major Defence Partner Status:** India has been a US Major Defence Partner since 2016, unique among US defence partners, and this framework reinforces that designation.
- **Regional Multilateral Engagement:** Signed at a key ASEAN forum, the pact underlines shared interests with regional partners in Southeast Asia, enhancing collective security cooperation.
- **Defence Industrial Collaboration:** The pact supports deeper defence industrial cooperation, benefiting India’s Make in India initiative and technology transfer agreements.

### Background & its dynamics

- The defence framework was conceived amid broader high-level engagements between New Delhi and Washington, including meetings between external affairs and defence officials earlier in 2025.
- It comes at a time when bilateral ties also face pressures, such as trade tensions, but both sides reaffirmed commitment to a strategic partnership that transcends economic disagreements.

### Importance for India’s Defence Strategy

- Offers predictability and continuity in strategic cooperation with a major global power.

- Strengthens India’s military preparedness through sustained exercises and advanced technology access.
- Enables better intelligence sharing and joint responses to regional security challenges.

**Way Forward**

- **Time-bound Implementation:** Convert the 10-year framework into actionable roadmaps with clear milestones.
- **Technology Co-development:** Focus on joint R&D and co-production in emerging domains like AI, cyber, space, and drones.
- **Defence Industrial Linkages:** Align cooperation with Make in India and Aatmanirbhar Bharat to boost indigenous capacity.
- **Enhanced Interoperability:** Expand the scale and complexity of joint military exercises and logistics coordination.
- **Indo-Pacific Focus:** Use platforms like QUAD and ADMM-Plus to strengthen a rules-based regional security order while preserving India’s strategic autonomy.

**Conclusion**

The 10-year defence framework between India and the US marks a transformative milestone in bilateral relations, deepening a strategic partnership grounded in shared democratic values, mutual security interests, and a common vision for peace and stability in the Indo-Pacific.

**EXPECTED QUESTION FOR UPSC CSE**

**Descriptive Question**

Q. Examine how the India–US 10-year Defence Framework strengthens India’s position as a major defence partner while preserving its strategic autonomy. (10 marks, 150 words)

**INDIA AND ASEAN ON ECONOMIC AND SECURITY COOPERATION:**

**Why in News:** Indian Prime Minister addressed the 47th ASEAN Summit virtually, reaffirming India’s diplomatic priorities.

**Key highlights of the ASEAN engagement**

- **India-ASEAN Partnership:** PM Modi emphasized the India-ASEAN Comprehensive Strategic Partnership as a “foundation for stability and development.” He underlined shared goals such as economic cooperation, digital inclusion, maritime security, green energy, and resilient supply chains.
- **ASEAN-India Year of Maritime Cooperation:** To counterbalance regional uncertainties—especially in the Indo-Pacific—India announced 2026 as the ‘ASEAN-India Year of Maritime Cooperation’, boosting naval, disaster relief (HADR), and blue economy initiatives.

- **Act East Policy Continuity:** India committed to strengthening connectivity, trade, and people-to-people ties with Southeast Asia, seated at the heart of India’s Act East policy.

**US Trade Measures & India’s Response**

- **High Tariffs on Indian Exports:** The United States imposed steep tariffs—up to 50%—on Indian exports, particularly justified by Washington on India’s continued imports of Russian oil.
- **Impact on Exports:** Trade experts warned this could significantly reduce India’s export volume to the US, with sectors like textiles, gems, and manufactured goods being most affected.

**Diplomatic engagement**

- **India–US Negotiations Continued:** Despite tensions, diplomatic channels remained active, with visits by US officials and trade negotiation efforts ongoing to reverse or lower tariffs.
- **Personal Equation Maintained:** State visits, public affirmations of friendship, and strategic dialogues continued, indicating that both nations valued the long-term India–US Comprehensive Global Strategic Partnership despite current economic friction.

**China and Trade Stability**

- Amid US tariff pressures and shifting global alliances, India also engages with China on multilateral platforms.
- India and China have publicly described their relationship as partners, affirming strategic autonomy and cooperation on global economic issues, including trade stabilisation.

**ASEAN’s Neutral Stance**

- Southeast Asian leaders have carefully avoided taking sides in the US-China trade confrontation, instead seeking enhanced cooperation with both powers—reflected in ASEAN’s continuing engagement with India.

**Significance & Implications for India’s Foreign Policy**

This period reflects India’s multi-vector diplomacy where:

- Economic interests (trade agreements & tariff negotiations) are balanced with
- ✓ Strategic autonomy philosophies, engaging both the US and China, and
- ✓ Regional leadership aspirations, especially within ASEAN and the Indo-Pacific.

**Why is this Development Important?**

1. **Global Economic Uncertainty**
  - The revival of protectionist trade policies, especially tariff threats by the US, has disrupted global supply chains.
  - ASEAN economies, deeply integrated into global trade, are vulnerable to spillover effects from US-China tensions.
  - India positioning ASEAN as a pillar of stability reflects an attempt to diversify economic partnerships.

## 2. Centrality of ASEAN in Indo-Pacific

- ASEAN lies at the crossroads of global maritime trade routes.
- Stability in ASEAN is critical for freedom of navigation, energy security, and trade flows in the Indo-Pacific.

## 3. India's Strategic Autonomy

- India's engagement with ASEAN allows it to balance relations with:
  - The US (strategic and defence partner).
  - China (economic competitor and geopolitical challenger).
  - Without entering rigid military or trade blocs.

## Significance for India

### 1. Strategic Significance

- Reinforces India's Act East Policy and Indo-Pacific vision.
- Strengthens India's role as a net security provider in the region through maritime cooperation, HADR (Humanitarian Assistance and Disaster Relief), and naval exercises.
- Enhances India's voice in regional rule-making amid great power rivalry.

### 2. Economic Significance

- ASEAN is among India's largest trading partners.
- Helps India:
  - Reduce over-dependence on traditional markets like the US and EU.
  - Integrate into resilient and diversified supply chains.
- Supports India's ambitions in manufacturing, digital economy, and green growth.

### 3. Diplomatic Significance

- Signals India's preference for inclusive, rules-based multilateralism.
- Positions India as a bridge between the Global South and major powers.
- Enhances India's credibility as a stabilising force rather than a confrontational power.

### 4. Geopolitical Significance

- ASEAN engagement offers India leverage amid:
  - US tariff pressures,
  - China's economic assertiveness,
  - Fragmentation of global trade regimes (WTO weakening).
- Strengthens regional balance without provoking bloc politics.

## Suggestions / Way Forward

### 1. Deepen Economic Integration

- Upgrade and rationalise the India-ASEAN FTA to address trade imbalances.

- Promote value-chain integration in electronics, semiconductors, pharmaceuticals, and green technologies.

### 2. Strengthen Connectivity

- Fast-track physical connectivity projects.
- Expand digital connectivity and fintech cooperation.

### 3. Maritime & Security Cooperation

- Institutionalise joint maritime domain awareness.
- Expand naval exercises, coastal security cooperation, and disaster response mechanisms.

### 4. Trade Diplomacy & Multilateralism

- Advocate reform of global trade institutions (WTO).
- Coordinate with ASEAN on resisting excessive protectionism and unilateral tariffs.

### 5. People-to-People & Soft Power

- Enhance educational exchanges, tourism, and cultural diplomacy.
- Leverage India's digital public infrastructure (DPI) as a development model for ASEAN nations.

## Conclusion

At a time when global trade is increasingly shaped by geopolitical rivalry and tariff wars, India's emphasis on ASEAN as a pillar of stability reflects a mature, multi-aligned foreign policy approach. Strengthening India-ASEAN ties not only safeguards India's economic and strategic interests but also contributes to a balanced, inclusive, and rules-based Indo-Pacific order. Going forward, sustained engagement, economic pragmatism, and strategic restraint will be key to translating diplomatic intent into tangible outcomes.

## EXPECTED QUESTION FOR UPSC CSE

### Descriptive Question

- Q. In the backdrop of rising protectionism and US-China trade tensions, India has highlighted ASEAN as a pillar of stability and growth. Examine the strategic, economic, and geopolitical significance of India-ASEAN relations for India's foreign policy. Suggest measures to further strengthen this partnership. (15 marks/ 250 words)

## INDIA-RUSSIA STRATEGIC ECONOMIC PUSH

**Why in News:** India and Russia have reiterated their resolve to elevate annual bilateral trade to USD 100 billion by 2030, while advancing negotiations on a Free Trade Agreement (FTA) with the Eurasian Economic Union (EAEU) to strengthen economic ties and market access for Indian goods and services.

## Background

- India and Russia share a longstanding strategic partnership encompassing energy, defence, space, and trade cooperation.
- With bilateral trade reaching around USD 70 billion in 2024–25 and growing rapidly over the past decade, both nations are now deepening economic engagement against a backdrop of global geopolitical shifts and trade realignments.

## Key Developments

- USD 100 Billion Trade Target by 2030
  - India and Russia reaffirmed their commitment to achieve USD 100 billion in bilateral trade by 2030, a significant increase from the current levels of about USD 70 billion.
  - Both governments have adopted economic cooperation programmes to expand trade and investment across sectors, including fertilisers, manufacturing, food safety, and shipping.
- India–EAEU FTA Progress
  - India and the Eurasian Economic Union (EAEU) — comprising Russia, Armenia, Belarus, Kazakhstan, and Kyrgyz Republic — have signed Terms of Reference (ToR) to launch negotiations for an FTA aimed at boosting trade in goods and services, improving market access, and supporting MSMEs.
  - The ToR outlines an 18-month work plan to diversify markets, address nontariff barriers, and pave the way for broader economic cooperation.
- Regulatory and Trade Facilitation Measures
  - Regular quarterly engagements between Indian and EAEU regulators will address issues such as certification, agricultural and marine exports, antimonopoly norms, logistics, and payment mechanisms to enhance the ease of doing business.

## Importance & Significance

### 1. Economic Diversification and Growth

- The USD 100 billion trade goal reflects a push to diversify India's export basket beyond energy imports, which currently dominate the trade imbalance.
- Enhanced access to the EAEU market — with a combined GDP of around USD 6.5 trillion — offers opportunities for Indian sectors including pharmaceuticals, machinery, chemicals, automobiles, telecom equipment, and leather goods.
- Strengthening trade with Russia will also support MSMEs, farmers, and new sectors, increasing employment and industrial growth at home.

### 2. Strategic Partnership and Geopolitical Balance

- As India navigates complex global trade dynamics — including US tariff pressures and broader geopolitical

shifts — strengthening ties with Russia enhances India's economic strategic autonomy.

- A deeper economic alliance signals multialigned diplomacy, balancing ties with Western and other partners while maintaining robust cooperation with Russia.

### 3. Regional Trade Integration

- An India–EAEU FTA could be a stepping stone for broader engagement in Eurasian markets, positioning India as a key player in regional value chains and economic corridors.

## Challenges

1. **Trade Imbalance:** Despite growth, India's exports to Russia remain significantly lower than imports, leading to trade imbalance issues. Addressing tariff and nontariff barriers remains critical.
2. **Non-Tariff Barriers & Logistics:** Certification hurdles, logistics constraints, and payment mechanisms continue to pose challenges that could slow trade expansion.
3. **Geopolitical Complexities:** External geopolitical pressures, such as Western sanctions on Russia and tariff disputes involving other trading partners, could complicate deeper economic integration.

## Suggestions / Way Forward

- **Balanced Trade Strategy:** India should focus on increasing exports in high-growth sectors such as pharmaceuticals, engineering goods, electronics, food products, and textiles to rebalance trade.
- **Strengthen Payment & Settlement Systems:** Expanding rupee–rouble and national currency settlement mechanisms could enhance predictability and financial cooperation in bilateral trade.
- **Improve Trade Facilitation:** Streamlining certification, reducing nontariff barriers, and enhancing transport and logistics links would make Indian goods more competitive in Russian and EAEU markets.
- **Promote Private Sector Engagement:** Encouraging Indian companies to participate in joint ventures and co-production initiatives with Russian and EAEU firms can catalyse deeper integration and technology transfer.

## Conclusion

India and Russia's renewed focus on achieving USD 100 billion bilateral trade by 2030 and advancing the India–EAEU FTA marks a strategic milestone in their economic partnership. This initiative not only carries significant promise for boosting trade and industrial growth but also strengthens India's economic diplomacy in a complex global landscape. By addressing structural challenges, promoting export diversification, and streamlining trade facilitation, both countries can unlock the full potential of their partnership — contributing to sustained prosperity and deeper regional integration.

## EXPECTED QUESTION FOR UPSC CSE

### Descriptive Question

Q. In the context of India–Russia economic engagement and the proposed India–EAEU FTA, analyze the potential benefits and risks of expanding trade ties with Russia and the Eurasian Economic Union. How can India leverage this partnership to diversify its trade and strengthen economic diplomacy? (15 marks/250 words)

## MONGOLIA'S FIRST OIL REFINERY

**Why in News:** India and Mongolia have taken a significant step in deepening their bilateral cooperation with the construction of Mongolia's first oil refinery, backed by Indian financing and technical support.

### Key Details

- The refinery is expected to begin operations by 2028, marking a milestone in energy collaboration between the two nations.
- The announcement was made during the official visit of Mongolian President Khurelsukh Ukhnaa to India, highlighting the growing strategic and economic ties.

### Project overview

- **Project Name & Location:** The Mongol Refinery is being constructed in Altanshiree, Dornogovi Province, Mongolia.
- **Capacity:** It will have the capacity to process about 1.5 million metric tonnes of crude oil annually (approximately 30,000 barrels per day), which will produce products such as petrol, diesel, LPG, and aviation fuel.
- **Financing:** The project is financed through a US \$1.7 billion line of credit extended by the Export-Import (Exim) Bank of India, making it one of India's largest overseas development projects under a line of credit.
- **Manufacturing & Logistics:** The refinery equipment is being manufactured in India and will be shipped to Mongolia for installation.

### Why this development matters

#### 1. Energy Security & Import Substitution for Mongolia

- Mongolia currently depends heavily on imports of refined petroleum products, primarily from Russia. The commissioning of a domestic refinery will significantly reduce dependence on imported fuels, enhance energy self-sufficiency, and support stable domestic pricing.

#### 2. Strengthening India–Mongolia Strategic Partnership

- This project represents a high point in bilateral relations, expanding beyond traditional cultural and diplomatic cooperation to include infrastructure and energy cooperation. It strengthens India's role as a trusted

development partner in the IndoPacific and Central Asian region.

#### 3. Boost to Economic and Industrial Linkages

- The refinery project offers potential spill-overs including opportunities for Indian engineering, procurement, and construction firms in execution and consultancy roles.
- Enhanced cooperation in oil and gas exploration, as Mongolia has invited Indian firms to explore domestic hydrocarbon resources.
- Prospects for coal and mineral imports from Mongolia, such as coking coal, which can support Indian industries.

#### 4. Geostrategic Implications

- Mongolia is a landlocked country between Russia and China. India's participation in its energy infrastructure reflects New Delhi's pursuit of its Act East and Connect Central Asia policies, widening India's influence beyond South Asia.

### Challenges and Considerations

- **Logistics and Connectivity:** Mongolia's landlocked geography requires efficient transport corridors via Russia or China for crude supply and export of refined products. India is exploring viable routes, including Vladivostok (Russia) and Tianjin (China), to optimize movement of energy and mineral resources.
- **Economic Viability and Market Dynamics:** Ensuring the refinery's commercial sustainability will depend on securing consistent crude supplies, competitive pricing, and integration into regional fuel markets.
- **Geopolitical Sensitivities:** India's engagement in Mongolia's energy sector must navigate broader regional geopolitical equations, given Mongolia's strategic location and its relationships with neighbouring powers.

### Way Forward / Suggestions

- **Strengthen Transport Corridors:** Building multi-modal connectivity — rail, road, and pipeline linkages — will be crucial for cost-effective supply chains linking Mongolia, India, and third-country markets.
- **Expand Technical Collaboration:** Encourage Indian public and private firms to participate in refinery operations, maintenance, and upstream exploration. This will deepen industrial cooperation and create long-term business ecosystems.
- **Integrated Energy Partnership:** Develop a comprehensive energy partnership framework that includes crude sourcing, refining, downstream product marketing, and logistics integration, enhancing mutual benefits.
- **Leverage Regional Connect Policies:** Align the project with India's Connect Central Asia Initiative to promote broader economic cooperation, including trade, investment, and cultural linkages.

## Conclusion

The India backed Mongolian oil refinery project set to begin operations by 2028 reflects a transformative leap in bilateral cooperation, with implications for energy security, economic integration, and strategic engagement in Central and East Asia. By financing and supporting Mongolia's first refinery, India reinforces its credentials as a development partner and energy collaborator while expanding its footprint in a geopolitically strategic region. Harnessing this momentum through enhanced connectivity and diversified cooperation will benefit both nations and contribute to regional stability and prosperity.

### EXPECTED QUESTION FOR UPSC CSE

#### Descriptive Question

Q.1 "India's support to Mongolia's first oil refinery reflects its strategic energy diplomacy in Central Asia." Comment in the context of India's Act East and Connect Central Asia policies. (10 marks/ 150 words)

## INDIA ENDS ITS PRESENCE AT TAJIKISTAN'S AYNİ AIRBASE

**Why in News:** India has formally concluded its operations at the Ayni Airbase in Tajikistan, marking the end of its only fullfledged overseas military installation.



### Background and evolution of Ayni Airbase

The Ayni Airbase is located near Dushanbe, Tajikistan's capital. Originally a former Soviet facility, India entered into an agreement in the early 2000s with Tajikistan to modernise and jointly operate the base, as part of its strategic outreach into Central Asia.

#### Key milestones include:

- **Early 2000s:** India began renovation and development, investing close to US\$80–100 million on runway upgrades, fuel depots, hangars and air traffic systems.
- **Operational Role:** The base hosted a small contingent of Indian Air Force personnel and, at times, Su-30MKI fighter jets, serving both as a strategic hub and logistical facility.

- **Evacuation Efforts:** Ayni played a role in the 2021 evacuation of Indian nationals from Afghanistan after the Taliban's return to power.

### Why India withdrew

The India-Tajikistan arrangement expired in 2022. Several factors influenced this outcome:

- **Expiration of Bilateral Agreement:** India's lease and joint-use arrangement with Tajikistan lapsed and was not renewed.
- **Geopolitical Pressures:** Regional powers — particularly Russia and China — exerted influence on Dushanbe to limit non-regional military presences, narrowing India's strategic space.
- **Operational Constraints:** India never secured formal status-of-forces agreements granting autonomous basing rights, limiting the strategic utility of the facility.
- **Logistical Challenges:** Remote location, supply challenges and reliance on third-party access reduced operational viability over time.

### Strategic significance of Ayni

The Ayni Airbase held considerable strategic importance for India's foreign policy and defence posture:

- **Central Asia Access:** It provided unique geopolitical reach into Central Asia, a region of growing economic and security importance.
- **Proximity to Key Borders:** The base's location near the Afghanistan's Wakhan Corridor, Pakistan-administered Kashmir, and Xinjiang (China) offered monitoring and rapid response potential.
- **Power Projection:** Ayni was India's attempt to project military presence beyond the South Asian neighbourhood and balance competing interests.

### Implications for India's Security and Diplomacy

The closure of the Ayni facility has raised several strategic considerations:

1. **Loss of Forward Presence:** India's only overseas airbase provided strategic depth and immediate reach into a geopolitically sensitive region. Its absence limits India's ability to monitor threats and respond rapidly in Central Asia.
2. **Geopolitical Significance:** The shift reflects the changing power balance in Central Asia, where Russia and China are consolidating influence, and India's role has comparatively diminished.
3. **Policy Reorientation:** Experts view the withdrawal as part of India's broader strategic recalibration toward the Indian Ocean and IndoPacific theatres, where it has stronger leverage and infrastructure, such as engagements through the Quad and partnerships with maritime democracies.
4. **Multifaceted Engagement:** India continues diplomatic, economic and cultural ties with Central Asian republics

through forums like the India-Central Asia Dialogue, trade initiatives and connectivity projects, reinforcing a non-military presence.

### Way Forward

While the exit from Ayni marks the end of a chapter in India's military diplomacy, it underscores a strategic pivot toward areas where New Delhi's influence can be more effective:

- **Indo-Pacific Focus:** Stronger emphasis on maritime security, alliance frameworks, and capacity building.
- **Economic and Cultural Diplomacy:** Strengthening ties with Central Asian states via trade, investment and cultural exchange remains a priority.
- **Technological and Intelligence Cooperation:** Growing cooperation in counter-terrorism and intelligence sharing with regional partners is expected to continue.

### Conclusion

India's withdrawal from the Ayni Airbase reflects not just the end of a bilateral pact but also a strategic recalibration in response to evolving geopolitical realities. As New Delhi adapts its foreign policy priorities, the focus is likely to remain on areas offering greater leverage and mutual strategic gains, even as Central Asia retains importance in India's broader regional engagement.

#### EXPECTED QUESTION FOR UPSC CSE

##### Descriptive Question

Q. "The expiration of India's strategic pact with Tajikistan and the closure of Ayni Airbase highlights the challenges of overseas military basing. In this context, discuss the factors that limit India's strategic reach in Central Asia and suggest measures to enhance its regional influence." (15 marks, 250 words)

## INDIA-CANADA ON TRADE AND INVESTMENT

**Why in News:** A high-level Ministerial Dialogue on Trade and Investment (MDTI) was jointly held by India and Canada from 11–14 November 2025 in New Delhi.

### Key Details

- It is the 7th edition of this strategic dialogue between the two nations.
- The event was part of ongoing efforts to deepen economic ties following directions from the Prime Ministers of both countries during their meeting on the sidelines of the G7 Summit 2025 in Kananaskis, Canada.

### Background

- The MDTI serves as the principal institutional mechanism to review and expand bilateral trade and investment cooperation between India and Canada.

- India-Canada economic engagement has witnessed notable growth in recent years, with two-way trade in goods and services reaching approximately US \$23.66 billion in 2024, including merchandise trade of nearly US \$8.98 billion — reflecting a 10 per cent increase over the previous year.

### Key Highlights of the dialogue

- **Reaffirmation of Strategic Partnership:** The Dialogue reinforced India and Canada's shared commitment to deepen economic cooperation through sustained ministerial and private-sector engagement.
- **Trade and Investment Growth:** Both parties welcomed the robust expansion of bilateral trade and investments, underscoring the role of market access, transparent policies, and increasing institutional flows that support jobs in both economies.
- **Sectoral and Future Collaboration:** The Ministers agreed to identify and enhance cooperation in strategic and emerging sectors, including:
  - Critical minerals — essential for energy transition and decarbonisation;
  - Clean energy technologies — to support sustainable development ambitions;
  - Aerospace and dual-use capabilities — to leverage Canadian strengths and India's expanding aviation sector.
- **Supply Chain Resilience:** Joint emphasis was placed on strengthening supply chain resilience, a key lesson from recent global disruptions, to ensure long-term stability and diversification across sectors such as agriculture and manufacturing.
- **People-to-People Ties:** Recognizing that robust people-to-people connections provide a vital foundation, both sides encouraged broader civil society, academic, and business interactions to deepen bilateral trust and cooperation.

### Significance for India's Foreign Trade Policy

- **Reinforcing Economic Diplomacy:** The Dialogue underscores India's push to expand economic diplomacy with key partners like Canada, aligning trade priorities with global economic trends.
- **Diversification of Trade Partnerships:** Enhanced ties with Canada complement India's comprehensive strategy to deepen engagements beyond traditional markets, especially in high-technology and green sectors.
- **Strategic Sector Linkages:** Collaboration in critical minerals and aerospace intersects with India's priorities in self-reliance (Atmanirbhar Bharat) and participation in global value chains, offering mutual gains.
- **Private Sector Role:** Sustained private sector involvement is seen as pivotal in unlocking new opportunities,

enhancing market access, and catalysing innovation-led growth.

### Conclusion

The 2025 Ministerial Dialogue on Trade and Investment has reinforced India-Canada economic cooperation at a time of shifting global economic dynamics. With expanding bilateral trade, strategic sector partnerships, and strengthened policy coordination, both countries are positioned to capture future growth opportunities, boost supply chain resilience, and build a sustainable and forward-looking economic partnership.

#### EXPECTED QUESTION FOR UPSC CSE

##### Descriptive Question

Q. "Bilateral dialogues and strategic partnerships are increasingly shaping India's trade and investment landscape. In this context, examine how India's engagement with Canada can contribute to economic growth, technological cooperation, and supply chain resilience." (15 marks, 250 words)

## INDIA-SLOVENIA JOINT COMMITTEE ON TRADE

**Why in News:** The 10th Session of the India-Slovenia Joint Committee on Trade and Economic Cooperation (JCTEC) was held in New Delhi.



### Key Details

- The session focused on strengthening bilateral economic engagement, exploring new avenues for cooperation, and formulating a forward-looking roadmap for trade and investment.
- The JCTEC is a key institutional mechanism underpinning economic engagement between India and Slovenia, facilitating periodic reviews of bilateral trade and economic cooperation.
- Slovenia, strategically located in Central Europe, acts as a gateway for India's trade and economic outreach in the wider European region. This has made the relationship increasingly relevant in the context of India's efforts to deepen ties with the European Union.

### Key Discussions and Outcomes

1. **Review of Bilateral Trade Growth:** Both sides assessed the trajectory of bilateral trade and noted an upward trend over recent years, reflecting the growing depth and resilience of the partnership.
2. **Sectoral Cooperation:** The session explored cooperation across a range of economic sectors including: Agriculture, Chemicals and Pharmaceuticals, Healthcare, Transport and Energy, Tourism, Micro, Small and Medium Enterprises (MSMEs), Ayurveda and Traditional Systems of Medicine. These sectors were identified as potential drivers for expanding trade, joint ventures, and technology exchanges.
3. **Investment and Connectivity:** Participants discussed ways to enhance investment flows and improve economic linkages, with an emphasis on business facilitation and mutual interest areas in the European and Indian markets.
4. **India-EU FTA Considerations:** Both sides expressed optimism for the early conclusion of a balanced and mutually beneficial India-European Union Free Trade Agreement (FTA), viewing it as a catalyst for enhanced economic cooperation not only with Slovenia but the broader EU region.

### Significance and strategic dimensions

- **Deepening economic diplomacy:** The JCTEC reinforces India's strategy of deepening trade ties with European partners as part of its broader economic diplomacy, aimed at market diversification and resilient supply chains.
- **Complementarity in trade:** Slovenia offers complementarities in sectors such as pharmaceuticals, technology, transport equipment, and services, which align with India's economic priorities and export potential.
- **Gateway to Europe:** Slovenia's geographic and economic position in Central Europe provides strategic access to EU markets and reinforces India's broader engagement with European economies.

### Way Forward

- The joint committee reaffirmed its commitment to nurturing a dynamic and forward-looking economic partnership anchored in mutual trust and shared interests. Future collaboration is expected to focus on enhancing bilateral trade volumes, facilitating investment partnerships, supporting MSMEs, and leveraging cooperation opportunities in high-growth sectors.

### Conclusion

The 10th India-Slovenia JCTEC session marks a significant milestone in broadening bilateral economic relations. It not only highlights the sustained growth of trade and cooperation but also positions the partnership as a strategic bridge between India and the European economic landscape. Continued dialogue and implementation of joint initiatives will be vital in unlocking the full potential of this partnership in the years ahead.

## EXPECTED QUESTION FOR UPSC CSE

### Descriptive Question

Q. Bilateral economic dialogues, such as the India–Slovenia Joint Committee on Trade and Economic Cooperation, are important instruments of India’s economic diplomacy. Critically analyze their significance in enhancing trade, investment, and strategic engagement with Europe. (15 marks, 250 words)

## INDIA-VIETNAM DEFENCE POLICY

**Why in News:** The 15th edition of the India–Vietnam Defence Policy Dialogue (DPD) was held in Hano. The policy dialogue reviewed the progress of defence cooperation and set the course for future collaboration across multiple domains.

### Key Details

- The India–Vietnam Defence Policy Dialogue is a key institutional mechanism that guides bilateral defence engagement under the India–Vietnam Comprehensive Strategic Partnership.
- Defence cooperation forms a core pillar of India’s Act East Policy and its broader IndoPacific strategy, reflecting mutual interests in peace, security, and stability in the region.

### Key Highlights of the dialogue

1. **Review of Ongoing Cooperation:** Both sides expressed satisfaction with progress in areas such as: Hydrography cooperation; Capacity building and training; UN Peacekeeping Operations; Increased port calls and ship visits; Collaborative work in niche domains, including artificial intelligence and shipyard modernisation.
2. **Expansion into Emerging Domains:** The dialogue agreed to deepen cooperation in several strategic and emerging areas: Cyber security; Real-time information exchange; Military medicine; Exchange of experts and personnel.
3. **Memorandum of Agreement for Submarine Operations:** A Memorandum of Agreement (MoA) was signed to establish a framework for Mutual Submarine Search and Rescue Support, enhancing capacity to respond to underwater contingencies collaboratively.
4. **Defence Industry Collaboration:** A Letter of Intent (LoI) was signed to strengthen defence industry cooperation. The agreement focuses on: Transfer of Technology (ToT); Cooperation in hightech and core technology domains; Joint research and development, joint ventures, and equipment procurement; Exchange of experts in design and production.
5. **Institutional Continuity:** Under the existing implementing arrangement on defence industry cooperation, both sides decided to hold a meeting in December 2025, and the 16th DPD is scheduled to be held in India in 2026.

### Strategic Significance

- **Strengthening Defence Ties:** The DPD serves as the primary mechanism to review and guide bilateral defence cooperation, helping align military collaboration with broader strategic priorities.
- **Submarine Rescue and Maritime Safety:** The MoA on submarine search and rescue enhances maritime safety collaboration, crucial for regional security in the Indo-Pacific theatre.
- **Defence Industrial Cooperation:** Strengthening defence industry links supports Make in India, encourages innovation, and fosters self-reliance in defence production while engaging Vietnamese capabilities.
- **Act East Policy and Indo-Pacific Vision:** Vietnam’s strategic location and shared security concerns make it a critical partner in India’s Act East Policy and IndoPacific Outlook, balancing regional dynamics.

### Conclusion

The 15th India–Vietnam Defence Policy Dialogue reaffirms the multi-dimensional defence cooperation between the two nations, expanding from traditional domains to emerging and future-oriented areas. With enhanced strategic alignment, joint operational frameworks, and deepening industrial collaboration, the India–Vietnam defence partnership continues to be a cornerstone of India’s security and diplomatic outreach in Southeast Asia and the Indo-Pacific region.

## EXPECTED QUESTION FOR UPSC CSE

### Descriptive Question

Q. India’s defence engagements in Southeast Asia, particularly with Vietnam, reflect its strategic priorities in the IndoPacific region. Examine how such partnerships contribute to regional security, maritime domain awareness, and the development of India’s defence industry. (15 marks, 250 words)

## INDIA-AUSTRALIA SECURITY DEAL:

**Why in News:** India and Australia signed a comprehensive bilateral security agreement during Indian Defence Minister visit to Canberra. The pact includes military talks, maritime cooperation, information sharing, and submarine rescue collaboration between the two nations’ armed forces.

### Key Features of the Agreement

- **Submarine Rescue and Maritime Support:** A MoU on submarine search and rescue cooperation was signed, establishing frameworks for mutual assistance if submarines are in distress.
- **Joint Staff Talks:** Terms of Reference for regular military

staff-level consultations will improve operational coordination.

- **Information Sharing:** Agreements to share defence-related information and intelligence will enhance coordination on defence and strategic planning.
- **Expanded Military Exercises:** India's participation in AUSINDEX, Talisman Sabre, Malabar, and other drills with Australia and Quad members increases interoperability.
- **Defence Industry Engagement:** Defence Industry Roundtables and personnel exchanges (e.g., training at Australian defence institutions) were discussed to deepen defence collaboration.

### Background: India–Australia Relations

- India–Australia ties are anchored in a Comprehensive Strategic Partnership (CSP) initiated in 2020 that spans defence, trade, culture, and science cooperation.
- Military cooperation has intensified through joint naval exercises and logistics agreements, especially focused on maritime domain awareness and Indian Ocean security.

### Strategic context

The agreement comes amid a shifting Indo-Pacific security landscape shaped by:

- China's increasing naval assertiveness in the Indian Ocean and South China Sea.
- Australia's deepening defence ties with the U.S. and U.K. under AUKUS, including plans for nuclear-powered submarines.
- Expansion of multilateral exercises like Malabar 2025, which included Australia, India, Japan, and the U.S., building maritime interoperability among Quad nations.

### Significance

- **Strategic Balance in Indo-Pacific:** The pact reinforces a rules-based regional order by strengthening defence cooperation outside formal military alliances. It offers credible maritime deterrence and shared surveillance capacity.
- **Submarine Operations and Capability:** India's expertise in conventional submarine operations (e.g., Kalvariclass deployments) complements Australia's future shift towards nuclear-powered submarines under AUKUS, setting the stage for logistics support and operational synergy.
- **Quad and Regional Collaboration:** While bilateral in nature, the pact bolsters Quad interoperability — enhancing joint exercises, information sharing, and maritime security frameworks among major democracies in the Indo-Pacific.
- **Defence Diplomacy:** This agreement reflects India's expanding strategic outreach beyond immediate neighbourhood policy to encompass shared Indo-Pacific security interests with like-minded partners.

### Challenges & Opportunities

- **Operational Integration:** Effective coordination across different command structures and doctrines remains a work in progress.
- **Non-alignment vs Partnerships:** India continues to balance strategic autonomy with growing operational cooperation.
- **China's Response:** Beijing perceives such pacts as counterbalancing mechanisms, potentially increasing regional tensions.

### Way forward

- Expanded joint R&D and defence industry collaboration, including emerging technologies.
- Increased participation in maritime security initiatives and humanitarian exercises.
- Potential alignment with broader AUKUS framework dynamics and Quad strategic projects.

### EXPECTED QUESTION FOR UPSC CSE

#### Descriptive Question

- Q. India's foreign policy increasingly emphasizes strategic partnerships and multilateral engagements in the Indo-Pacific region. Examine how such collaborations contribute to India's maritime security and global strategic influence, and discuss the challenges in balancing national interests with regional sensitivities. (10 marks/ 150 words)

## G20 JOHANNESBURG SUMMIT

**Why in News:** Indian Prime Minister proposed six major global development initiatives to G20 leaders on the opening day of the G20 Summit in Johannesburg, aimed at promoting inclusive, sustainable, resilient, and equitable global growth.

### The Six Global Development Initiatives

#### 1. G20 Global Traditional Knowledge Repository

- Aims to document and share traditional and indigenous knowledge related to health, environment, and sustainable living.
- Seeks to harness "collective wisdom of humanity" for future generations.

#### 2. G20–Africa Skills Multiplier Initiative

- Focuses on skilling Africa's youth by creating a pool of 1 million certified trainers over the next decade.
- Trainers will catalyse skills development and long-term employment growth across sectors in Africa.

#### 3. G20 Global Healthcare Response Team

- Envisions a rapid deployment team of healthcare experts from G20 nations to assist in global health emergencies and disasters.

- Embodies lessons from the COVID19 pandemic on coordinated health responses.
- G20 Initiative on Countering the Drug-Terror Nexus**
    - Targets drug trafficking networks and their links to terrorism financing.
    - Proposes integrated action across financial, governance, and security frameworks to disrupt the drug-terror economy.
  - G20 Open Satellite Data Partnership**
    - Promotes sharing satellite data and analytics from G20 space agencies with developing nations, particularly the Global South.
    - Key application areas: agriculture, fisheries, disaster management, climate monitoring.
  - G20 Critical Minerals Circularity Initiative**
    - Aims to bolster supply chain security for critical minerals.
    - Encourages recycling, urban mining, secondlife batteries and innovations for a cleaner, sustainable pathway.

### Strategic and global context

- Africa's First G20 Summit Host: Johannesburg hosted the G20 for the first time, underscoring the rising global importance of African development in the global agenda.
- Integral Humanism as a Framework: PM Modi emphasized Integral Humanism—balancing society, economy, and nature—as a guiding philosophy for global development planning.
- Disaster Resilience Focus: The Prime Minister reiterated the need to shift from response-centric to developmentcentric approaches in disaster management—strengthening the legacy of the Disaster Risk Reduction Working Group initiated under India's G20 Presidency.

### Significance for India and the World

#### 1. Leadership in Global Governance

India's proposal of multiple actionable initiatives highlights its emerging leadership in articulating solutions for global structural challenges across health, skills, technology, and sustainable development.

#### 2. Global South & Development Equity

Proposals like the Open Satellite Data Partnership and

Skills Multiplier Initiative underscore India's push for technological democratization and capacity building in developing nations.

#### 3. Addressing Security and Socio-Economic Threats

Tackling the drugterror nexus and building coordinated global healthcare responses reflect India's understanding of interlinked security and development challenges in a globalized world.

#### 4. Sustainability & Clean Technology

The Critical Minerals Circularity Initiative aligns with global commitments to clean energy transitions, resilient supply chains, and climate mitigation.

### Challenges & Considerations

- **Implementation & Consensus:** Translating proposals into binding or collaborative frameworks among G20 members requires sustained diplomacy and resource commitments.
- **Global Geopolitical Tensions:** Evolving great power rivalries and supply chain politics may affect consensus on technology and resource governance.
- **Data Equity and Accessibility:** Ensuring that open satellite data truly benefits the Global South equitably demands robust policy frameworks.

### Way Forward

India's initiatives aim to shape the G20 agenda toward inclusive development, resilience, and technology democratization. The proposals set a stage for postNew Delhi G20 cooperation, with potential followups on implementation mechanisms, partnerships, and financing models to actualize global development aspirations.

### EXPECTED QUESTION FOR UPSC CSE

#### Descriptive Question

Q. Global challenges such as health emergencies, climate change, and resource security require coordinated international action. Critically examine India's role in promoting inclusive and sustainable global development through multilateral platforms, highlighting the opportunities and challenges in aligning national and global priorities. (15 marks/ 250 words)

### MARINE FISHERIES CENSUS 2025:

**Why in News:** The Government of India has taken a big step to modernize the way it gathers data about fishing communities by launching the Marine Fisheries Census (MFC) 2025 in a completely digital format.

#### Key Details

- This change will help policymakers make better plans for welfare, infrastructure, and support programmes for fishermen and coastal communities.

#### Why this census matters

- The Marine Fisheries Census is conducted once in several years to collect information about fisher households, boats, fishing equipment, coastal infrastructure and socio-economic conditions.
- Traditionally, this was done with paper forms, which were slow and sometimes inaccurate.
- But in 2025, the Government has digitized the entire process — marking a historic shift in data collection in the fisheries sector.

#### Key highlights of the census

##### 1. Fully Digital and Paperless Enumeration

- For the first time, the census process will be completely digital. Enumerators will use mobile applications to collect data with real-time, geo-referenced information. This means the Government will be able to see where and how data is being collected, and make sure it is accurate and up to date.
- The digital tools being used include:
  - VyAS-NAV – For mapping fishing villages and harbours.
  - VyAS-BHARAT – For household and infrastructure data collection.
  - VyAS-SUTRA – For monitoring and supervising enumerators in real time.

##### 2. Large-Scale Coverage Across the Coast

- The census will cover about 1.2 million fishing households in around 5,000 coastal villages and settlements across 13 coastal States and Union Territories, including the Andaman & Nicobar Islands and Lakshadweep.

##### 3. Richer and More Useful Data

- In addition to basic household details, the census will gather deep socio-economic information, such as:

- Family income and major expenses
- Access to credit and insurance
- Impact of the COVID-19 pandemic
- Benefits received from Government schemes like PMMSY and PM-MKSSY
- Participation in fishermen and fish farmer organizations

This richer data will help design better welfare programmes and strengthen support for fishers.

#### 4. Advanced Technology for Accuracy

- To support data accuracy:
  - Drones are being used to count fishing crafts and infrastructure from above in harbours and landing centres.
  - Web dashboards help officials track progress and quality of data in real time.
- These technologies reduce errors and make the process faster and more reliable.

#### Government's Focus on Fisherfolk Welfare

Union Minister of State stressed the importance of the census for improving the livelihood of fishermen. He encouraged fishers and fish farmers to register on the National Fisheries Digital Platform (NFDP) so they can receive various Government benefits.

#### What It Means for the Future

The digital census will give policymakers a strong data foundation for planning welfare schemes, improving coastal infrastructure, and supporting fisher families. Because the data is accurate, detailed, and geo-tagged, it will help in:

- Better targeting government assistance
- Designing climate-resilient policies
- Strengthening support for women, youth, and community organizations
- Boosting sustainable growth in coastal ecosystems

#### Conclusion

The fully digital Marine Fisheries Census 2025 is not just a survey. It is a technology-led initiative that will help India build a modern, data-driven approach to support the livelihood and welfare of millions of fisherfolk. With accurate information, the Government can deliver better services,

plan needed infrastructure, and ensure that the benefits of development reach every coastal community.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

Q. Which of the following digital tools is used for mapping fishing villages and landing centres in Marine Fisheries Census 2025?

- (a) VyAS-SUTRA
- (b) VyAS-NAV
- (c) VyAS-MITRA
- (d) VyAS-DATA

Answer: (b)

## INDIA'S HANDLOOM & HANDICRAFTS INDUSTRY

**Why in News:** The Ministry of Textiles, has announced a National Conference on Handlooms & Handicrafts scheduled concluded in Bhubaneswar, Odisha from 31st October to 1st November 2025.

### Key Details

The event brings together central and state government officials, artisans, weavers, and experts to discuss key issues and new policy directions for the traditional art and craft sectors.

### Significance of handlooms & handicrafts

- India's handloom and handicrafts sectors are deeply rooted in the country's cultural heritage and are major contributors to rural employment, livelihoods, and exports.
- These sectors support millions of artisans, weavers, and craftspersons, particularly in villages and small towns. Policies aimed at strengthening these sectors have both economic and socio-cultural importance.
- Policies are also aligned with initiatives such as "Vocal for Local" to promote indigenous products and global market access for handmade goods.

### Objectives of the conference

- **Identifying Opportunities:** To explore new opportunities for the growth and sustainability of India's handloom and handicraft sectors in both domestic and international markets.
- **Addressing Challenges:** To understand and address long-standing challenges faced by artisans and weavers, such as access to markets, finance, design innovation, and technology upgradation.
- **Deliberating new schemes:** To discuss a new scheme proposed by the Government of India for the sector that aims to improve governance and reach of welfare measures for artisans and stakeholders.

### Expected Outcomes

The conference aims to chart a roadmap for the future of the handmade sector. Expected outcomes include:

- A common understanding of key issues affecting handloom and handicraft artisans.
- Suggestions for policy improvements and better governance structures.
- Enhanced coordination between Centre and States for focused interventions.
- Greater involvement of stakeholders in shaping scheme design and delivery.

### Other Similar Government Initiatives / Schemes

1. National Handloom Development Programme (NHDP)
  - Implemented by the Ministry of Textiles
  - Focuses on weaver welfare, infrastructure support, marketing assistance, and skill development.
2. National Handicrafts Development Programme (NHDP – Handicrafts)
  - Supports craft clusters, design development, and export promotion
  - Aims to improve artisans' livelihoods and global competitiveness.
3. PM Vishwakarma Scheme
  - Launched to support traditional artisans and craftspeople
  - Provides skill training, toolkits, credit support, and market linkage.
4. India Handloom Brand (IHB)
  - Ensures quality certification for handloom products
  - Builds consumer trust and promotes premium handloom goods.

### Way Forward

To ensure long-term growth and sustainability of the handloom and handicrafts sector, the following steps are needed:

1. **Strong Centre–State Coordination**
  - Regular coordination between the Union and State governments can ensure better implementation of schemes and avoid duplication of efforts.
2. **Market Access and Branding**
  - Artisans should be supported through:
    - E-commerce platforms
    - GI tagging
    - National and international exhibitions
      - This will help increase income and visibility of handmade products.

### 3. Skill and Design Upgradation

- Continuous training in modern designs, quality standards, and new technologies should be provided while preserving traditional skills.

### 4. Financial and Credit Support

- Easy access to institutional credit, insurance, and working capital will reduce dependence on middlemen.

### 5. Use of Digital Technology

- Digital platforms can be used for: Direct marketing, Online payments, Registration and tracking of artisans.
  - This improves transparency and inclusion.

### Conclusion

The National Conference on Handlooms & Handicrafts is an important event that brings attention to a sector that blends culture with economy. It seeks to bridge gaps between policy and practice and strengthen the foundation for a vibrant and sustainable handmade ecosystem in India. Active participation from government and craft communities could lead to inclusive growth of the sector and better outcomes for artisans across the country.

#### EXPECTED QUESTION FOR UPSC CSE

##### Prelims MCQ

Q. With reference to the National Conference on Handlooms & Handicrafts, consider the following statements:

1. The conference aims to address challenges and explore growth opportunities for the handloom and handicrafts sector.
2. It is organised by the Ministry of Textiles in collaboration with State Governments.
3. One of its objectives is to discuss new schemes for better governance of the sector.

Which of the statements given above is/are correct?

- (a) 1 only                      (b) 1 and 2 only  
(c) 1, 2 and 3                (d) 2 and 3 only

Answer: (c) 1, 2 and 3

## EMPLOYABILITY CRISIS

**Why in News:** India is facing a growing employability crisis, where a large number of college and university graduates are finding it hard to get jobs that match their qualifications. This challenge is not simply about unemployment, but about the gap between what education teaches and what the industry needs from fresh talent.

### About the employability crisis

- Employability means a graduate has the skills, knowledge, and mindset to succeed in real work environments. It goes beyond academic certificates — it includes practical problem-solving, communication, teamwork, and digital skills that employers expect.
- According to recent assessments, only around 42.6% of Indian graduates are considered job-ready. The rest struggle to find suitable employment even after completing college education.

### Root causes of the crisis

- **Outdated academic curriculum:** Many colleges and universities still follow course content that focuses mainly on theory and exams. This means students learn largely from books, with limited exposure to real industry problems or modern tools used in workplaces.
- **Weak Industry Engagement:** Although industries want graduates who can start work with minimal training, collaboration between academia and industry is often weak. Many companies do recruitment drives but do not participate fully in designing practical training, internships, or curriculum updates.
- **Skills mismatch:** The job market is rapidly changing due to technology — especially in fields like AI, cybersecurity, data analytics, automation, and digital services. Many graduates lack these contemporary skills, which causes a gap between demand and supply of talent.
- **Lack of soft skills:** Employers also look for good communication, teamwork, adaptability, and attitude. Academic courses traditionally focus less on these soft skills, which leads to another gap in employability.

### Impact on Youth and Economy

The employability crisis affects not only individual students but also the economy at large:

- Youth frustration increases when educated young people remain jobless or under-employed.
- Wasted potential arises when degrees do not translate into meaningful work.
- Industries incur extra cost to train fresh graduates before they can contribute effectively.

### Why collaboration matters

- Experts believe that closing the employability gap requires strong partnerships between educational institutions and industries.

### What successful collaboration looks like

Instead of occasional internship drives:

- Industry experts co-design curriculum with universities.
- Hands-on projects, live assignments, and apprenticeships are integrated into education.
- Faculty get exposure to industry trends and technologies.

- Students receive workplace mentoring and real problem-solving exposure.

This kind of deep collaboration ensures students are equipped with both conceptual knowledge and practical skills needed in real jobs.

### Steps taken

Several policy and programme initiatives in India aim to improve employability:

- NEP 2020 encourages flexible and experiential learning that connects education with real-world demand.
- Skill India and digital skill programmes provide specialised training in areas like data science, cybersecurity, and AI.
- Industry-linked courses and internship policies are being introduced to give students early exposure to workplaces.

### Way forward

To truly address the employability crisis, the following measures are important:

- **Co-designed curriculum:** Educational syllabi should be regularly updated with input from employers to match industry expectations.
- **Experiential learning:** More internships, apprenticeships, live industry projects and lab work should be part of regular study programmes.
- **Soft skills training:** Communication, teamwork, analytical thinking and adaptability must become core parts of learning.
- **Data-driven tracking:** Institutions should track how well graduates perform in the workforce and adjust teaching accordingly.

### Conclusion

The employability crisis in India is not a lack of talent — it is a misalignment between education and the labour market. With stronger cooperation between academia and industry, and by preparing students with relevant skills, India can turn education into a powerful foundation for sustainable employment and economic growth.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

Q. Consider the following statements regarding the employability crisis in India:

1. Employability refers only to having a formal degree from a recognised institution.
2. Lack of industry-academia collaboration is one of the major reasons for low employability among graduates.
3. Soft skills like communication and teamwork are increasingly demanded by employers.

Which of the statements given above is/are correct?

- (a) 2 and 3 only                      (b) 1 and 2 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Answer: (a) 2 and 3 only

## INDIA'S SERVICES SECTOR

**Why in News:** Job growth in services is uneven and lagging behind output growth, according to a new report by the policy think-tank NITI Aayog.

### Key findings of NITI Aayog report

#### 1. Services sector still dominates output

- The services sector now contributes about 55% of India's Gross Value Added (GVA) — an indicator of total economic production — up from around 51% a decade ago. This confirms that the sector remains the backbone of the Indian economy.

#### 2. Employment share is still low

- Despite its large share in output, the services sector employs only about 30% of the national workforce (188 million workers) in 2023-24, up from 26.9% in 2011-12. This is far below the global average of around 50% for services employment, pointing to a slower structural transition in India.

#### 3. Job growth and quality are uneven

- The sector added nearly 40 million new jobs over the last six years.
- But most jobs are in traditional, low-wage areas like retail trade, transport and education rather than high-value services such as IT, finance, and professional services.
- Many of these jobs are informal, poorly paid, and lack social security or formal contracts.

#### 4. Regional and demographic disparities

- The report shows uneven growth across states and groups:
- Southern and western states (e.g., Karnataka, Maharashtra, Tamil Nadu, Telangana) lead in high-value services output.
- In contrast, several northern and eastern states lag in shifting workers into better service jobs.
- Urban workers are more likely to be employed in services than rural workers, and women — especially in rural areas — are much less likely to participate in higher-quality service jobs.

### Policy Implications

To ensure inclusive and sustained growth, the Aayog recommends a multi-pronged policy response:



with the aim to ensure that government pay structures are fair, balanced and suited to economic conditions.

- Composition of the Commission will have: One Chairperson, One Part-Time Member, One Member-Secretary.
- The Commission will complete its work and submit its recommendations within 18 months from the date it is formed.
- If needed, the Commission may provide interim (temporary) reports before submitting the final report.

#### What Will the Commission Consider?

While making its recommendations, the 8th CPC will consider:

- Economic conditions of the country
- Need for fiscal prudence (careful use of public money)
- Availability of resources for development and welfare
- Unfunded pension liabilities (pension costs not provided for)
- Impact on State Government finances (as states often adopt central pay recommendations)
- Current salary structure, benefits and working conditions for employees in both central government and public sector undertakings (PSUs)

#### Why the Central Pay Commissions are important?

The 8th Central Pay Commission (CPC) is important because it affects the salary, pension and service conditions of nearly 50 lakh Central Government employees and around 65 lakh pensioners. Its impact is not limited to government employees alone but extends to the overall economy and governance system.

##### 1. Ensures Fair and Updated Pay Structure

- Over time, inflation reduces the real value of salaries.
- The 8th CPC will revise pay to ensure employees can maintain a decent standard of living.
- It helps align salaries with current economic realities.

##### 2. Improves Efficiency and Motivation

- Fair pay increases job satisfaction and morale.
- Motivated employees are more likely to deliver better public services.
- This is crucial for improving governance and administration.

##### 3. Large Impact on Government Finances

- Pay Commission recommendations lead to a significant increase in government expenditure.
- They affect: Union Budget, Fiscal deficit, Long-term pension liabilities.
- Hence, the CPC must balance employee welfare with fiscal discipline.

#### 4. Influence on State Governments

- Many State Governments follow Central Pay Commission recommendations.
- Therefore, the 8th CPC will also affect state finances, especially those already under fiscal stress.

#### 5. Social and Economic Significance

- Increased salaries lead to higher consumption, boosting the economy.
- Pension revisions support social security for the elderly.
- It strengthens trust between the government and its employees.

#### Conclusion

The 8th Central Pay Commission is a crucial step towards ensuring fair compensation, efficient governance and economic balance. While it aims to improve the living standards of government employees and pensioners, it must also remain mindful of the country's fiscal health and development needs. A well-designed and balanced set of recommendations can strengthen public administration, improve service delivery, and contribute to inclusive economic growth. If implemented wisely, the 8th CPC can become a strong pillar of long-term administrative reform in India.

#### EXPECTED QUESTION FOR UPSC CSE

##### Prelims MCQ

Q. Consider the following statements regarding the 8th Central Pay Commission:

1. It has been constituted by the Union Cabinet to revise salaries and pensions of Central Government employees.
2. It will submit its recommendations within 18 months of its formation.
3. Its recommendations are binding on both the Central and State Governments.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 only                              (d) 1, 2 and 3

Answer: (a)

#### INDIA'S GROWTH STRENGTHENS

**Why in News:** The Government of India released key economic data for Quarter 2 (Q2) of FY 202526, indicating a robust macroeconomic performance with real GDP growth estimated at 8.2% — a clear acceleration compared to the corresponding period last year.

**Key highlights**

Combined with steady inflation, increasing industrial output, and rising employment metrics, these figures suggest resilient growth dynamics amid complex global economic conditions.

**Key Economic indicators**

- **GDP Growth:** Real GDP is estimated to grow at 8.2% in Q2 of FY 202526, compared with 5.6% in Q2 of FY 202425. H1 (April–September) growth stands at 8.0%, up from 6.1% a year ago.
- **Inflation:** Consumer Price Index (CPI) inflation eased to 0.25% in October 2025, the lowest in the current CPI series, primarily due to softening food prices.
- **Industrial production:** The Index of Industrial Production (IIP) rose by 4.0% YoY in September 2025, driven by manufacturing growth of 4.8%.
- **Labour force participation:** Labour Force Participation Rate (LFPR) reached a sixmonth high of 55.4% in October 2025, indicating strengthening employment conditions.
- **Exports:** Cumulative merchandise and services exports expanded by 4.84% in April–October 2025 compared to last year.

**Analytical insights**

**1. Sustained Growth Momentum**

- An 8.2% GDP expansion in Q2 underscores India’s continued position as one of the fastestgrowing major economies globally.
- This acceleration is underpinned by broadbased contributions from secondary and tertiary sectors — manufacturing, construction, services and trade — indicating diversified momentum rather than sectoral dependency.

**2. Inflation Within Comfort Zone**

- The sharp moderation of CPI inflation to 0.25% reflects effective price stability management, aided by easing food prices, including oils, cereals, and vegetables.
- Price stability enhances purchasing power and investment confidence — key constituents for sustainable growth.
- Importantly, inflation within the Reserve Bank of India’s tolerance band enables accommodative monetary policy without compromising price stability.

**3. Industrial Activity & Production**

- A 4.0% growth in IIP, especially manufacturing’s 4.8% expansion, points to strengthening industrial performance, a crucial indicator of economic health.
- This aligns with national initiatives such as Make in India and Production Linked Incentive (PLI) schemes, which aim to stimulate manufacturing competitiveness, employment, and value addition.

**4. Labour Market – Improving Participation**

- Labour force metrics show encouraging trends: higher LFPR and a rise in female labour participation — a critical factor for inclusive growth and demographic dividend realization. Initiatives like Skill India Mission and EPFO membership growth contribute to a strengthening job market.

**5. Export Resilience**

- Exports — both merchandise and services — witnessed growth of nearly 5%, reflecting competitiveness in global markets despite international economic headwinds. This aligns with policy thrusts such as the recently approved Export Promotion Mission (EPM) to enhance export infrastructure, credit support, and market access for MSMEs.

**Policy Implications**

**Monetary & Fiscal Policy**

- Synergy between RBI’s monetary policy stance and government expenditure appears to balance growth and price stability, offering a classic case study in macroeconomic management for UPSC economic policy discussions.
- Low inflation facilitates credit accessibility and investment predictability, underpinning sustainable longterm growth.

**Inclusive Development**

- The labour market indicators and export performance underscore structural transformation — a vital area within UPSC’s Indian Economy syllabus.
- Improvements in female labour participation and formal employment reflect progress toward inclusive development goals, which dovetail with SDGs and national employment strategies.

**Conclusion**

India’s Q2 FY 202526 economic data reflect strong growth fundamentals, broadbased industrial recovery, low inflation, improving employment conditions, and resilient external sector performance. These combined indicators point to a robust and balanced economic expansion, reinforcing India’s prospects of emerging as a leading global economy by 2030.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

- Q. Consider the following statements about India’s economy in Q2 FY 202526:
1. Real GDP growth for Q2 FY 202526 was 8.2%, higher than the same period last year.
  2. Consumer Price Index (CPI) inflation eased to 0.25%, the lowest in the current CPI series.

3. The Index of Industrial Production (IIP) grew by 4.0%, led by the mining sector.
4. Labour Force Participation Rate (LFPR) reached a six-month high, reflecting improvement in employment conditions.

Which of the statements given above is/are correct?

- (a) 1, 2 and 4 only                      (b) 1 and 3 only  
(c) 2, 3 and 4 only                      (d) All of the above

Answer: (a) 1, 2 and 4 only

## NATIONAL INDUSTRIAL CLASSIFICATION (NIC) 2025

**Why in News:** In a major move to strengthen India's economic data ecosystem, the Ministry of Statistics & Programme Implementation (MoSPI) formally released the National Industrial Classification (NIC) 2025.

### Key Details

- It was released during the culmination ceremony of the 75th anniversary of the National Sample Survey (NSS) and World Statistics Day 2025 held in Udaipur.
- The NIC serves as a principal statistical standard for classifying economic activities, underpinning surveys, censuses, national accounts, administrative records, and policymaking processes.
- This periodic revision reflects structural shifts in the Indian economy and aligns domestic statistical practices with global standards.

### About National Industrial Classification (NIC)

- The National Industrial Classification (NIC) is a systematic framework that categorises all economic activities in India.
- First introduced in 1962, it has been periodically updated to reflect changes in economic structure, technology, and production processes.
- Previous versions include NIC 1970, 1987, 1990, 1998, 2004 and 2008. The latest iteration — NIC 2025 — marks a significant leap in standardisation and relevance.
- NIC is crucial for compiling reliable economic statistics that inform government policy, academic research, and business decisions.
- It acts as the backbone of data used in GDP estimation, sectoral performance evaluation and policy analysis — areas explicitly highlighted in the UPSC syllabus under Indian Economy and Statistical Indicators.

### Key Features of NIC 2025

- **Alignment with International Standards:** NIC 2025 is harmonised with ISIC Revision 5 — the United Nations'

latest standard — facilitating global comparability of industrial statistics.

- **Enhanced Granularity:** A new 6-digit coding structure replaces the older 5-digit system, allowing more detailed and flexible classification of diverse economic activities.
- **Representation of Emerging Sectors:** The classification now includes expanded categories for renewable energy, fintech, e-commerce, cloud services, blockchain, and digital intermediation, reflecting India's rapid digital transformation.
- **Environmental & Green Economy Integration:** New subclasses capture activities in carbon capture, waste management and environmental remediation, enhancing synergy with Sustainable Development Goals (SDGs) monitoring frameworks.
- **Recognition of Indigenous Sectors:** Traditional sectors such as Ayush-based healthcare and the handloom industry have been distinctly included, signifying the integration of formal and informal economic segments.

### Why NIC 2025 matters for policy and governance

- **Evidence-based policymaking:** With more granular data, policymakers can design targeted economic interventions, especially for emerging industries and digital sectors — a priority under Atmanirbhar Bharat and Viksit Bharat 2047 visions.
- **Improved economic measurement:** Accurate classification improves the precision of national accounts, employment statistics, and sectoral output estimates — areas critical for macroeconomic planning and monitoring.
- **International comparability:** Conformance with global standards enhances India's participation in international statistical reporting and improves benchmarking against other economies.
- **Data-driven reforms:** Better classification supports reforms in taxation, investment policy, labour regulations, and financial inclusion — essential for long-term economic governance.

### Challenges and the road ahead

While NIC 2025 is a forward-looking framework, its successful implementation depends on:

- **Capacity building:** Training officials and statisticians to adopt the new classification across ministries and state agencies.
- **Digital integration:** Leveraging data technologies for realtime data collection and analysis.
- **Coordination with states:** Harmonising subnational classification systems for seamless data aggregation.

### Conclusion

The launch of NIC 2025 represents a significant milestone in India's statistical governance. By capturing the dynamism of the modern economy and aligning with international

standards, it strengthens the foundations of economic data that drive policymaking, academic research, and public discourse. For UPSC aspirants, NIC 2025 is a practical example of how statistical standards shape economic understanding and governance in a rapidly transforming economy.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. Consider the following statements about the National Industrial Classification (NIC) 2025:

1. NIC 2025 is fully aligned with ISIC Revision 5, the United Nations’ international standard for industrial classification.
2. NIC 2025 introduces a 6digit coding structure to capture emerging sectors like fintech, e-commerce, blockchain, and digital intermediation.
3. The NIC framework is primarily used for taxation purposes and has limited application in national accounts.
4. NIC 2025 incorporates environmental and green economy activities to help monitor Sustainable Development Goals (SDGs).

Which of the statements given above is/are correct?

- (a) 1, 2 and 4 only                      (b) 2 and 3 only  
 (c) 1, 3 and 4 only                      (d) All of the above

Answer: (a) 1, 2 and 4 only

**RBI HIGHLIGHTS STRENGTH OF MACROECONOMIC FUNDAMENTALS**

**Why in News:** The global economic environment is marked by policy uncertainty, trade tensions, and weakening external demand — factors that have dampened global growth prospects. Despite these challenges, India’s growth trajectory remains intact due to strong structural support from several domestic economic pillars.

**Key Details**

- **Resilient Domestic Demand:** Highfrequency indicators such as GST collections, digital payments, and away bills depict sustained demand across services and industry sectors. Both rural and urban consumption continue to display vigour, supporting overall aggregate demand.
- **Low and Stable Inflation:** Headline CPI inflation moderated sharply — reaching levels not seen since 2017. This has widened policy space for the RBI to support growth without risking price instability. Low inflation

is a crucial macroeconomic anchor emphasised in UPSC syllabi.

- **Strong Banking and Corporate Balance Sheets:** Healthy financial sector metrics — including robust capital buffers and low nonperforming assets — reinforce economic stability and improve the prospects for credit growth and investment.
- **Foreign Exchange Reserves:** Adequate forex reserves lend confidence to forex market stability and support monetary policy effectiveness amid volatile capital flows.
- **Policy Credibility:** A credible monetary and fiscal framework underpins longterm macroeconomic stability, enabling calibrated response to shocks without policy overreach.

**Challenges**

- **Global Trade Tensions & Protectionism:** Rising tariff barriers and geopolitical tensions could impact export competitiveness and investment flows.
- **Exchange Rate Pressures and FPI Outflows:** The rupee’s depreciation against the US dollar reflects heightened global risk aversion and portfolio investment volatility.
- **Moderated FDI Inflows:** Recent data suggests fluctuations in foreign direct investment patterns, signalling caution among global investors.

**Wider Growth Narrative**

Recent economic projections support the RBI’s sanguine outlook: India’s GDP growth for FY202526 is estimated at around 7.4%, outperforming most major economies. This strong performance is driven by domestic demand, investment momentum, and policy support — factors paralleling RBI’s analysis.

**Conclusion**

The RBI Bulletin’s findings present a nuanced picture: while global uncertainties present real challenges, India’s macroeconomic fundamentals— underpinned by low inflation, robust internal demand, and financial sector health — are enabling the economy to absorb shocks and maintain growth momentum.

**SLOWEST PRIVATE SECTOR GROWTH IN FIVE MONTHS**

**Why in News:** India’s private sector expansion moderated in October 2025, with growth slowing to a fivemonth low, according to the HSBC Flash India Composite Purchasing Managers’ Index (PMI) compiled by S&P Global.

**Key drivers of the slowdown**

1. **Weaker demand conditions**
  - The slowdown was primarily driven by a deceleration in the services sector, where the PMI eased as new

business growth softened after several months of robust expansion.

- While manufacturing activity remained strong, buoyed by domestic demand, it was insufficient to offset the services slowdown in the composite index.

## 2. Higher output prices

- Firms reported rising output prices and input costs, prompting businesses to increase selling charges rather than absorb cost pressures, a development that hinted at persistent inflationary pressures in certain segments.

## 3. Export demand softening

- International demand for Indian goods and services moderated, partly attributed to higher tariffs in key markets, like the United States. This contributed to slower export order growth during the month.

## Significance and Implications

- **Indicator of Demand Trends:** The PMI is regarded as a leading indicator of economic activity, offering realtime insights into demand conditions across sectors. A slowdown, even within expansion territory, signals potential future moderation in GDP growth if underlying demand weakens further.
- **Price Pressures & Inflation:** Rising output prices suggest that inflationary pressures persist within segments of the private sector, complicating the monetary policy outlook as the Reserve Bank of India (RBI) balances inflation control with growth support.
- **External Sector Challenges:** Softening export demand stresses the importance of diversification and competitiveness in foreign markets, especially given lingering global uncertainties and trade policy challenges facing Indian exporters.

## Way Forward

To sustain private sector momentum, the following strategic measures could be considered:

- **Strengthening Domestic Demand:** Fiscal and monetary measures to support consumption and investment can help offset external demand headwinds.
- **Enhancing Competitiveness:** Focused reforms to improve export diversification and reduce cost bottlenecks for services firms.
- **Productivity Enhancement:** Incentivising technology adoption, skilling, and supplyside reforms to improve efficiency across manufacturing and services.

## Conclusion

October 2025's PMI data shows that India's private sector continues to expand, but the moderation in growth—

especially in services—and persistent price pressures point to emerging challenges. Monitoring these trends will be vital for policymakers in calibrating supportive economic measures and sustaining India's growth trajectory.

## EXPECTED QUESTION FOR UPSC CSE

### Prelims MCQ

- Q. Consider the following statements regarding India's Private Sector growth in October 2025, as indicated by the HSBC Flash India PMI:
1. The composite PMI fell to a five-month low but remained above the 50-mark indicating expansion.
  2. The slowdown was primarily due to weaker manufacturing demand.
  3. Firms reported rising output prices, indicating persistent inflationary pressures.
  4. The PMI is considered a leading indicator of economic activity.

Which of the statements given above are correct?

- (a) 1, 2 and 3 only      (b) 1, 3 and 4 only  
(c) 2 and 4 only      (d) 1, 2, 3 and 4

(b) Answer

### Descriptive Question

"Sustained private sector growth is essential for employment generation, investment, and overall economic stability." Examine the challenges faced by India's private sector in maintaining robust growth and discuss the policy measures that can enhance its resilience and competitiveness in the current economic scenario. (15 marks/ 250 words)

## MARKET ACCESS SUPPORT SCHEME

**Why in News:** In a bid to strengthen India's export ecosystem amid global headwinds and rising protectionism, the Government of India has launched a ₹4,531-crore Market Access Support (MAS) scheme.

### Key Details

- This initiative, unveiled by the Directorate General of Foreign Trade (DGFT), is the first operational component of the broader Export Promotion Mission (EPM) with an overall outlay of ₹25,060 crore for 2025–26 to 2030–31.
- The scheme comes at a time when Indian exports face external challenges, including higher tariffs in key markets such as the United States, necessitating proactive measures to diversify markets and boost global competitiveness.

### Key Features of the Market Access Support (MAS) Scheme

- **Financial Support for Global Outreach:** MAS provides structured financial assistance for participation in

international trade fairs, exhibitions, buyer-seller meets (BSMs) and mega reverse buyer-seller meets.

- **Cost Sharing Mechanism:** The government will fund 60% of approved costs (up to ₹5 crore per BSM and ₹10 crore per mega event), while the industry contributes the remainder.
- **Priority for MSMEs:** At least 35% participation slots are reserved for Micro, Small and Medium Enterprises (MSMEs), emphasising inclusivity and capacity building of smaller exporters.
- **New Market Focus & Innovation Support:** The scheme earmarks support for proof-of-concepts and product demonstrations, particularly in technology-driven and emerging sectors, to help Indian goods and services gain visibility abroad.

**Linkages with Export Promotion Mission (EPM)**

The MAS forms part of the Export Promotion Mission, a unified framework replacing several fragmented export schemes. The EPM is designed to catalyse export growth by:

- Promoting market diversification into Latin America, Africa and other emerging regions;
- Strengthening non-financial enablers such as quality compliance, branding and global partnerships;
- Integrating multiple ministries and export promotion councils under a coordinated digital delivery platform.

Alongside MAS, the government has announced related support measures including a ₹7,295-crore credit support package featuring interest subvention and collateral guarantees to ease access to trade finance for exporters, especially MSMEs.

**Significance for India’s Export Strategy**

- **Market Diversification:** MAS accelerates India’s outreach to non-traditional markets, reducing dependence on a few major buyers and mitigating risk from tariff escalations.
- **MSME Empowerment:** With 35% participation quotas and targeted support, small exporters will be better equipped to compete globally.
- **Holistic Export Ecosystem:** By dovetailing demand-side initiatives like MAS with supply and finance-side measures under EPM, the government is building a comprehensive export-promotion architecture.

**Challenges and Imperatives**

- **Implementation Capacity:** Effective execution across states and sectors, including targeted guidance for first-time exporters, will be critical.
- **Quality and Standards Compliance:** Exporters must meet international standards and certifications, which often remain bottlenecks for MSMEs.
- **Sustainable Market Penetration:** Beyond events and fairs, long-term strategies involving brand building, digital market intelligence, and sustained buyer relations are essential.

**Conclusion**

The Market Access Support scheme represents a significant policy push to enhance India’s export competitiveness in an increasingly challenging global trade environment. By prioritising market diversification, small business inclusion, and structured financial support, the government’s approach under the Export Promotion Mission signals a strategic shift towards a more resilient and diversified export ecosystem—a key economic imperative in the post-pandemic and geopolitically volatile era.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. With reference to the recently launched Market Access Support (MAS) scheme, consider the following statements:

1. The scheme is a component of the Export Promotion Mission (EPM) approved by the Government of India.
2. It provides financial assistance for participation in international trade fairs and buyer-seller meets.
3. At least 35% participation under the scheme is reserved for MSMEs.
4. The scheme is implemented by the Reserve Bank of India.

Which of the statements given above are correct?

- (a) 1, 2 and 3 only
- (b) 1 and 4 only
- (c) 2 and 3 only
- (d) 1, 2, 3 and 4

(a) Answer:

**Descriptive Question**

The recently launched Market Access Support (MAS) scheme reflects a shift in India’s export strategy from incentive-based support to market-oriented facilitation. Discuss the key features of the MAS scheme and examine its significance for MSMEs and export diversification. (15 marks/ 250 words)

**SEBI UNVEILS REFORMS**

**Why in News:** The Securities and Exchange Board of India (SEBI) has unveiled a comprehensive set of reforms aimed at enhancing the regulatory experience for Foreign Portfolio Investors (FPIs), marking a pivotal step in India’s capital market liberalisation strategy.

**Role of FPIs in India’s Capital Markets**

- FPIs play a crucial role in India’s financial markets, bringing liquidity, diversification, and global capital. As of late 2025, FPIs accounted for nearly 17% of the listed equity market, with assets under management around USD 876 billion, underlining their significance in India’s market ecosystem.

- Historically, SEBI has continued to balance the twin objectives of market development and investor protection, adapting regulatory frameworks to dynamic global investment patterns and systemic risk considerations. This includes ease-of-doing-business measures, risk-based disclosure thresholds, and sophisticated compliance protocols.

### Key Reforms Announced by SEBI

#### 1. Digital Transformation & Paperless Onboarding

- SEBI plans to make the FPI registration process fully paperless, leveraging digital signatures and robust data security measures.
- The adoption of end-to-end digital processing aims to cut down procedural delays and reduce compliance burden — a key demand from global institutional investors.
- Supporting this, the regulator has integrated digital signature facility within the Common Application Form (CAF) portal, allowing FPIs to obtain and use digital signatures during registration itself — a significant step towards seamless onboarding.

#### 2. Simplified & Harmonised Compliance Framework

- SEBI has signalled a push towards risk-based regulation and simplified compliance for certain categories of FPIs, especially those focused on low-risk, sovereign debt instruments.
- Recent amendments allow FPIs investing solely in Indian government securities to benefit from relaxed compliance norms — including aligned KYC timelines with RBI norms, reduced reporting requirements, and exemption from investor group disclosures.
- This paralleled initiative is expected to enhance foreign interest in India's sovereign bond market and broaden the investor base in government securities, complementing the broader macro-economic objective of deepening domestic debt markets.

#### 3. Review of Market Microstructure

- To strengthen linkages between India's cash and derivatives markets, SEBI has constituted a working group to comprehensively review short selling and the Securities Lending & Borrowing (SLB) framework — an important reform for efficient price discovery and market completeness.

### Why These Reforms Matter

- Capital Inflows & Market Confidence:** By reducing friction in FPI processes, SEBI seeks to attract stable and long-term foreign capital — crucial for narrowing the current account deficit and sustaining economic growth.
- Market Depth & Liquidity:** Easier access and better regulatory experience for FPIs can deepen domestic equity and debt markets — a key indicator of market maturity.

- Global Integration:** Digitisation and streamlined processes align India with global best practices, improving its global investment competitiveness.

### Challenges and Considerations

- Volatility Risk:** Increased foreign participation can amplify short-term volatility, particularly in asset classes sensitive to global risk sentiment.
- Regulatory Coordination:** Harmonisation between SEBI and the Reserve Bank of India (RBI) is critical, especially for KYC, foreign exchange and repatriation norms.
- Data Security & Compliance:** Full digitisation demands robust cybersecurity frameworks to protect sensitive investor and transaction data.

### Way Forward

- Regulatory Coordination:** Strengthen coordination between SEBI, RBI and the Ministry of Finance to ensure uniform norms on KYC, taxation and capital flows through a single-window framework.
- Policy Predictability:** Ensure regulatory stability and stakeholder consultation to avoid abrupt changes that deter long-term FPI investments.
- Market Deepening:** Expand corporate bond and derivatives markets and strengthen the Securities Lending and Borrowing (SLB) mechanism to enhance liquidity and hedging options.
- Risk Management:** Use calibrated macro-prudential tools to manage volatility from sudden capital inflows and outflows while encouraging long-term FPIs like pension and sovereign funds.
- Digital Security:** Strengthen cybersecurity and data protection frameworks alongside full digitalisation of FPI processes.

### Conclusion

SEBI's reform push is a strategic move to modernise India's capital market infrastructure, enhance foreign investor experience, and align regulatory frameworks with global standards. Through digital transformation, compliance rationalisation, and structural reviews, India is poised to improve its attractiveness as a destination for FPI capital — an essential component for sustained market development and economic resilience. However, effective implementation and coordination with affiliated institutions like RBI will determine the long-term impact of these reforms.

#### EXPECTED QUESTION FOR UPSC CSE

##### Descriptive Question

- Q. "Recent reforms by SEBI to improve the experience of Foreign Portfolio Investors (FPIs) reflect India's attempt to balance capital market liberalisation with financial stability." Discuss the key reforms introduced by SEBI in this regard and examine their significance for India's capital markets. Suggest further measures to ensure sustainable and stable foreign investment inflows. (15 marks/ 250 words)

### TAAL VOLCANO

**Why in News:** Taal Volcano in the Philippines erupted **three times over a short period**, sending ash and steam plumes into the sky, prompting authorities to keep volcanic **Alert Level 1** (low-level unrest) and monitor for further activity due to potential hazards. These eruptions were documented by the **Philippine Institute of Volcanology and Seismology (PHIVOLCS)**.

#### About Taal Volcano

- **Location:** Batangas Province, Luzon Island, **Philippines**; situated within **Taal Lake** on Volcano Island — a volcanic caldera system.
- **Significance:** One of the most active volcanoes in the Philippines, with frequent minor and occasional major eruptions historically, affecting local populations, air travel, and environment.

#### Details of Recent Activity

- **Eruptions:** PHIVOLCS recorded **three minor eruptions** on **October 26, 2025** — one **phreatic eruption** and two **phreatomagmatic eruptions** originating at the main crater.
  - **Phreatic eruptions** are steam-driven explosions caused by heating of groundwater by magma.
  - **Phreatomagmatic eruptions** involve interaction between magma and water, leading to explosive response and ash emission.
- **Alert Status:** **Alert Level 1** continues, indicating *low-level unrest* and potential for minor eruptions, volcanic earthquakes, minor ashfall and gas emissions.

#### Impacts of Volcanic Activity

##### Environmental

- **Air Quality:** Ash and gas (e.g., sulfur dioxide) can degrade air quality, causing respiratory issues and environmental corrosion.
- **Water & Soil:** Ashfall can affect water sources and agricultural productivity.

##### Socio-Economic

- **Health:** Residents around Taal Lake may experience respiratory irritation, eye problems, and longer-term health effects in severe cases.

- **Aviation:** Flight restrictions issued due to ash cloud hazards impacting visibility and aircraft engines.
- **Tourism & Livelihoods:** Local tourism and fishing activities around the lake may be disrupted during heightened activity.

#### Broader Geological Significance

- Taal Volcano's activity reflects the **complex interplay of water-magma interactions** in caldera systems.
- Philippine volcanoes lie along the **Pacific Ring of Fire**, a zone of frequent tectonic and volcanic activity, making monitoring critical for disaster preparedness and risk mitigation.

#### EXPECTED QUESTION FOR UPSC CSE

##### Prelims MCQ

- Q. Which of the following types of volcanic eruptions involves interaction between magma and water leading to explosive ash ejection?
- Effusive eruption
  - Phreatic eruption
  - Phreatomagmatic eruption
  - Strombolian eruption

(c) Answer.

Phreatomagmatic eruption.

##### Descriptive Question

- Q. Analyse the multi-sectoral impacts of recurrent volcanic activity on local communities and aviation, with specific reference to Taal Volcano's 2025 eruptions.

### RARE STRIPED HYENA

**Why in News:** A rare striped hyena (*Hyaena hyaena*) was spotted and recorded on camera near **Ganeshgudi bridge in the Kali Tiger Reserve** in Uttara Kannada district of Karnataka — marking the **first documented sighting** of this species in this portion of the **Western Ghats**, a region where it was previously unrecorded.

#### About the Striped Hyena

- **Scientific Name:** *Hyaena hyaena*
- **Distribution:** South Asia (India, Nepal, Afghanistan), North & Sub-Saharan Africa, Western & Central Asia.



### Jomon Culture (Quick Facts)

- **Time period:** c. 14,500 BCE – 1,000 BCE
- **Type of society:** Advanced hunter-gatherers
- **Key feature:**
  - World's earliest known **pottery tradition**
  - Cord-marked designs ("Jomon" = rope pattern)
- **Significance:** Challenges idea that pottery emerged only with agriculture

### Why This Discovery Is Important

#### 1. Archaeological Significance

- Strengthens evidence that **pottery-making began before settled farming**
- **Provides insights into:**
  - Early human craftsmanship
  - Food storage and cooking practices

#### 2. Technological Significance

- **Discovery made using:**
  - Underwater scanning
  - 3D mapping
  - Autonomous underwater vehicles (AUVs)
- Shows growing role of **marine & underwater archaeology**

#### 3. Preservation Value

- Low oxygen and stable freshwater conditions helped preserve the relic
- Rare example of **intact prehistoric artifact** found underwater

## KUNMING BIODIVERSITY FUND FOR NATURE-FRIENDLY AGRICULTURE

**Why in News:** Seven countries — Cook Islands, Madagascar, Mexico, Nepal, Sri Lanka, Turkey and Uganda — have secured USD 5.8 million in funding from the **Kunming Biodiversity Fund (KBF)** to promote **nature-friendly agricultural practices and biodiversity conservation** under the **Kunming-Montreal Global Biodiversity Framework**.

### What is the Kunming Biodiversity Fund (KBF)?

- **Establishment:** A global biodiversity finance mechanism launched in **2021** by China's Ministry of Ecology and Environment in collaboration with the **UN Environment Programme (UNEP)** and partners.
- **Purpose:** To support **developing countries** in implementing biodiversity conservation actions and integrating biodiversity priorities into national policies, especially in sectors like agriculture.

- **Context:** The fund is part of efforts to help countries implement the **Kunming-Montreal Global Biodiversity Framework (KMGBF)** — a comprehensive global plan adopted by 196 countries in 2022 to **halt and reverse biodiversity loss by 2030** and achieve long-term biodiversity goals by 2050.

### Purpose of the \$5.8 Million KBF Allocation

The recent funding will support projects in the seven beneficiary countries in the following areas:

#### a. Mainstreaming Biodiversity in Agrifood Systems

- Aligning national biodiversity strategies with agricultural policies.
- Enhancing **institutional capacity**, financial incentives, and **knowledge sharing** to promote biodiversity-friendly farming. (*Focus countries: Madagascar, Uganda, Mexico*)

#### b. Community Empowerment

- Strengthening ecosystem data and classification systems.
- Promoting sustainable agroecology rooted in **traditional knowledge**, with emphasis on women and youth engagement. (*Focus country: Cook Islands*)

#### c. Invasive Species Management

- Community-based strategies to manage harmful invasive species that threaten local ecosystems and livelihoods. (*Focus countries: Nepal, Sri Lanka*)

#### d. Strengthening Ecosystem Resilience

- Promoting water-efficient agriculture and biodiversity-friendly practices to sustain fragile landscapes and livelihoods. (*Focus country: Turkey around Lake Eğirdir*)

### Significance of the Initiative

#### a. Bridging Biodiversity Finance Gap

- Global biodiversity finance needs are estimated at **USD ~700 billion annually**, but current resources fall far short. Funds like the KBF help **mobilise finance for implementation at the country level**.

#### b. Linking Agriculture with Conservation

- Agriculture is both a **driver of biodiversity loss** and a **potential solution** when sustainable practices are adopted. Mainstreaming biodiversity across agrifood systems helps balance **food security, livelihoods and ecosystem health**.

#### c. Support for Developing Countries

- Grants from the Fund target countries with limited financial resources but **high biodiversity value**, strengthening their capacity to protect ecosystems and meet international targets.

## Challenges and Limitations

- Despite new funding mechanisms like KBF, the **global biodiversity finance gap persists**. Greater mobilization of **public and private sector funds** is still required to fully achieve the KMGBF's goals.

### EXPECTED QUESTIONS FOR UPSC CSE

#### Prelims MCQ

Q1. The Kunming Biodiversity Fund (KBF) was established mainly to:

- Finance climate mitigation projects under the Paris Agreement
- Support biodiversity conservation and implementation of the Kunming-Montreal Global Biodiversity Framework
- Fund ocean exploration projects
- Promote space-based biodiversity monitoring

(b) :Answer

Q2. Which of the following is a key target under the Kunming-Montreal Global Biodiversity Framework?

- Reducing greenhouse gas emissions by 50% by 2030
- Mobilizing USD 200 billion per year for biodiversity finance by 2030
- Achieving 100% renewable energy use by 2050
- Banning all pesticides by 2030

(d) :Answer

#### Descriptive Question

Q. Discuss the role of international biodiversity finance mechanisms such as the Kunming Biodiversity Fund in mainstreaming biodiversity considerations into agricultural systems. What challenges remain in mobilizing adequate funds for global biodiversity conservation?

## INDIA REFRAMES ITS RENEWABLE REVOLUTION

**Why in News:** India's renewable energy sector is transitioning from **rapid capacity additions** to building a **robust, resilient, and system-integrated renewable energy framework** that supports long-term goals like achieving **500 GW of non-fossil capacity by 2030** and advancing the **Viksit Bharat** vision. The focus is now on *system strength* – grid integration, energy storage, market reforms, and infrastructure expansion — rather than sheer megawatt numbers.

### Background: India's Renewable Journey

- India has scaled its renewable energy (RE) capacity **more than fivefold over the past decade**, from under ~35 GW in 2014 to over ~197 GW (excluding large hydro).

- The **500 GW non-fossil energy target by 2030** is part of India's climate commitments under the **Paris Agreement** and net-zero by 2070 goal.
- Renewable energy includes **solar, wind, bioenergy, small hydro**, and is increasingly complemented by **energy storage and hybrid projects**.

### Key Components:

#### 1. Grid Integration & Transmission

- Investment in transmission (e.g., Green Energy Corridor, high-capacity lines linking renewable-rich states to demand centres).
- Reforms like **CERC General Network Access (GNA) Regulations, 2025** to prioritise grid readiness.

#### 2. Energy Storage & Hybridisation

- **Battery Energy Storage Systems (BESS)** deployment at grid and project levels ensures *firm and dispatchable* green power.
- Hybrid Renewable energy and storage tenders indicate market shift toward reliability.

#### 3. Market & Contract Reforms

- Use of **Virtual Power Purchase Agreements (VPPAs)**, green attribute trading, ancillary markets and **electricity market reforms**.

#### 4. Domestic Value Chain, Manufacturing & Policy Support

- *Production-Linked Incentive (PLI) scheme*, **Domestic Content Requirements**, fiscal adjustments like GST recalibration — to strengthen local manufacturing and reduce import dependence.

#### 5. Multiple Pathways for Growth

- Apart from central Renewable energy agency bids, **state agencies and commercial/industrial consumers** are adding Renewable energy capacity.

### Challenges & Current Realities

- **Grid & Institutional Lag:** Renewable Energy capacity growth has outpaced grid readiness and contractual frameworks, a challenge typical of fast-moving energy transitions.
- **Global Headwinds:** Supply chain disruptions, module price volatility, and tight financing can slow commissioning timelines.
- **Transition Phase:** The recent moderation in headline capacity additions is viewed as a **recalibration** — necessary for building durable infrastructure and market systems.

### Linkage with Viksit Bharat Vision

- **Viksit Bharat** aims for a developed nation by 2047, emphasising *economic strength, infrastructure resilience, and sustainable growth*.

- A **clean energy ecosystem** with grid robustness, energy storage, and manufacturing depth aligns with this vision by:
  - Boosting *energy security & employment*
  - Attracting *domestic and foreign investment*
  - Enhancing *technological capabilities* (e.g., green hydrogen, pumped hydro, offshore wind)

**Synergies with Broader Energy & Climate Goals**

- Supports **India’s climate commitments**:
  - Net-zero by 2070
  - 500 GW non-fossil capacity by 2030
  - Reduced carbon intensity and pollution.
- Promotes **energy justice & access** through distributed solar and rural initiatives (e.g., PM Surya Ghar Muft Bijli Yojana).

**INDIA JOINS BRAZIL-LED FOREST FUND AS OBSERVER AT COP30**

**Why in News:** At COP30 (30th Conference of Parties to the UNFCCC) in Belém, Brazil, India joined the Brazil-led Tropical Forests Forever Facility (TFFF) as an observer and called for higher global climate ambition a decade after the Paris Agreement. India also urged developed nations to increase emission cuts and deliver adequate climate finance.

**Background: COP30 & Paris Agreement**

- **COP30:** A global climate summit under the UN Framework Convention on Climate Change (UNFCCC), held in Belém, Brazil (Nov 10–21, 2025).
- Marks **10 years since the Paris Agreement (2015)**, which aims to limit global warming well below 2 C and pursue efforts for 1.5 C above pre-industrial levels.
- Countries submit **Nationally Determined Contributions (NDCs)** — climate action plans outlining mitigation and adaptation targets.

**What is the Tropical Forests Forever Facility (TFFF)?**

- **Initiated by Brazil:** A global blended-finance mechanism to support tropical forest conservation.
- **Aim:** Mobilise around **USD 125 billion** via public, private and sovereign investments.
- **Mechanism:** Returns from investments are used to **reward tropical forest countries** that preserve or expand forest cover.
- **Observer Role:** India has joined TFFF as an **observer** — enabling dialogue and cooperation without full commitment at this stage.

**Why Tropical Forest Conservation Matters**

- Climate Regulation**
  - Tropical forests are crucial **carbon sinks**, absorbing CO<sub>2</sub> and mitigating climate change.
  - Their protection prevents release of stored carbon and supports global climate targets.
- Biodiversity Hotspots**
  - High biodiversity — home to countless species and ecosystems vulnerable to deforestation and degradation.
- Ecosystem Services**
  - Support water cycles, soil fertility, indigenous livelihoods and climate resilience.

**India’s Position at COP30**

- Support for Multilateral Climate Action**
  - India reaffirmed commitment to **multilateralism**, the **Paris Agreement**, and the **principle of equity and Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC)**.

**EXPECTED QUESTIONS FOR UPSC CSE**

**Prelims MCQ**

Q1. Which of the following best describes the current phase of India’s renewable energy transition?

- Focus only on adding capacity
- Building transport infrastructure
- Transitioning toward system integration and reliability
- Reducing renewable energy targets

(c) Answer

Transitioning toward system integration and reliability.

Q2. Virtual Power Purchase Agreements (VPPAs) in the renewable energy sector are primarily used to:

- Directly supply fossil fuel power to industries
- Contract renewable power without physical delivery
- Increase coal power generation
- Finance only interstate transmission

(b) Answer

Contract renewable power without physical delivery.

**Descriptive Question**

Q. Analyse how reforms in renewable energy policy, including grid integration and energy storage, can help India meet its climate commitments by 2030.

**b. Call for Stronger Ambition**

- India stated **global climate ambition remains inadequate** 10 years after Paris.
- Emphasised that many NDCs fall short of the state's climate goals required to keep warming to 1.5 C.

**c. Developed Nations' Role**

- India urged developed countries:
  - To **accelerate emission reductions** faster than currently pledged.
  - To provide **adequate, predictable and concessional climate finance**, technology transfer and capacity building to developing nations.

**d. India's Climate Achievements**

- **India highlighted:**
  - Reduced **emission intensity of GDP** by ~36% (2005–2020).
  - Over 50% of installed power capacity from **non-fossil sources**, achieving its revised NDC early.
  - Forest and tree cover expanded to ~25.17%, adding significant carbon sink capacity.

**Significance for India**

**a. Strengthening South-South Cooperation**

- India's observer role in TFFF aligns with **South-South climate collaboration**, particularly with Brazil and other tropical forest countries.

**b. Enhancing Climate Diplomacy**

- Signals India's engagement in **global climate finance architecture** and support for **nature-based solutions**.

**c. Credibility Boost**

- Reinforces India's image as a **responsible global actor** committed to climate stabilization and equity in international frameworks.

**EXPECTED QUESTIONS FOR UPSC CSE**

**Prelims MCQ**

**Q. The Tropical Forests Forever Facility (TFFF) aims to:**

- (a) Fund fossil fuel phase-out in developed economies
- (b) Reward countries for conserving and expanding tropical forests
- (c) Finance urban air pollution control only
- (d) Support nuclear energy transition globally

Answer: (b)

**Descriptive Question**

Q. "Nature-based solutions such as global forest funds are essential for effective climate action." Examine this statement with reference to the Tropical Forests Forever Facility (TFFF) launched at COP30. (15 marks, 250 words)

**IBERIAN LYNX**

**Why in News:** A rare white Iberian lynx — believed to be the first ever leucistic individual of its kind recorded in the wild — has been captured on camera in the mountains of Jaén in southern Spain. The sighting underscores both **wildlife conservation success** and the significance of genetic anomalies in biodiversity studies.



**About the Iberian Lynx**

**Scientific Name:** *Lynx pardinus*

**Distribution:** Native to the **Iberian Peninsula (primarily Spain and Portugal)**.

**Habitat:** Mediterranean scrublands and forests with dense cover and ample prey (European rabbit).

**Physical Traits:** Medium-sized wild cat with spotted coat, tufted ears, short tail, and ruff around the face.

**Conservation Status:**

- Once classified as **Critically Endangered** with fewer than 100 individuals in early 2000s.
- Through sustained conservation since the 2000s, numbers have risen to **over ~2,000**, and the IUCN now lists it as **Vulnerable**.

**Significance:** One of the **world's most endangered feline species**, the lynx plays a critical ecological role as a *top predator*, regulating prey populations.

**What Is Leucism?**

- **Leucism:** Partial loss of pigmentation due to reduced development of pigment-producing cells.
- **Albinism vs Leucism:**
  - *Albinism* — Total absence of melanin; affects skin, hair, and eyes (pink/red eyes).
  - *Leucism* — Partial loss; **normal eye colour** maintained.
- **Ecological Implications:** While visually striking, pale coat may reduce camouflage, potentially affecting *hunting* and *predator avoidance*.

**Conservation Context**

**Historical Decline**

- 20th century pressures:

- Habitat loss, poaching, decline in prey (European rabbit), and legal persecution reduced population drastically.
- By early 2000s, **fewer than 100** remained.

### Recovery Efforts

- **Captive breeding programmes** and **planned reintroductions** since mid-2000s.
- **Habitat protection** and restoration, along with prey recovery measures.
- Supported by **EU LIFE Projects**, national governments, and NGOs.
- Population now >2,000, leading to IUCN down-listing to Vulnerable.

### Significance of the White Lynx

- Represents **genetic diversity** within the recovering population.
- Acts as a **symbol of conservation success**, showing that intensive protection can not only increase population but also maintain rare genetic traits.

### Ecological Importance of the Iberian Lynx

- **Trophic role:** As a top predator, helps regulate populations of herbivores and smaller carnivores, maintaining ecosystem balance.
- **Habitat indicator:** Healthy lynx populations indicate robust ecosystems with ample prey and minimal human disturbance.

## EXPECTED QUESTIONS FOR UPSC CSE

### Prelims MCQ

Q1. Leucism in animals is characterized by:

- (a) Complete lack of melanin and red pupils
- (b) Partial loss of pigmentation with normal eye colour
- (c) Seasonal change in coat colour
- (d) Pigmentation patterns unique to domesticated species

(b) :Answer

Q2. Which of the following best describes the conservation status change of the Iberian lynx?

- (a) From Least Concern to Endangered
- (b) From Critically Endangered to Vulnerable
- (c) From Vulnerable to Extinct in Wild
- (d) From Extinct to Endangered

(b) :Answer

### Descriptive Question

Q. "The appearance of rare genetic variants in wild populations can be both an indicator of genetic health and a challenge for conservation management." Discuss with reference to recent wildlife sightings.

## LOCAL TOPOGRAPHY CONTRIBUTES TO AIR POLLUTION

**Why in News:** The worsening air quality in India's **national capital region, especially Delhi**, is not only due to emissions from vehicles, industry and stubble burning, but also because **local topography amplifies the problem**, trapping pollutants and worsening seasonal smog conditions.

### Air Pollution Overview

- According to the **2024 World Air Quality Report**, India ranked as the **5th most polluted country** globally in terms of annual average **PM2.5 concentration**, with New Delhi the most polluted capital city in the world.
- Air pollution is **transboundary in nature**, moving across regions and borders, indicating the need for coordinated action.

### What Is Local Topography?

- **Topography** refers to the physical features of a region's surface — such as mountains, hills, plains and plateaus — that influence **wind patterns, atmospheric movement and pollutant dispersion**.
- Local topographical features can create **natural barriers or basins** that affect how air masses and pollutants move.

### How Topography Influences Air Quality

#### a. Bowl-Shaped Basin of Delhi

- Delhi sits in a **bowl-like depression** in the **Indo-Gangetic Plains (IGP)**, bounded by:
  - **Himalayas** to the north,
  - **Aravalli hills** to the southwest,
  - **Malwa and Deccan plateaus** to the south.
- This configuration **inhibits lateral movement of polluted air**, making dispersion difficult.

#### b. Barrier Effect

- The **Himalayas act as a barrier** that prevents the northward escape of polluted air, forcing it to travel eastward through the plains rather than dissipating.

#### c. Temperature Inversion

- **Winter temperature inversions** occur when a layer of warm air caps cooler air near the surface.
- This prevents vertical dispersion of pollutants, trapping them close to the ground and leading to **smog formation**.

**d. Reduced Mixing Height**

- **Post-monsoon** conditions bring **lower temperatures** and **lighter winds**, reducing the **mixing height** (the height up to which pollutants can disperse).
- Pollutants thereby remain near the surface.

**e. Turbidity Island Effect**

- Fog combined with pollutants creates **smog and haze**, further reducing visibility and complicating air quality conditions during seasonal peaks.

**Regional and Seasonal Dimensions**

- **Winter winds** from northwest transport pollutants from agricultural burning in Punjab and neighbouring states, intensifying Delhi’s pollution burden.
- Lack of strong winds and rain in winter prevents natural cleansing of the atmosphere.

**Health and Socio-Economic Impacts**

- Air pollution is now the **second leading risk factor for death globally**, with **PM2.5 exposure** linked to **respiratory, cardiovascular, immune, neurodevelopmental, and other chronic conditions**.
- **Children** are particularly vulnerable due to higher respiratory rates relative to body weight.
- Healthcare costs and lost productivity impose a **significant economic burden** on countries.

**Government Policies and Measures**

- National Clean Air Programme (NCAP)**
  - Launched in **January 2019**, aims to improve air quality in **131 cities** through monitoring and sector-wise emission reduction actions.
- Graded Response Action Plan (GRAP)**
  - A **tiered set of actions** triggered by different Air Quality Index levels to control pollution episodes.
- Vehicle Scrappage and Emission Controls**
  - Policies to phase out older, high-emission vehicles and restrict entry of polluting vehicles.
- Technological Interventions (with Limitations)**
  - **Anti-smog guns, smog towers, cloud seeding** — attempted but with **limited effectiveness**.

**EXPECTED QUESTIONS FOR UPSC CSE**

**Prelims MCQ**

- Q1. Which meteorological phenomenon traps pollutants close to the surface, worsening air pollution in winter?
- (a) Cyclonic circulation      (b) Temperature inversion  
 (c) El Niño                      (d) Nor’wester

Answer: (b)

Q.2 Delhi experiences severe air pollution partly because it is situated in a topographical bowl bounded by which of the following?

- Himalayas                      Aravalli hills  
 Western Ghats

Select the correct answer:

- (a) 1 and 2 only                      (b) 1 and 3 only  
 (c) 2 and 3 only                      (d) 1,2 and 3

Answer: (a) 1 and 2 only

**Descriptive Question**

Q. Explain how local topography and meteorological conditions exacerbate air pollution in Northern India, particularly in Delhi. Assess the adequacy of current policy measures in addressing these geography-linked challenges.

**WMO’S EARLY WARNINGS FOR ALL REPORT**

**Why in News:** The **World Meteorological Organization (WMO)** published a new report titled *Early Warnings for All in Focus: Hazard Monitoring and Forecasting* that assesses global progress in strengthening **multi-hazard early warning systems** — key tools to protect lives and property from extreme weather, climate and water-related hazards. The initiative aims to ensure that **every person on Earth is covered by life-saving early warning systems by 2027**.

**Background: Early Warnings for All (EW4All)**

- **Initiative launched:** 2022 by the **UN Secretary-General**; co-led by **WMO, UNDRR, ITU and IFRC**.
- **Goal:** Universal coverage of **Multi-Hazard Early Warning Systems (MHEWS)** by **2027** so that *no country or community is left behind*.
- **Need:** Climate change intensifies weather extremes — cyclones, floods, heatwaves, droughts, etc. — increasing disaster risk. Early warnings save lives and reduce economic losses significantly.

**Significance:** Early warning systems are not luxuries — they are a **cost-effective disaster risk reduction tool** that can provide up to 10 return on investment by reducing loss of life and property.

**Core Focus of the WMO Report**

The WMO report *“Early Warnings for All in Focus: Hazard Monitoring and Forecasting”* examines progress specifically under **Pillar 2** of the EW4All initiative — **hazard monitoring, observing networks and forecasting systems**.

**Key Areas Covered**

- Strengthening Observations**
  - Expansion of the **Global Basic Observing Network**

(GBON), automation of national stations, and reduction of data gaps — especially in Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

**b. Data Sharing & Exchange**

- Launch of **WIS 2.0**, an open, cloud-ready data exchange platform that enables real-time, global data flows to support forecasts worldwide.

**c. Forecasting Capabilities**

- Use of the **WMO Integrated Processing and Prediction System (WIPPS)** and advanced modelling (including AI tools) to forecast hazards such as **tropical cyclones, floods, droughts, heat waves and dust storms.**

**d. Impact-Based Early Warnings**

- Adoption of the **Common Alerting Protocol (CAP)** and digital platforms such as **ClimWeb** and the **WMO Coordination Mechanism** to ensure actionable warnings reach communities and humanitarian actors.

**e. Enabling Environment**

- Importance of **governance, legislation, sustainable financing and institutional frameworks** to support long-term early warning system operations.

**Importance of Early Warning Systems**

**a. Disaster Risk Reduction (DRR)**

- Early warnings give communities time to prepare, evacuate, and protect infrastructure, reducing disaster mortality and economic damage.

**b. Climate Change Adaptation**

- With more frequent and intense extreme weather due to climate change, robust forecasting and early warnings are vital components of **climate resilience and adaptation planning.**

**c. Equity & Inclusion**

- Current global coverage of multi-hazard EWS is insufficient — many vulnerable regions (especially LDCs and SIDS) lag behind. Universal coverage aims to address this inequity.

**Challenges Identified**

- **Gaps in monitoring capacity:** Many countries still lack quality observational infrastructure.
- **Digital Divide:** Least resourced nations need support to close data and technology gaps.

- **Finance & Governance:** Sustained investment and supportive policies are critical to scale and sustain early warning systems.

**Linkage with Global Goals**

- **Sendai Framework for Disaster Risk Reduction 2015–2030:** EWS are core to Target G — substantial reduction in disaster damage to critical infrastructure and disruption of services.
- **Paris Agreement (Climate Action):** Early warnings support adaptation and resilience pillars.
- **SDG 13 (Climate Action):** Strengthening early warning systems is essential for climate change mitigation and adaptation.

**EXPECTED QUESTIONS FOR UPSC CSE**

**Prelims MCQ**

Q. EW4All initiative aims to achieve what by 2027?

- (a) Universal access to potable water
- (b) Universal coverage of multi-hazard early warning systems
- (c) Elimination of all climate-related disasters
- (d) Net-zero carbon emissions

(b) Answer

Q2. Which WMO platform facilitates global exchange of real-time climate data to support early warning systems?

- (a) GBON
- (b) WIS 2.0
- (c) CREWS
- (d) IPCC AR Reports

(b) Answer

**Descriptive Question**

Q. “Robust early warning systems are central to climate adaptation and disaster resilience.” Analyse this statement in the context of global efforts under WMO’s Early Warnings for All initiative.

## JUVENILE HUNTINGTON'S DISEASE

**Why in News:** In a historic development for neurological research in India, the family of a patient with Juvenile Huntington's Disease (JHD) has donated the patient's brain to the National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru for scientific research (neuropathological and molecular research).

### About Juvenile Huntington's Disease (JHD)

- JHD is a rare inherited genetic disorder that causes progressive degeneration of nerve cells in the brain in children and adolescents.
- It is caused by a mutation in the HTT gene (huntingtin gene), leading to abnormally long repetitions of a DNA sequence (CAG) which accelerates neuronal death.
- Symptoms include rigidity, cognitive decline, movement difficulties, behavioral changes, and progressive loss of motor control — often more severe and rapid than adult-onset Huntington's Disease.

### Clinical Significance

- Juvenile onset is typically defined when the disease manifests before age 20. The length of the genetic mutation often correlates with severity and age of onset.
- Currently, there is no cure for JHD; available treatments focus on symptom management through physical therapy, medications, counseling, and supportive care.

### Importance of the Brain Donation

#### 1. Research Advancement

- Brain tissue is a critical resource for understanding the pathology of neurological diseases like JHD, where molecular and cellular changes cannot be fully replicated through blood samples or animal models.
- The availability of donated human brain tissue enables researchers to:
  - ✓ Study neuronal degeneration patterns
  - ✓ Investigate disease pathways and biomarkers
  - ✓ Develop potential therapeutic targets for future interventions

#### 2. Strengthening Brain Banking in India

- NIMHANS houses one of the leading brain banks in the

country, supported by neuropathology and neuroscience research facilities.

- Historically, brain donations for neurodegenerative disease research have been limited in India due to cultural, awareness, and logistical challenges; such donations now pave the way for enhanced research participation.

### About NIMHANS

- The National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru, is an Institute of National Importance under the Ministry of Health and Family Welfare.
- It is a premier centre for patient care, training, and advanced neuroscience research, including neuropathology, clinical neurology, and mental health sciences.
- The institute maintains a Human Brain Tissue Repository and conducts translational studies on neurological and psychiatric conditions.

### Policy & Public Health Implications

#### 1. Research Prioritisation

- The brain donation highlights the growing recognition of neurodegenerative disorders in India and the need for stronger research frameworks and brain banks — essential for evidence-based diagnosis, treatment, and policy formulation.

- Such steps align with broader goals to strengthen neurological health research infrastructure and address rare diseases within national health agendas.

#### 2. Awareness and Community Participation

- Enhanced awareness about brain donation can increase research contributions and improve understanding of rare brain disorders.
- Public education campaigns and supportive policies may reduce stigma and logistical barriers to post-mortem tissue donation.

### Conclusion

The donation of the first Juvenile Huntington's Disease brain to NIMHANS marks a significant milestone for neuroscience research in India. It offers a valuable resource to deepen scientific understanding of rare neurodegenerative conditions and strengthens the foundation for future breakthroughs in diagnosis and therapy.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. With reference to Juvenile Huntington’s Disease (JHD), consider the following statements:

1. Juvenile Huntington’s Disease is caused by a mutation in the HTT gene leading to abnormal CAG repeat expansion.
2. JHD usually manifests after the age of 40 and progresses slowly compared to adult-onset Huntington’s Disease.
3. The recent donation of the first Juvenile Huntington’s Disease brain in India was made to NIMHANS, Bengaluru, for neurological research.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 1 and 3 only  
 (c) 2 and 3 only                      (d) 1, 2 and 3

Answer: (b) 1 and 3 only

**TYPHOID CONJUGATE VACCINE (TCV)**

**Why in News:** Despite being a major vaccine manufacturer globally and a country with a high typhoid burden, India has not yet included the Typhoid Conjugate Vaccine (TCV) in its Universal Immunisation Programme (UIP).

**About Typhoid Fever**

- Typhoid fever is a water-borne infectious disease caused by Salmonella Typhi, primarily spread through contaminated food and water.
- It poses a significant health burden globally, with an estimated 9–12 million cases and over 100,000 deaths annually. India, Pakistan and Bangladesh account for a large share of this burden.
- In India, modelling studies suggest around 4.5 million cases and approximately 9,000 deaths each year. Urban and low-income settlements with poor sanitation are hotspots of transmission.

**Impact on Children and Diagnosis Challenges**

- Children are disproportionately affected, leading to loss of school days and childhood morbidity.
- Clinical symptoms often mimic other febrile illnesses (e.g., dengue, malaria), complicating early diagnosis.
- Accurate diagnosis through blood culture is limited due to infrastructure constraints, while the widely used Widal test is unreliable.

**Antimicrobial Resistance: Growing Threat**

- Misuse of antibiotics and increasing antibiotic resistance

in Salmonella Typhi strains—especially to drugs like azithromycin and ceftriaxone—pose treatment challenges.

- Extensively drug-resistant (XDR) typhoid strains emerging in neighbouring countries threaten to spread across borders.
- Vaccination can reduce antibiotic use and thus help mitigate resistance.

**Typhoid Conjugate Vaccine (TCV): Features and Benefits**

- Typhoid Conjugate Vaccines are WHO-approved for children from 6 months of age and require only a single dose, providing longer-lasting immunity.
- Conjugate vaccines overcome limitations of older typhoid vaccines (e.g., Vi-polysaccharide), offering enhanced immunogenicity and suitability for younger infants.

**Global Evidence and Efficacy**

- TCVs have shown high protective efficacy (over 80%) in field trials conducted in multiple countries, including Bangladesh, Nepal and Malawi.
- WHO has strongly recommended TCV introduction in endemic regions as a key preventive strategy.

**Current Status in India**

- Several TCVs are available in India’s private market, including those developed by Bharat Biotech and Zydus Lifesciences, and have received WHO pre-qualification for global procurement.
- The National Technical Advisory Group on Immunisation (NTAGI) has recommended inclusion of TCV in the UIP since 2016/2022, but formal rollout remains pending.
- High vaccine costs in the private sector (~₹2,000 per dose) hinder equitable access, particularly for vulnerable groups.

**Water, Sanitation and Hygiene (WASH)**

- Poor access to safe drinking water and sanitation exacerbates typhoid transmission; only a small fraction of urban households has guaranteed safe water supply despite government initiatives like Swachh Bharat Mission.

**Why India Must Act Now: Public Health Implications**

- Equity and Accessibility
  - Inclusion of TCV in the UIP would ensure free and equitable access across socio-economic groups, reducing health disparities and disease burden.
- Cost-Effectiveness and Long-Term Benefits
  - Preventing typhoid through vaccination is cost-effective compared to treatment costs, hospitalisation and productivity losses.
  - TCV introduction aligns with global health goals and WHO recommendations for endemic settings.
- Holistic Disease Control Strategy

- ✓ Vaccination should be complemented by improved diagnostics, AMR surveillance, WASH interventions, and public health awareness to sustainably control typhoid.

### Conclusion

India's failure to include the Typhoid Conjugate Vaccine in its Universal Immunisation Programme represents a missed opportunity in its public health response to a preventable disease with high burden and rising antibiotic resistance. With strong evidence, WHO backing, and domestic vaccine production capacity, urgent inclusion of TCV in the UIP would enhance disease prevention, reduce health inequities, and strengthen national immunisation outcomes.

#### EXPECTED QUESTION FOR UPSC CSE

##### Prelims MCQ

Q. With reference to the Typhoid Conjugate Vaccine (TCV), consider the following statements:

1. Typhoid Conjugate Vaccine can be administered to children below one year of age.
2. TCV provides longer-lasting immunity compared to older polysaccharide typhoid vaccines.
3. The World Health Organization recommends TCV only in countries that have eliminated open defecation.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 2 only  
 (c) 1 and 3 only                      (d) 1, 2 and 3

Answer: (a) 1 and 2 only

## CHRONIC OBSTRUCTIVE PULMONARY DISEASE

**Why in News:** Chronic Obstructive Pulmonary Disease (COPD) is a major global and national health concern that silently affects millions, reducing quality of life and contributing significantly to morbidity and mortality.

### About COPD

- Chronic Obstructive Pulmonary Disease (COPD) refers to a group of chronic lung conditions that cause persistent airflow limitation and breathing difficulties. It primarily includes chronic bronchitis and emphysema, two conditions that often overlap in patients.
- ✓ **Chronic bronchitis:** Long-term inflammation of the airways producing cough with mucus.
- ✓ **Emphysema:** Damage and enlargement of the lung's air sacs (alveoli), reducing oxygen exchange.
- COPD is progressive and long-term — meaning it worsens over time and is usually irreversible. Treatment focuses on managing symptoms and slowing disease progression.

### Burden of Disease – Global & National Context

- COPD remains one of the leading causes of death worldwide, accounting for millions of fatalities annually and a significant share of disability-adjusted life years (DALYs). Nearly 90 % of deaths under age 70 occur in low- and middle-income countries.
- In countries with high pollution and smoking rates, COPD represents a hidden epidemic, often ranking among the top causes of chronic illness and death.

#### Causes: Primary Causes

- Tobacco smoke: The most significant factor worldwide — active smoking is linked to the majority of cases.
- Air pollution: Both outdoor (traffic, industrial emissions) and indoor pollution (biomass cooking fuels) contribute substantially.
- Occupational hazards: Long-term exposure to dust, chemical fumes, and smoke at work.
- Genetic factors: Rare conditions like alpha-1 antitrypsin deficiency predispose individuals even in the absence of smoking.

#### At-Risk Populations

- Middle-aged and older adults.
- Individuals exposed to high air pollution or second-hand smoke.
- Workers in dusty or polluted environments.

#### Common Symptoms

**COPD symptoms are often gradual and may be mistaken for normal ageing:**

- Persistent shortness of breath, especially on exertion.
- Chronic cough with mucus or phlegm.
- Wheezing and chest tightness.
- Fatigue and decreased exercise tolerance.

Symptoms may suddenly worsen in episodes known as exacerbations or flare-ups, often triggered by infections or pollution.

#### Potential Complications

**COPD increases risk for:**

- Lung infections (e.g., pneumonia).
- Heart disease and pulmonary hypertension.
- Lung cancer.
- Anxiety, depression, and reduced quality of life.

#### Diagnosis

- The cornerstone of COPD diagnosis is spirometry, a lung function test that measures how much air a person can forcibly exhale in one second (FEV<sub>1</sub>) and overall lung function.
- Early diagnosis allows timely intervention to reduce symptoms, prevent progression and avoid complications.

## Management & Treatment

- Non-Pharmacological
  - Smoking cessation: Most critical intervention.
  - Avoidance of air pollutants and irritants.
  - Pulmonary rehabilitation: Exercise and education programs to improve lung capacity and quality of life.
- Medical Treatment
  - Bronchodilators and inhaled steroids to improve airflow and reduce inflammation.
  - Supplemental oxygen therapy in advanced disease.
  - Vaccinations against influenza and pneumococcal infections to reduce flare-ups.

**While COPD is not curable, these approaches help control symptoms and slow progression.**

### Prevention Strategies

**Prevention hinges on reducing exposure to known risk factors:**

- Tobacco control policies and smoking cessation programs.
- Improving indoor air quality (clean cooking fuels, proper ventilation).
- Reducing ambient air pollution through environmental regulation and public health initiatives.
- Public awareness campaigns on early symptoms and risk factors can greatly enhance early detection and better outcomes.

### Conclusion

COPD remains a significant public health challenge. With rising pollution and persistent smoking rates, especially in urban areas and LMICs, the disease is increasingly seen even in younger individuals. While there is no cure, timely diagnosis, management, preventive policies, and lifestyle changes can substantially improve quality of life and reduce disease burden.

#### EXPECTED QUESTIONS FOR UPSC CSE

##### Prelims MCQ

- Q. With reference to Chronic Obstructive Pulmonary Disease (COPD), consider the following statements:
- COPD is a progressive lung disease characterised by persistent airflow limitation that is largely irreversible.
  - Chronic bronchitis and emphysema are the two primary conditions included under COPD.
  - Long-term exposure to indoor air pollution from biomass fuels is a significant risk factor for COPD in developing countries.

4. Spirometry is used mainly to detect infectious lung diseases and has no role in diagnosing COPD.

Which of the statements given above are correct?

- (a) 1, 2 and 3 only                      (b) 1 and 4 only  
(c) 2 and 3 only                        (d) 1, 2, 3 and 4

(a) Answer

### Descriptive Question

- Q. "Chronic Obstructive Pulmonary Disease (COPD) is an under-recognised public health challenge in India." Discuss the causes, burden, and preventive strategies for COPD in the context of rising air pollution and lifestyle changes. (15 marks/ 250 words)

## DIMINISHED OVARIAN RESERVE (DOR)

**Why in News:** Recent medical observations and research indicate a worrying trend in India: an increasing number of young women — including those in their late 20s and early 30s — are exhibiting signs of diminished ovarian reserve (DOR), a condition traditionally associated with older reproductive age.

### Ovarian Reserve

Ovarian reserve refers to the number and quality of eggs (oocytes) a woman has, which naturally declines with age. However, clinicians are now observing unusually low reserves in comparatively younger age groups.

### About DOR

DOR is a clinical condition characterized by a lower-than-expected count of ovarian follicles and eggs for a woman's age group. This reduction may compromise fertility and reduce the likelihood of natural conception.

### Clinical Significance

- A woman is born with all her eggs; these progressively decline over her life.
- In typical reproductive ageing, ovarian reserve decreases gradually; in DOR, this decline accelerates prematurely.

### Key Findings and Evidence

- Early Onset Among Younger Women
  - Medical reports suggest an emerging pattern where younger Indian women are diagnosed with low ovarian reserves earlier than expected.
  - Fertility experts across urban centres have noted high numbers of women under 35 showing diminished Anti-Müllerian Hormone (AMH) levels — a key indicator of ovarian reserve — when tested.

## 2. AMH Testing

- Anti-Müllerian Hormone (AMH) levels correlate with egg quantity; lower levels imply a reduced pool of eggs. AMH measurement, along with antral follicle count via ultrasound, is central to assessing ovarian reserve.

### Possible Causes of Early Ovarian Decline

Health and reproductive specialists point to multiple interconnected factors potentially contributing to premature ovarian senescence:

#### 1. Lifestyle and Environmental Factors

- Urban lifestyles: Sedentary habits, processed diets, high stress and sleep disruption are implicated in accelerated decline.
- Pollution and chemical exposures: Endocrine-disrupting chemicals (EDCs) in plastics, pesticides and pollution may interfere with hormonal systems and ovarian biology.

#### 2. Delayed Childbearing

- Career and education aspirations leading women to postpone pregnancy could inadvertently coincide with earlier depletion of egg reserves.

#### 3. Genetic and Ethnic Factors

- Some studies suggest Indian women may experience a faster reduction in AMH levels compared to women from other ethnic backgrounds, indicating possible genetic or epigenetic influences.

#### 4. Other Health Conditions

- Conditions like Polycystic Ovary Syndrome (PCOS), genital infections (e.g., tuberculosis), ovarian surgeries or hormonal imbalances may also impact ovarian reserve.

### Implications of Reduced Ovarian Reserve

#### 1. Fertility and Reproductive Planning

- Early ovarian depletion can reduce fertility potential, shorten the reproductive window, and increase the reliance on assisted reproductive technologies (ART) such as IVF.

#### 2. Emotional and Socio-Economic Impact

- Unexpected fertility challenges among young women can create psychological stress, affect family planning timelines, and pose financial burdens due to fertility treatments.

### Expert Recommendations

- **Routine Fertility Screening:** Incorporating AMH tests and ovarian reserve assessments into broader health check-ups for women of reproductive age could help early recognition and planning.
- **Lifestyle Modifications and Awareness:** Experts advocate balanced diets, stress management, avoidance of smoking and environmental toxins, and timely reproductive counselling as preventive strategies.

### Government and Policy Relevance

- **Public Health Priority:** With India's fertility landscape evolving — including trends of delayed parenthood and a declining fertility rate — early reproductive health screening and awareness are emerging public health priorities.
- **Need for Research and Data:** Expanded population-level studies are required to understand the prevalence, causes and long-term consequences of early ovarian reserve depletion across socio-economic groups.

### Conclusion

The phenomenon of reduced ovarian reserve among young women in India underscores an evolving reproductive health challenge influenced by lifestyle, environment, genetics, and socio-cultural factors. Early detection, awareness, and proactive reproductive health strategies are critical to addressing this trend and enabling informed reproductive choices.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

Q. Which of the following statements about Diminished Ovarian Reserve (DOR) in young Indian women is/are correct?

1. DOR refers to a lower number and quality of eggs than expected for a woman's age.
2. Anti-Müllerian Hormone (AMH) levels are commonly used to assess ovarian reserve.
3. Early onset of DOR in India is linked only to genetic factors.
4. Lifestyle factors, environmental exposures, and delayed childbearing may contribute to early ovarian reserve depletion.

Options:

- |                      |                      |
|----------------------|----------------------|
| (a) 1 and 2 only     | (b) 1, 2, and 3 only |
| (c) 1, 2, and 4 only | (d) All of the above |

Answer: (c)

## NATIONAL ACTION PLAN ON ANTIMICROBIAL RESISTANCE 2.0

**Why in News:** The Ministry of Health and Family Welfare announced the launch of the National Action Plan on Antimicrobial Resistance (AMR) 2.0 (2025–29) in New Delhi.

### Key Details

- The updated plan seeks to strengthen India's response to the global public health challenge of antimicrobial resistance.
- Antimicrobial resistance, caused by overuse and misuse of antibiotics and other antimicrobial agents, undermines the effectiveness of lifesaving drugs and threatens

healthcare outcomes in surgeries, infection control, cancer care and more.

**Significance of AMR and Need for Updated Action Plan**

- Threat of Antimicrobial Resistance
- ✓ AMR is a major public health concern with profound health, economic and societal implications.
- ✓ Resistance to antimicrobials increases treatment failures, raises healthcare costs and jeopardizes progress in modern medical procedures including surgeries, cancer treatments and critical care.
- Rationale for Revision
- ✓ The first National Action Plan on AMR, launched in April 2017, laid the groundwork but revealed gaps in crosssectoral coordination and implementation.
- ✓ The revised plan — NAPAMR 2.0 — aims to build deeper ownership across sectors and strengthen engagement with both the public and private sectors.

**Core Strategies Under NAPAMR 2.0**

**1. Strengthening Awareness and Education**

- Increasing public and professional awareness on appropriate use of antimicrobials.
- Education and training programmes for healthcare practitioners to promote rational prescribing.

**2. Improved Laboratory Capacity and Infection Control**

- Expansion of laboratory networks and diagnostic capacities.
- Enhancing infection control measures in hospitals and community health settings to curb transmission of resistant microbes.

**3. Enhanced Stakeholder Coordination**

- Regular convening of stakeholders across ministries and departments to resolve implementation challenges.
- Engagement of the private sector, professional bodies, NGOs and international partners for a coordinated response.

**One Health Approach and Multisectoral Action**

- AMR containment is based on the One Health approach integrating human health, animal health, agriculture and environmental considerations.
- The development of NAPAMR 2.0 involved consultations with more than 20 ministries and departments, ensuring comprehensive action across sectors.

**India’s Initiatives on AMR**

- States like Kerala and Gujarat have banned overthecounter antibiotic sales and enforced stricter controls on antimicrobial use in crops.
- The India AMR Innovation Hub was established to foster innovation, resource mobilization and collaboration among national and international stakeholders.

**Way Forward**

- Following the launch, each stakeholder ministry/ department is expected to develop an implementation roadmap with clear timelines and resource commitments.
- The plan promotes regular monitoring and evaluation to track progress and ensure effective containment of antimicrobial resistance.

**Conclusion**

The National Action Plan on AMR 2.0 represents India’s reinforced commitment to tackling antimicrobial resistance — a complex, crosssectoral challenge that demands coordinated policy action, robust surveillance, improved healthcare practices and sustained stakeholder engagement.

**EXPECTED QUESTIONS FOR UPSC CSE**

**Prelims MCQ**

Q. Consider the following statements regarding the National Action Plan on Antimicrobial Resistance (AMR) 2.0 (2025–29) in India:

1. It is the first-ever national plan on AMR launched in India.
2. The plan follows a One Health approach integrating human, animal, and environmental health.
3. Strengthening laboratory capacity and infection control is a key component of the plan.
4. The plan involves coordination among multiple ministries and the private sector.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 2, 3, and 4 only  
 (c) 1, 3, and 4 only                (d) All of the above

(b) Answer

**Descriptive Question**

Q. “Antimicrobial resistance (AMR) is emerging as a serious public health challenge in India. Critically examine the strategies under the National Action Plan on AMR 2.0 (2025–29) and discuss how a ‘One Health’ approach can strengthen India’s response to AMR.”  
 (10 marks/ 150 words)

**WORLD’S SMALLEST AUTONOMOUS ROBOTS**

**Why in News:** Researchers — primarily from the **University of Pennsylvania** and the **University of Michigan** — have developed what are being reported as the **world’s smallest fully programmable and autonomous robots** that are **nearly invisible to the naked eye**.

### Size & visibility

- Each robot is microscopic: about **0.2 mm** **0.3 mm** **0.05 mm**. That's around the size of many microorganisms — **much smaller than a grain of salt** — and essentially **invisible without magnification**.

### How they work

- **Light-powered:** The robots use light (via tiny solar cells) to power their onboard systems.
- **Simple intelligence:** Onboard computers run on extremely low energy and follow programmed instructions independently.
- **Propulsion without moving parts:** At microscopic scales, water behaves like a thick fluid, so instead of propellers, the robots generate electric fields that move ions in the liquid to create motion — effectively pushing themselves through the fluid.

### Sensing & behaviour

- They can **sense temperature changes**, adjust movement accordingly, and carry out programmed behaviours autonomously.
- Each robot has a **unique identifier**, allowing potential coordination or task differentiation in swarms.

### Cost and scale

- Reportedly, they could be manufactured cheaply - **~1 US cent per robot** thanks to standard semiconductor fabrication techniques.
- These robots can **operate for months** under light exposure.

### Potential applications

While still early research, scientists envision future uses such as:

- **Environmental sensing** in tiny or hard-to-access places
- These robots represent a major step toward autonomous machines that operate at **microscopic scales**.
- **Medical science:** targeted drug delivery, cell-level monitoring
- **Micro-manufacturing** and future **swarm robotics** application

### Challenges & Ethical Concerns

- Control and retrieval after deployment
- Bio-safety and environmental risks
- Data privacy in medical applications
- Need for regulatory framework

### Conclusion

The development of microscopic autonomous robots marks a significant leap in robotics, merging nanotechnology, artificial intelligence, and biomedical engineering. Moving forward, research should focus on improving control mechanisms, ensuring safe deployment, and addressing ethical and

regulatory concerns. Collaboration between scientists, ethicists, and policymakers will be crucial to harness these robots for beneficial applications such as targeted medical therapies, environmental monitoring, and precision micro-manufacturing, while minimizing potential risks to health and the environment.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

Q. Which of the following statements about the world's smallest autonomous robots is correct?

- They are powered by tiny batteries and require external control to operate.
- They move using microscopic propellers that spin in water.
- They can sense environmental changes and follow programmed instructions autonomously.
- Each robot costs approximately \$1,000 to manufacture due to advanced materials.

(c) Answer

## GEMINID METEOR SHOWER

**Why in News:** Geminid meteor shower is an annual celestial event where numerous meteors ("shooting stars") appear as Earth passes through debris in space.

Known for being **one of the brightest and most reliable meteor showers of the year**.

### When & Where to Watch

- **Peak night:** Night of **December 13 – 14, 2025** (early morning of 14th).
- **Best viewing in India:** Between **2 AM to 4 AM IST** when the constellation **Gemini** is high in the sky.
- Better visibility from **dark, open areas** away from city lights.

### Why It Happens

- Meteors originate from debris shed by the asteroid **3200 Phaethon** — *unusual source since most showers come from comets*.
- As Earth moves through this debris field, particles burn up in the atmosphere, producing bright streaks.

### Characteristics

- Can produce **over 100 meteors per hour at peak** under ideal conditions.
- Meteors are often **bright enough to cut through light pollution**, visible even from cities.

## Conclusion

The Geminid meteor shower continues to be one of the most spectacular and reliable annual celestial events, offering an excellent opportunity for stargazers, astronomers, and educators to observe meteors and engage with astronomy. To maximize visibility, enthusiasts should plan to watch during peak hours from dark, open areas away from city lights. Looking ahead, organizing public viewing events, promoting astronomy education, and encouraging citizen science to track meteor activity can help deepen public interest in space and planetary science.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

Q. Which of the following statements about the Geminid meteor shower is correct?

- (a) The meteors come from a comet, like most other meteor showers.
- (b) Peak viewing in India is best between 2 AM to 4 AM IST on December 13–14, 2025.
- (c) The shower usually produces less than 10 meteors per hour.
- (d) It is rarely visible from cities due to low brightness.

Answer: (b)

## NEW MARS MISSION BLUEPRINT :

**Why in News:** A landmark blueprint has been released to guide human missions to Mars.

### Other Details

- Prepared by the US National Academies of Sciences, Engineering, and Medicine based on NASA-led expert inputs.
- It outlines science priorities, equipment needs, landing-site criteria, and environmental constraints for future crewed Mars missions.

### Mains Objectives of the Blueprint

- Define scientific goals for the first human exploration missions to Mars.
- Organise these goals into mission campaigns that structure exploration phases.
- Provide criteria for landing sites that maximise scientific return and crew safety.
- Specify required equipment and tools for surface operations.
- Environmental constraints (radiation, dust, terrain) are factored into planning.

### Priorities Highlighted

#### 1. Astrobiology

- Search for signs of past or present life on Mars.

#### 2. Atmospheric Science

- Understand Martian weather, climate, and atmospheric processes.

#### 3. Planetary Geology

- Study surface composition, rocks, and historical planetary evolution.

#### 4. Biological & Physical Sciences

- Investigate effects of Mars environment on human biology and physical systems.

#### 5. Crew Health & Safety

- Research health challenges posed by long-duration space travel and Martian conditions

### Significance

- Provides a **structured science agenda** for Mars exploration — beyond just reaching the planet, emphasising **meaningful scientific discovery**.
- Helps guide decisions by space agencies and policymakers.

### Way Forward

The Mars mission blueprint provides a comprehensive framework for human exploration of the Red Planet, emphasizing both scientific discovery and crew safety. Moving forward, space agencies should focus on:

- **Technology development:** Advance life-support systems, radiation shielding, landing technologies, and surface mobility equipment to ensure safe and efficient human operations on Mars.
- **International collaboration:** Encourage partnerships between countries, space agencies, and private enterprises to share expertise, reduce costs, and coordinate exploration campaigns.
- **Mission simulations & training:** Conduct Earth-based analog missions and simulations to test equipment, study human health effects, and refine operational protocols.
- **Landing site selection & planetary protection:** Carefully evaluate potential sites to maximize scientific return while minimizing contamination risks to Mars and Earth.
- **Incremental exploration:** Begin with precursor robotic missions to gather environmental data, validate technologies, and reduce uncertainties before crewed landings.
- **Policy & ethical frameworks:** Develop guidelines to govern human presence, protect potential Martian life, and ensure responsible exploration.

By systematically combining science, technology, safety, and ethics, humanity can move closer to sustainable and meaningful exploration of Mars.

## IISF 2025 – India International Science Festival (11th Edition)

### What is IISF?

- A **national science festival** launched in 2015 to promote scientific temper, innovation and public engagement in science.
- It brings together scientists, students, innovators, industry leaders, educators and policymakers.
- Acts as a platform to **showcase scientific achievements**, foster collaborations and inspire youth.

IISF 2025 is organised by the **Ministry of Earth Sciences** and coordinated by **IITM Pune**, with major contributions from **DST, DBT, CSIR, Department of Space, DAE**, and outreach partner **Vijnana Bharati**.

IISF 2025 will be held in Panchkula (Haryana) and its theme is *Vigyan se Samruddhi: For a Self-reliant India*.

### Objectives of IISF 2025

- **Promote scientific temper** among the general public.
- **Bridge the gap** between research institutions and citizens.
- **Encourage innovation** and showcase India's scientific ecosystem.
- **Create career avenues** for students in STEM fields.

### Vision & Focus Areas

- Celebrates achievements in **emerging technologies**, space science, health innovations, climate research and biotechnology.

- Emphasises science as a **driver for national development** and **Viksit Bharat @2047**.
- Encourages **science communication** beyond laboratories to reach all sections of society.

### Engagement & Outreach

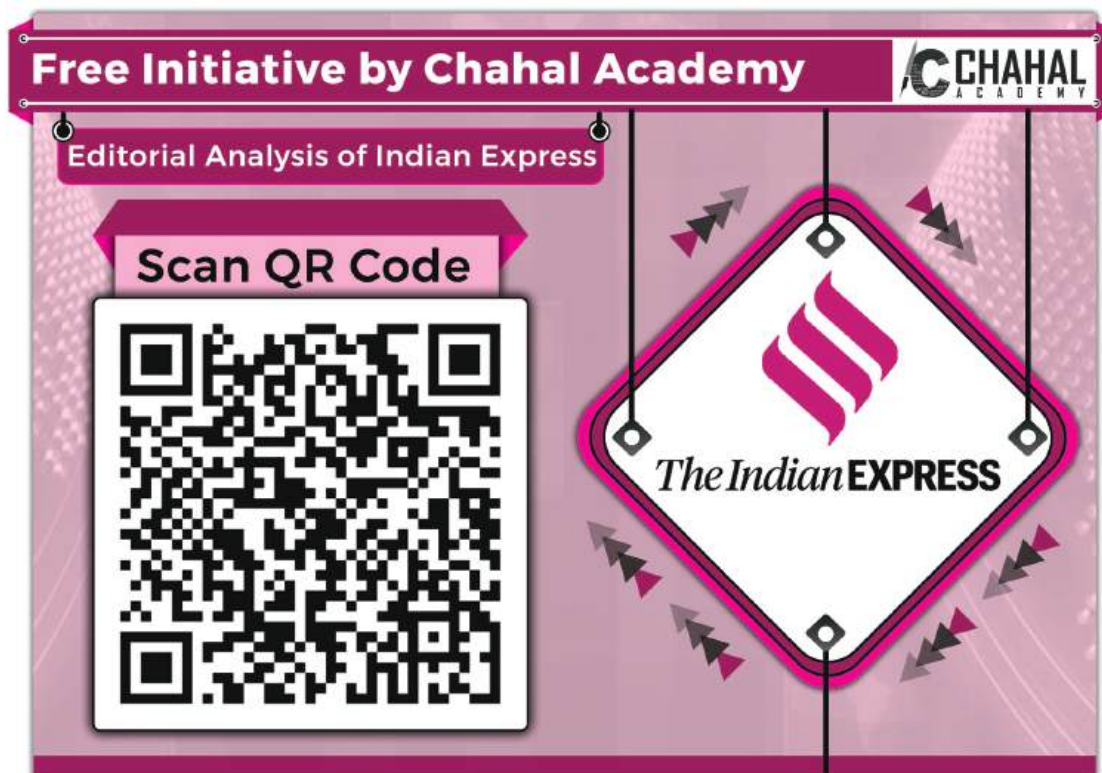
- Structured **workshops, exhibitions, hackathons**, interactive labs and panel discussions.
- Sessions designed for students on **quantum tech, AI, robotics, biotech and deep-tech entrepreneurship**.
- Focus on **career building** by linking young learners with researchers, incubators and industry mentors.

### Significance for India

- Reinforces India's **scientific ecosystem**, innovation potential and global standing.
- Supports national goals in **research, innovation, skilled human capital and technology leadership**.
- Encourages **public-private collaboration** in S&T sectors.

### Conclusion

IISF 2025 serves as a vibrant platform to celebrate India's scientific achievements, foster innovation, and strengthen public engagement with science. By bringing together researchers, students, industry leaders, and policymakers, the festival not only promotes scientific temper but also bridges the gap between laboratories and society. With its focus on emerging technologies, career development in STEM, and science-driven national growth, IISF reinforces India's vision of becoming a self-reliant and globally competitive scientific nation by 2047.



## DEFENCE &amp; SECURITY

**DELHI CAR BLAST 2025**

**Why in News:** A deadly car blast near Delhi's Red Fort on 11 November 2025, investigated under the Unlawful Activities (Prevention) Act (UAPA), killed eight people and marked the capital's first major terror-linked explosion in over a decade.

**Key Details**

- The blast occurred in a **high-security, high-footfall area near Red Fort and Chandni Chowk**, injuring over 20 people and damaging multiple vehicles.
- **Delhi Police invoked UAPA**, along with the Explosives Act and criminal laws, indicating a suspected terror angle.
- **Prime Minister Narendra Modi vowed strict action**, asserting that those behind the conspiracy would be brought to justice.

**Background of the Incident**

- The blast occurred near **Chandni Chowk–Netaji Subhash Marg**, close to **Red Fort Metro Station**, a high-footfall tourist and commercial zone.
- A **slow-moving car halted at a traffic signal** exploded around 7 p.m., damaging nearby vehicles and infrastructure.
- Delhi Police registered the case under:
  - **Unlawful Activities (Prevention) Act (UAPA)**
  - **Explosives Act**
  - Relevant sections of the **Indian Penal Code (IPC)**
- Prime Minister **Narendra Modi**, while on an official visit to Bhutan, vowed that the **conspirators would not be spared**.

**Constitutional and Legal Framework**

- **Unlawful Activities (Prevention) Act (UAPA), 1967**
  - India's **principal anti-terror legislation**, amended significantly in 2004, 2008, 2012 and 2019.
  - Allows:
    - ◆ Designation of **individuals as terrorists** (2019 amendment)
    - ◆ Extended detention periods
    - ◆ Special courts for speedy trials

- Objective: Protect **sovereignty, integrity, and security of India**.

• **Federal Structure and Policing**

- **Police and public order** are **State subjects** (List II, Seventh Schedule).
- However, terror investigations often involve:
  - ◆ NIA (National Investigation Agency)
  - ◆ IB and central intelligence agencies
- Delhi, being a **Union Territory**, allows greater **central coordination**, making it a test case for urban security governance.

**Urban Terrorism**

- Targets **symbolic locations** (Red Fort – national and historical significance).
- Aims to:
  - Create panic
  - Gain global attention
  - Undermine public confidence in the state

**Lone-Wolf vs Organised Networks**

- Preliminary investigation highlights challenges in identifying:
  - Vehicle ownership
  - Possible suicide bombing patterns
- **Raises concerns about:**
  - Radicalisation
  - Cross-border or home-grown modules

**Intelligence Failure or Tactical Gap?**

- Despite **high surveillance zones**, the attack raises questions on:
  - Last-mile intelligence
  - Inter-agency coordination
  - Real-time threat assessment

## Comparison with Past Incidents (Analytical Perspective)

Incident	Year	Nature	Outcome
Delhi Serial Blasts	2008	Coordinated IED attacks	Policy overhaul, NSG hub
Mumbai Attacks	2008	Multi-target terror assault	Coastal security reforms
Delhi Blast	2011	Bombing near High Court	Strengthened CCTV network
Delhi Car Blast	2025	Vehicle-borne explosion	Renewed focus on urban terror

### International and Strategic Context

- The incident occurred months after a **terror attack in Jammu & Kashmir** that escalated into **India–Pakistan military tensions**.
- **Highlights:**
  - Persistent threat of **proxy warfare**
  - Use of terrorism as a tool of **asymmetric conflict**

### Government Response and Institutional Mechanisms

#### Immediate Measures

- Area sealed; forensic teams deployed
- Metro station shut as precaution
- High-level monitoring by Ministry of Home Affairs

#### Long-Term Imperatives

- **Strengthening:**
  - CCTV and AI-based surveillance
  - Vehicle tracking and explosive detection
  - Community policing and intelligence sharing

#### Way Forward

- **Urban Counter-Terror Strategy:** India needs city-specific counter-terror plans focusing on high-density and symbolic locations such as heritage sites, metro hubs and markets. The 2008 Mumbai attacks and the 2025 Delhi blast show that urban spaces require layered security, rapid response units and regular threat simulations.
- **Strengthening Intelligence and Surveillance:** Human intelligence must be complemented with technology-driven surveillance such as AI-enabled CCTV networks and real-time vehicle tracking. After the 2011 Delhi High Court blast, CCTV coverage was expanded, but periodic audits and real-time data integration remain critical.
- **Legal Safeguards and Accountability under UAPA:** While UAPA is essential to deal with terrorism, safeguards are needed to prevent prolonged detention without trial. Periodic judicial review and parliamentary oversight can help balance national security with fundamental rights under Article 21.
- **Inter-Agency Coordination:** Effective counter-terror response depends on seamless coordination among Delhi Police, Intelligence Bureau, NIA and central armed police forces. Past incidents reveal that intelligence silos often delay preventive action, highlighting the need for unified command structures in major cities.
- **Technology Adoption with Privacy Protection:** Use

of facial recognition, bomb-detection sensors and data analytics should be guided by clear legal frameworks. The Supreme Court’s emphasis on the right to privacy (Puttaswamy judgment) makes it essential to ensure proportional and lawful use of surveillance tools.

- **Counter-Radicalisation and Community Engagement:** Preventing radicalisation requires monitoring online extremist content and strengthening community policing. Local intelligence gathered through trust-building measures has proven effective in preventing lone-wolf attacks in several global cities.

### Conclusion

The **Delhi car blast of 2025** is a stark reminder that **terrorism remains a dynamic and adaptive threat**, even in heavily secured urban centres. While robust legal tools like the UAPA and institutional frameworks exist, their effectiveness depends on **intelligence precision, inter-agency synergy, and democratic accountability**. For UPSC aspirants, the incident offers a comprehensive case study linking **current affairs with constitutional values, internal security, and governance challenges**.

## NYOMA AIRBASE OPERATIONALISATION

**Why in News:** India’s **Nyoma airbase in eastern Ladakh**, located close to the Line of Actual Control (LAC) with China, has become operational with **IAF Chief Air Chief Marshal A.P. Singh landing a C-130J aircraft**, marking a major boost to India’s air infrastructure and operational readiness along the northern border.

### Key Details

- **Location:** Nyoma (Mudh–Nyoma sector), eastern Ladakh, around **35 km from the China border**.
- **Altitude:** Approximately **13,700 feet**, making it one of the **highest operational fighter-capable airbases** in the world.
- **Cost and Execution:** Developed at a cost of about **₹200 crore** by the **Border Roads Organisation (BRO)**.
- **Capability:** Can support **fighter jets, transport aircraft, and high-tempo air operations**.

### Background

- Nyoma was originally constructed in **1962** as a basic airstrip for **helicopters and transport aircraft**.

- Following the **PLA troop build-up and clashes in eastern Ladakh in 2020**, India decided to upgrade Nyoma into a **frontline fighter airbase**.
- The foundation stone was laid by **Defence Minister Rajnath Singh in September 2023**, and the project was completed in just over two years.

### Strategic Significance of Nyoma Airbase

- **Enhanced Deterrence Against China:** The operationalisation of Nyoma significantly strengthens India's **deterrence posture** along the LAC. Its proximity to the China border allows quicker deployment of fighter aircraft and rapid response in case of any escalation.
- **Improved Operational Reach and Flexibility:** The airbase enables the IAF to conduct **sustained air operations at high altitude**, reducing dependence on distant bases such as Leh. This improves sortie rates, logistics support, and operational flexibility in the northern sector.
- **Support to Joint Military Operations:** Nyoma will play a crucial role in **joint operations** involving the Army and Air Force. It enhances air support for ground forces deployed in forward areas and improves casualty evacuation and logistics supply.
- **Infrastructure Development in Border Areas:** The project highlights India's focus on **border infrastructure development**, especially after 2020. Improved airfields, roads, and logistics nodes strengthen both military preparedness and regional connectivity.

### Role of the Border Roads Organisation (BRO)

- BRO executed the project under **challenging terrain and extreme weather conditions**.
- Reflects improved **project execution capacity** and prioritisation of strategic infrastructure.
- Aligns with the government's broader push for **faster infrastructure development in border regions**.

### Broader Defence and Security Context

- India has been upgrading several airbases and advanced landing grounds (ALGs) in **Ladakh and Arunachal Pradesh**.
- Nyoma complements other key bases such as **Leh, Thoise, and Daulat Beg Oldie (DBO)**.
- Fits into India's strategy of maintaining **credible conventional deterrence** amid unresolved boundary disputes with China.

### Challenges

- **Extreme Terrain and Climatic Conditions:** Nyoma airbase is located at an altitude of around 13,700 feet, where extreme cold, low oxygen levels and harsh winds affect both personnel and equipment. Such conditions increase aircraft maintenance requirements and limit operational windows, especially during winter months.
- **Logistical and Supply Chain Constraints:** Sustaining high-tempo air operations in eastern Ladakh requires

uninterrupted supply of fuel, spares and ammunition. Limited road connectivity and dependence on weather-sensitive routes can disrupt logistics during emergencies or prolonged standoffs.

- **Operational Stress on Aircraft and Crew:** High-altitude operations put additional stress on aircraft engines and aircrew due to reduced air density and physiological challenges. This necessitates specialised training, acclimatisation protocols and higher operational costs.
- **Vulnerability to Enemy Surveillance and Precision Strikes:** Given its proximity to the Line of Actual Control, Nyoma airbase may remain under constant surveillance by Chinese satellites, drones and electronic intelligence systems. This increases the risk of precision strikes in a conflict scenario.
- **Infrastructure and Support Ecosystem Gaps:** While the airbase itself is operational, supporting infrastructure such as hardened shelters, integrated air defence systems and advanced radar coverage need continuous upgradation to ensure survivability during hostilities.

### Way Forward

- **Strengthening Integrated Air Defence Systems:** India should deploy layered air defence systems, including surface-to-air missiles and electronic warfare capabilities, to protect Nyoma from aerial threats. Integration with satellite-based early warning systems will enhance response time and survivability.
- **Enhancing Logistics and Redundancy:** Improving all-weather road connectivity, pre-positioning critical supplies and developing alternative logistics routes will ensure sustained operations. Greater use of airlift and unmanned logistics platforms can reduce dependence on vulnerable ground routes.
- **Focus on Jointness and Theatre Command Approach:** Nyoma should be fully integrated into joint operational plans involving the Army and Air Force. Coordination under future theatre commands will enable faster decision-making and effective use of air power in support of ground forces.
- **Capacity Building and Human Resource Preparedness:** Regular high-altitude training, specialised medical support and rotational deployment of personnel will reduce fatigue and improve operational efficiency. Investing in simulation-based training can also lower risk during real operations.
- **Technological Upgradation and Network-Centric Warfare:** The airbase must be integrated into India's network-centric warfare framework through secure communication systems, real-time intelligence sharing and advanced surveillance platforms. This will enable precision operations and better situational awareness.
- **Diplomatic and Strategic Signalling:** While strengthening military infrastructure, India should continue diplomatic engagement with China through established mechanisms

to prevent miscalculations. The operationalisation of Nyoma also serves as a signal of India's resolve to protect its territorial integrity.

### Conclusion

The operationalisation of the **Nyoma** airbase marks a significant milestone in India's defence preparedness. It reflects lessons learnt from recent border tensions and underscores India's commitment to strengthening its **air power, infrastructure, and deterrence capability** along the northern frontier.

## IS 19445:2025 – STRENGTHENING INDIA'S BOMB DISPOSAL

**Why in News:** BIS has notified **IS 19445:2025**, India's first national standard for testing bomb disposal systems, to improve the safety, performance, and reliability of equipment used by security forces against explosive threats.

### Key Features of IS 19445:2025

- **Voluntary Standard:** The standard is voluntary in nature and is intended for use by government procurement agencies, manufacturers, testing institutions, and accredited laboratories.
- **Uniform Testing Framework:** It provides a common and structured methodology for evaluating bomb disposal systems, ensuring consistency across testing agencies.
- **India-Specific Adaptation:** While drawing from international best practices, the standard is tailored to Indian threat scenarios and operating conditions.
- **Quality Assurance:** Emphasises performance, safety, and reliability of bomb disposal equipment before deployment in the field.

### Need for a National Standard

- **Diverse Threat Environment:** India faces a wide range of explosive threats, including improvised explosive devices (IEDs), vehicle-borne explosives, and unexploded ordnance. Existing international standards do not fully account for local operational conditions such as dense urban settings and varied terrain.
- **Limitations of International Standards:** Many global standards are either difficult to access or not fully compatible with Indian security requirements. This created inconsistencies in testing practices and procurement decisions.
- **Growing Indigenous Manufacturing:** With several public and private players manufacturing bomb disposal systems in India, a uniform testing standard is essential to ensure safety, reliability, and interoperability of equipment.

### Significance for Internal Security

- **Enhanced Safety of Security Personnel:** Standardised testing reduces the risk of equipment failure during

live bomb disposal operations, thereby improving the safety of personnel from police, paramilitary forces, and specialised bomb squads.

- **Improved Operational Confidence:** A nationally accepted testing framework increases confidence among security agencies regarding the performance of bomb disposal systems deployed during high-risk operations.
- **Better Procurement Decisions:** Government agencies can rely on a clear benchmark while procuring equipment, leading to transparent and objective decision-making.

### Impact on Indigenous Defence Manufacturing

- Encourages **quality-driven manufacturing** by providing clear technical benchmarks.
- Helps Indian manufacturers **upgrade product design and testing processes**.
- Enhances the **global competitiveness** of Indian bomb disposal systems by aligning them with internationally accepted principles while addressing domestic needs.

### Role of Institutions Involved

- **Bureau of Indian Standards (BIS):** Formulated and notified the standard as India's national standards body.
- **Ministry of Home Affairs (MHA):** Initiated the requirement in view of internal security needs.
- **Terminal Ballistic Research Laboratory (TBRL):** Provided technical expertise related to explosive threats and testing parameters.

### Challenges

- As the standard is voluntary, widespread adoption depends on awareness and acceptance among stakeholders.
- Continuous updating will be required to keep pace with evolving explosive technologies and threat patterns.
- Capacity building of testing laboratories is necessary to ensure effective implementation.

### Way Forward

- Gradual integration of **IS 19445:2025** into **government procurement policies**.
- Capacity enhancement of accredited laboratories across states.
- Periodic review and revision of the standard to address emerging threats.
- Alignment with the broader goals of **Atmanirbhar Bharat** in defence and security manufacturing.

### Conclusion

The introduction of **IS 19445:2025** marks an important milestone in India's efforts to strengthen its internal security framework. By establishing a uniform, India-specific standard for testing bomb disposal systems, the country has taken a proactive step towards improving operational safety, supporting indigenous manufacturing, and enhancing preparedness against explosive threats. Over time, effective

implementation of this standard can significantly contribute to safer and more reliable counter-terror operations.

## INDIA–FRANCE DEFENCE COOPERATION: HAMMER MUNITION

**Why in News:** India and France have signed a Joint Venture Cooperation Agreement (JVCA) to manufacture the *Highly Agile Modular Munition Extended Range (HAMMER)* precision-guided weapon system in India, strengthening bilateral defence industrial cooperation.



### Key Details

- Weapon System: HAMMER (Highly Agile Modular Munition Extended Range)
- Developed by: Safran Electronics & Defence, France
- Type: Precision-guided air-to-ground munition
- Range: Up to 70 km (stand-off capability)
- Platforms: Rafale fighter aircraft and Tejas Light Combat Aircraft (LCA)
- Indigenisation Target: Around 60%

### About HAMMER Munition

HAMMER is a modular weapon system that transforms conventional unguided bombs into precision-guided munitions using a guidance and propulsion kit. It is designed for high accuracy across diverse combat conditions.

### Key Features

- Enables stand-off strikes from outside enemy air defence zones.
- Maintains precision even in GPS-denied or electronic warfare environments.
- Effective against both stationary and moving targets.

### Operational Significance

- The system has been used by India in *Operation Sindoor* and enhances the operational flexibility of the Indian Air Force by integrating with both imported and indigenous fighter platforms.

### Strategic Importance for India

- Boosts India’s precision strike and deep offensive capabilities.
- Reduces exposure of combat aircraft to hostile air defence systems.
- Supports the *Make in India* initiative through increased domestic manufacturing.
- Deepens India–France defence ties, including cooperation in fighter jet engines and Rafale Marine procurement.

### Conclusion

The indigenous production of the HAMMER munition represents a critical step towards self-reliance in advanced defence technologies while reinforcing India’s strategic partnership with France. It contributes to enhanced combat readiness and long-term defence industrial capability.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

Q. Consider the following statements regarding the HAMMER munition:

1. It is a precision-guided air-to-ground weapon developed in France.
2. It provides stand-off strike capability and can operate in GPS-denied environments.
3. It is compatible only with imported fighter aircraft of the Indian Air Force.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Answer: (a)

### EXERCISE TRISHUL

**Why in News:** India has commenced a large-scale tri-service military exercise, *Exercise Trishul*, along the western border with Pakistan to demonstrate operational preparedness and joint war-fighting capability amid heightened security concerns in the Sir Creek region.

### Key Details

- Type: Tri-service military exercise
- Participating Forces: Indian Army, Navy and Air Force
- Duration: 30 October to 10 November 2025
- Area of Operations: Thar Desert region from Jaisalmer (Rajasthan) to Sir Creek (Gujarat)
- Internal Codename: *Mahaгурjar*

### About Exercise Trishul

Exercise Trishul is a comprehensive tri-service drill aimed at strengthening coordination and interoperability among the three armed forces. It focuses on preparing the military for integrated operations in a complex and evolving security environment.

### Objectives of the Exercise

- To test and refine joint operational doctrines of the Army, Navy and Air Force.
- To enhance readiness for multi-domain warfare covering land, sea, air and cyber domains.
- To practice deep-strike operations, amphibious assaults and coordinated combat missions.
- To validate newly inducted indigenous weapon systems under near-real battlefield conditions.

### Scale and Participation

- **Indian Army:** Deployment of over 20,000 troops supported by T-90S and Arjun main battle tanks, artillery systems, armed helicopters and missile units.
- **Indian Air Force:** High-tempo air operations involving Rafale and Sukhoi-30MKI fighter aircraft, transport and mid-air refuelling aircraft (IL-78), AEW&C platforms and unmanned aerial vehicles.
- **Indian Navy:** Frigates and destroyers positioned off the Gujarat and Saurashtra coasts to conduct amphibious and maritime combat drills.

### Airspace Restrictions (NOTAM)

The Indian Air Force has issued a Notice to Airmen (NOTAM), restricting civilian air traffic over parts of Rajasthan and Gujarat during the exercise period. Pakistan has also imposed temporary restrictions over its central and southern airspace, reportedly in connection with its own military activities around 28–29 October 2025.

### Conclusion

Exercise Trishul reflects India’s growing emphasis on jointness and integrated theatre-level operations. By conducting a large-scale tri-service drill along the western front, India aims to enhance deterrence, improve inter-service coordination and ensure combat readiness against emerging conventional and hybrid threats.

#### EXPECTED QUESTION FOR UPSC CSE

##### Prelims MCQ

Q. Consider the following statements regarding *Exercise Trishul*:

1. It is a tri-service military exercise involving the Army, Navy and Air Force.
2. It focuses on integrated operations across land, sea, air and cyber domains.

3. It is conducted exclusively in high-altitude Himalayan regions.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

(a) :Answer

## CHANAKYA DEFENCE DIALOGUE (CDD) 2025

**Why in News:** The two-day *Chanakya Defence Dialogue (CDD) 2025*, organised by the Indian Army in collaboration with the Centre for Land Warfare Studies (CLAWS), concluded at the Manekshaw Centre, New Delhi, with a focus on defence reforms, emerging security challenges and technology-driven transformation.

### Key Details

- Theme: *Reform to Transform – Sashakt, Surakshit aur Viksit Bharat*
- Organisers: Indian Army and Centre for Land Warfare Studies (CLAWS)
- Venue: Manekshaw Centre, New Delhi
- Duration: Two days (concluded on 28 November 2025)
- Key Dignitaries: Raksha Mantri Rajnath Singh; Gen Upendra Dwivedi, Chief of the Army Staff

### About Chanakya Defence Dialogue

- Chanakya Defence Dialogue is a flagship strategic forum of the Indian Army that brings together military leadership, policymakers, diplomats, academics and global experts to deliberate on India’s security environment, defence reforms and future warfare trends.

### Focus Areas of CDD 2025

- India’s evolving security challenges in a complex global order
- Defence reforms and military modernisation
- Role of emerging technologies such as artificial intelligence, autonomous systems, cyber and space
- Jointness, integration and multi-domain warfare
- Strategic autonomy and self-reliance in defence

### Key Highlights

- The Raksha Mantri underscored the necessity of defence reforms in light of shifting global power centres and blurred lines between peace and conflict.
- Emphasis was laid on *Atmanirbhar Bharat*, digitisation, green initiatives, infrastructure development and welfare of soldiers and veterans.
- Strategic autonomy was highlighted as dependent on operational military capability, resilient defence-

industrial base, secure technologies and reduced external dependencies.

- Deliberations focused on technology as a battlefield equaliser, doctrinal shifts in conventional warfare and the growing importance of information and cognitive security.

### Outcome and Strategic Significance

- Reinforced the need for integrated, agile and technologically enabled armed forces.
- Provided actionable inputs for the Indian Army's long-term transformation roadmap.
- Strengthened alignment between military experience, strategic thought and policy formulation.

### Conclusion

Chanakya Defence Dialogue 2025 reaffirmed India's commitment to building a strong, secure and developed nation through defence reforms, technological innovation and self-reliance. The dialogue highlighted that a future-ready military is central to national security, strategic autonomy and India's role as a stabilising global power.

#### EXPECTED QUESTION FOR UPSC CSE

##### Prelims MCQ

1. It is organised by the Indian Army in collaboration with a strategic think tank.
2. It focuses on defence reforms, jointness and emerging technologies in warfare.
3. It is a bilateral dialogue conducted exclusively with India's strategic partners.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Answer: (a)

## INDIA'S AVIATION VISION 2047

**Why in News:** The Ministry of Civil Aviation outlined India's long-term roadmap for the aviation sector aligned with *Viksit Bharat @2047*, highlighting the transformative role of schemes such as UDAN, Digi Yatra, Drone PLI and legislative reforms to support inclusive growth and economic expansion.

### Key Details

- India is the world's **third-largest domestic aviation market**.
- Number of airports increased from **74 (2014) to 163 (2025)**; target of **350–400 airports by 2047**.
- Aviation sector supports **over 7.7 million jobs**.

- UDAN: **1.56 crore passengers, 3.23 lakh flights, 649 routes, 93 aerodromes** connected.

### India's Aviation Growth Trajectory

- India's aviation sector has emerged as a major driver of economic growth, regional integration and employment generation.
- Domestic passenger traffic has grown at an annual rate of 10–12% over the past decade, supported by rising incomes, policy reforms and infrastructure expansion.
- By 2040, passenger traffic is projected to reach around **1.1 billion**, with the commercial aircraft fleet expanding significantly.

### UDAN and Regional Connectivity

- The UDAN (*Ude Desh ka Aam Nagrik*) scheme, launched in 2016, has democratised air travel by making it affordable and accessible.
- It has connected smaller towns, hilly areas, islands and aspirational districts to the national aviation network, boosting tourism, trade and local economies.
- The scheme has operationalised hundreds of regional routes with Viability Gap Funding to ensure commercial sustainability.

### Employment and Economic Impact

- Aviation has strong multiplier effects on the economy through tourism, logistics, manufacturing and services.
- The sector currently supports millions of jobs and is expected to generate nearly **25 million jobs by 2047**, emerging as a core pillar of India's journey towards a developed economy.

### Key Government Initiatives

- **Krishi UDAN:** Facilitates rapid transport of agricultural and perishable produce, benefiting farmers and northeastern and tribal regions.
- **Lifeline UDAN:** Ensured uninterrupted medical and essential supplies during emergencies such as the COVID-19 pandemic.
- **Greenfield Airports Policy:** Enables construction of new airports through public-private partnerships to expand capacity and reduce congestion.
- **Digi Yatra:** Introduced paperless and contactless air travel using facial recognition technology, improving passenger experience.
- **Drone Rules, 2021 & Drone PLI Scheme:** Promotes domestic drone manufacturing and commercial use, strengthening the drone ecosystem.
- **Bharatiya Vayuyan Adhiniyam, 2024:** Modernises aviation legislation in line with global standards and supports *Make in India* and *Atmanirbhar Bharat*.

### Vision 2047

- India's aviation vision focuses on inclusive connectivity, technological innovation, sustainability and skill

development. Expansion of airports, cleaner fuels, digital systems and indigenous manufacturing will shape a resilient and future-ready aviation ecosystem.

**Conclusion**

India’s civil aviation sector has become a key enabler of economic growth, national integration and global connectivity. Through policy reforms, infrastructure expansion and technology adoption, the sector is poised to play a decisive role in realising *Viksit Bharat @2047*, ensuring that growth remains inclusive, sustainable and employment-intensive.

**EXPECTED QUESTIONS FOR UPSC CSE**

**Prelims MCQ**

Q. Consider the following statements regarding the UDAN scheme:

1. It aims to enhance regional air connectivity by making air travel affordable.
2. It provides Viability Gap Funding to airlines for operating regional routes.
3. It is implemented by NITI Aayog in collaboration with State governments.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
 (c) 1 and 3 only                      (d) 1, 2 and 3

(a) Answer

**Descriptive Question**

Q. Discuss the role of the civil aviation sector in promoting inclusive economic growth in India. Examine how government initiatives such as UDAN and Digi Yatra contribute to India’s Vision 2047. [150 Words] [10 Marks]

**MAHE: INDIGENOUS ANTI-SUBMARINE WARFARE VESSEL**

**Why in News:** India is set to commission *INS Mahe* at the Naval Dockyard in Mumbai, reinforcing indigenous shipbuilding capabilities and strengthening coastal and near-shore maritime security.

**Key Details**

- Vessel Type: Anti-Submarine Warfare Shallow Water Craft (ASW-SWC)
- Class: Mahe-class
- Builder: Cochin Shipyard Limited (CSL), Kochi
- Indigenisation Level: Over 80% indigenous content
- Operational Domain: Littoral and shallow-water regions

**About INS Mahe**

INS Mahe is the lead vessel of the Mahe-class ASW-SWC series developed under the *Aatmanirbhar Bharat* initiative. It reflects India’s progress in designing and constructing advanced naval platforms using predominantly indigenous systems and technologies.

**Operational Role**

The vessel is specifically designed for high-speed operations in coastal and shallow waters. Its primary tasks include submarine detection and neutralisation, coastal surveillance, and protection of vital maritime assets close to shore.

**Key Capabilities**

- Optimised for littoral warfare with enhanced manoeuvrability and speed.
- Incorporates stealth features to reduce detectability.
- Equipped for precision operations against underwater threats in near-shore environments.

**Symbolic Significance**

Named after the historic coastal town of Mahe on the Malabar Coast in the Union Territory of Puducherry, the ship carries a crest depicting the *Urumi*, a traditional flexible sword used in *Kalaripayattu*. The symbol represents agility, accuracy and combat effectiveness.

**Conclusion**

The commissioning of INS Mahe marks the induction of a new generation of indigenous shallow-water combat vessels. It significantly enhances India’s coastal defence posture while reinforcing self-reliance in defence manufacturing and maritime security preparedness.

### RAJASTHAN BANS CHILD LABOUR BELOW 14 & RESTRICTS NIGHT WORK FOR TEENS

**Why in News:** The Rajasthan government has introduced major changes to labour laws governing shops and commercial establishments in the state. These changes aim to protect child rights, improve working conditions and align state labour regulations with national standards and global child protection norms.

#### Key highlights of the amendment

- Ban on child labour below 14 Years.
  - Children under 14 years of age are now completely prohibited from working in shops and commercial establishments in Rajasthan.
  - This move strengthens existing child protection norms and ensures that young children are not exploited for labour at the cost of their education and health.
- Minimum age for apprentices raised.
  - The minimum age for apprentices in commercial workplaces has been raised from 12 to 14 years.
  - This change is intended to safeguard early schooling years and ensure that children focus first on education.
- Restrictions on work for adolescents (14–18 Years)
  - Adolescents aged 14 to 18 are not permitted to work during night hours.
  - This restriction aims to protect their health, education, mental development and overall well-being.
- Revised Working Hour Norms
  - The amendment increases the maximum daily working hours from 9 to 10 hours.
  - The quarterly overtime limit has also increased, potentially improving operational flexibility for employers while maintaining worker protection.

#### Government's rationale

- The amendments strike a balance between economic growth and worker welfare.
- These changes will help expand commercial activities in Rajasthan while protecting vulnerable age groups.
- Prohibiting child labour below 14 and restricting night work for teens is expected to support continued school

attendance and better health outcomes for children aged 14–18.

#### Legal & policy implications

- These amendments align with India's broader legislative framework, such as the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986, which already bars employment of children below 14 and regulates adolescent work conditions.
- By reinforcing and expanding these protections at the state level, Rajasthan strengthens its compliance with national child rights laws and international standards on child protection.

#### Significance

- **For Children:** Ensures protection from work that could hinder education, health, and development.
- **For Employers:** Businesses must comply with updated norms regarding minimum working age and hours of work.
- **For Society:** Reinforces the state's commitment to eliminating child labour and promoting a safer, more just work environment.

#### Conclusion

Rajasthan's labour reforms represent an important step in safeguarding children's rights and welfare. By banning labour below 14 years and regulating adolescents' work schedules, the state aims to create a balance between economic activity and child protection.

#### EXPECTED QUESTIONS FOR UPSC CSE

##### Prelims MCQ

Q. With reference to the recent amendment to labour laws in Rajasthan, consider the following statements:

1. Employment of children below 14 years of age in shops and commercial establishments has been completely banned.
2. Adolescents between 14 and 18 years are allowed to work during night hours with employer permission.
3. The minimum age for apprentices in commercial establishments has been increased.

Which of the statements given above is/are correct?

- (a) 1 only                      (b) 1 and 3 only  
(c) 2 and 3 only              (d) 1, 2 and 3

Correct Answer: (b)

### Descriptive Question

Q. Discuss the significance of banning child labour below 14 years and restricting night work for adolescents. How do such measures contribute to child rights protection and social development in India? (10 marks/ 150 words)

## FUTURE CANCER BURDEN IN INDIA

**Why in News:** A recent disease-forecasting study has projected a significant increase in deaths due to pancreatic, colorectal and breast cancers in India by the year 2030.

### Key details about study

- The study aimed to forecast future cancer mortality trends in India up to 2030.
- It used historical data (from 2000 to 2019) on cancer deaths at the national level.
- A statistical modelling technique called ARIMA (Autoregressive Integrated Moving Average) was used to make these projections.
- Age-Standardized Mortality Rates (ASMR) were calculated to account for changes in population age structure over time.

### Key findings

- Rising Mortality from Specific Cancers
- ✓ **Pancreatic Cancer:** Continues to rise and is projected to contribute significantly to future cancer deaths due to its aggressive nature.
- ✓ **Colorectal Cancer:** Mortality has shown an upward trend and is expected to continue increasing until 2030.
- ✓ **Breast Cancer:** Among women, breast cancer deaths are projected to show the sharpest rise between 2025 and 2030.
- Gender-Specific Trends
- ✓ Among males, deaths due to colorectal and pancreatic cancers show significant increases.
- ✓ Among females, breast cancer is expected to lead the rise in mortality, followed by other cancers like lung and colorectal.
- Shifting Patterns of Cancer Burden
- ✓ The overall cancer mortality pattern in India is shifting away from infection-related cancers and tobacco-linked cancers toward cancers associated with lifestyle and metabolic changes.
- ✓ This shift reflects evolving risk factors such as dietary changes, obesity and reduced physical activity.

### Why are these changes happening?

- **Population ageing and growth:** India's population

is ageing, and older populations are at higher risk of developing cancer, leading to more deaths.

- **Lifestyle and behavioral risk factors:** Rising trends in unhealthy diets, sedentary lifestyles, obesity, and metabolic diseases contribute to increased cancer risk.
- **Decline in some traditional risk factors:** Deaths from cancers related to tobacco use and household air pollution are decreasing, perhaps due to better awareness and reduced exposure.

### Policy Implications

- **Need for early detection:** Expanding screening programmes such as mammography for breast cancer and colonoscopy for colorectal cancer can help detect cancers early when treatment is more effective.
- **Strengthening healthcare infrastructure:** Diagnostic and treatment services need to be improved, especially in rural and underserved regions.
- **Public awareness and prevention:** Increasing awareness about modifiable risk factors (like diet, exercise and smoking) is crucial to control future cancer deaths.

### Conclusion

The projected increase in deaths from pancreatic, colorectal and breast cancers by 2030 highlights an evolving cancer burden in India. This trend emphasizes the need for enhanced screening, robust public health strategies, early diagnosis, and preventive measures to reduce future mortality and improve health outcomes.

## EXPECTED QUESTION FOR UPSC CSE

### Prelims MCQ

Q1. According to a recent study, which of the following cancers are projected to show a significant rise in mortality in India by 2030?

- |                      |                      |
|----------------------|----------------------|
| 1. Pancreatic cancer | 2. Colorectal cancer |
| 3. Breast cancer     | 4. Cervical cancer   |

Select the correct answer using the code given below:

- |                     |                     |
|---------------------|---------------------|
| (a) 1 and 2 only    | (b) 1, 2 and 3 only |
| (c) 2, 3 and 4 only | (d) 1, 2, 3 and 4   |

Answer: (b)

## KARNATAKA'S MENSTRUAL LEAVE POLICY

**Why in News:** The Government of Karnataka has formally notified a landmark Menstrual Leave Policy, granting one paid leave each month to women employees during their menstrual period. The move makes Karnataka one of the first Indian states to implement a statewide menstrual leave entitlement across sectors.

**Key Details**

- Under this policy, women employees are entitled to one paid menstrual leave day every month, totalling 12 days a year.
- Applicable to women aged 18 to 52 years.
- The policy covers both public (government) and private sector employees.
- It applies to women in permanent, contractual, and outsourced jobs in establishments registered under various labour laws including the Factories Act, Shops & Commercial Establishments Act, Plantation Workers Act, and others.

**Key Features**

- **Paid leave:** The menstrual leave is with full pay and should not lead to any wage deduction.
- **No medical certificate required:** Women do not need to produce medical documents to avail the leave.
- **Non-Carry Forward:** Unused menstrual leave cannot be carried over to the following month; it must be consumed within that month.
- The leave should be recorded separately in attendance/leave registers and not merged with other leave types.

**Rationale behind the policy**

- The government’s stated aim is to recognise menstrual health needs, enhance women’s workplace welfare, and reduce stigma associated with periods.
- Such a policy seeks to create inclusive and supportive work environments that acknowledge women’s biological needs.

**Other Similar initiatives**

- **Kerala (2017):** The Kerala government introduced menstrual leave for female students in state-run higher education institutions.
- **Bihar (1992):** Bihar became one of the earliest states to allow two days of menstrual leave per month for women government employees.
- **Odisha (2024):** The Odisha government launched the “Mamata” scheme and workplace sensitisation programs focusing on menstrual health and hygiene, though it does not mandate leave.
- **Private Sector Initiatives:** Companies like Zomato, Swiggy, Byju’s, and Culture Machine provide menstrual leave policies voluntarily.

**Implementation and legal challenge**

- Soon after being notified, the policy faced a legal challenge in the Karnataka High Court with petitions questioning the notification’s basis under labour law.
- The High Court initially stayed one such government order but later recalled the stay, and proceedings to hear detailed objections were scheduled.

**Significance**

- With this notification, Karnataka stands out among Indian states in formally mandating menstrual leave across both private and public sectors.
- It aligns with global trends where certain countries provide menstrual leave, positioning menstrual health as a valid workplace consideration.

**Conclusion**

The Karnataka government’s decision to notify a paid menstrual leave policy marks an important step towards gender-sensitive governance and inclusive workplaces. By recognising menstruation as a legitimate health concern, the policy helps reduce stigma and promotes dignity, well-being, and productivity of women workers. However, successful implementation will require proper awareness, employer compliance, and legal clarity to ensure that the policy empowers women without creating unintended workplace discrimination.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. With reference to the Menstrual Leave Policy notified by the Karnataka government, consider the following statements:

1. The policy provides one day of paid menstrual leave per month to women employees.
2. A medical certificate is mandatory to avail the menstrual leave.
3. The policy applies to both public and private sector establishments registered under labour laws.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 1 and 3 only  
 (c) 2 and 3 only                      (d) 1, 2 and 3

Answer: (b) 1 and 3 only

**MAOIST SURRENDER IN CHHATTISGARH**

**Why in News:** In a major development in the long-standing conflict between the Indian state and Maoist insurgents in Chhattisgarh, a large number of Maoist cadres laid down their arms and surrendered to government authorities on October 17, 2025 in the Bastar region. This event is seen as one of the largest single-day surrenders in the state’s recent history and a key milestone in reducing Left-Wing Extremism (LWE).

**Key Highlights**

- **Large-scale surrender:** A total of around 208–210 Maoist cadres, including a significant number of

women, surrendered their weapons and returned to the mainstream society in Jagdalpur, Bastar.

- **Weapons handed over:** The surrendering group handed in over 150 weapons, such as AK-47 assault rifles, INSAS rifles, self-loading rifles and other arms previously used against security forces.
- **Participation of senior leaders:** Among those who surrendered were several senior Maoist leaders and members of the banned CPI (Maoist) organisation.
- **Symbolic gesture of reintegration:** Security personnel presented the former cadres with copies of the Indian Constitution as a symbolic step towards their reintegration into democratic life.

### Rehabilitation and Reintegration Policy

- The state government's Naxal Surrender and Rehabilitation Policy 2025 was highlighted as a key factor encouraging cadres to surrender. Under this policy, former Maoists receive financial support, skill training, livelihood assistance, housing support under PMAY, and other benefits to facilitate smooth reintegration.

### Significance

- **Major blow to maoist movement:** This surrender represents a major setback to the organization's operational strength in Chhattisgarh, especially across the Dandakaranya region — historically one of the main Maoist strongholds.
- **Ending Violence, Starting Development:** Officials believe this event will further weaken the armed insurgency and allow increased focus on peace, development, and governance in affected areas.

### Conclusion

The surrender in Chhattisgarh marks a historic turning point in the state's fight against Maoist insurgency. With hundreds of cadres agreeing to disarm and return to civilian life, it signals a weakening of the violent movement and a shift toward peace, stability, and development in the conflict-affected Bastar region.

## KERALA BECOMES FIRST INDIAN STATE TO ERADICATE EXTREME POVERTY

**Why in News:** Kerala has officially declared that it has eliminated extreme poverty within the state, making it the first state in India to achieve this milestone.

### What is "Extreme Poverty"?

Extreme poverty refers to the most severe form of deprivation where families lack basic necessities such as:

- Nutritious food
- Safe housing
- Basic healthcare

- Secure sources of income

It is measured not just by low income, but by lack of essential capabilities impacting daily life.

### How Kerala achieved this goal

- Targeted identification of the poor
  - The government conducted detailed surveys to find households living in extreme distress, especially those not covered by existing welfare schemes. Around 64,006 families were identified for assistance based on critical deprivation indices.
- Community-Driven Approach
  - Local bodies, volunteers, and community workers — including Kudumbashree, ASHA workers, and NGOs — played a key role in identifying and validating households that were excluded or left behind in earlier welfare efforts.
- Individual Micro-Plans for Families

Each identified family received a customised plan tailored to their specific needs, including:

- Food security
- Housing support (new houses or repairs)
- Healthcare and insurance
- Job cards and livelihood support
- Identity documents (ration card, Aadhaar)

Most families (over 96%) have already been lifted out of extreme poverty through this targeted programme.

- Integration with Existing Welfare Systems
  - Kerala's strong welfare framework — including free health cover (KASP), public distribution system benefits, pensions, and education support — was effectively integrated into the poverty eradication efforts.
- Sustained Government Support
  - The state government reportedly spent over ₹1,000 crore on welfare measures that helped pull the extremely poor out of distress.

### Significance

- Kerala already had one of the lowest poverty rates in India, with a Multidimensional Poverty Index (MPI) below 1%.
- Eradicating extreme poverty is seen as a major human development achievement, reinforcing the success of Kerala's long-standing welfare model.

### Conclusion

Kerala's declaration as the first state in India to eliminate extreme poverty highlights the impact of targeted governance, strong welfare systems and active community participation. While opinions differ on the completeness of this achievement, the initiative sets an example of how

tailored intervention and social inclusion can significantly improve the lives of the most vulnerable.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

Q. Kerala recently declared that it has eliminated extreme poverty. In this context, which of the following best describes “extreme poverty”?

- (a) Living below the official income poverty line
- (b) Lack of access to basic needs such as food, housing, healthcare and livelihood
- (c) Living in rural areas without permanent employment
- (d) Households not covered under any government scheme

Answer: (b)

## UNDERSTANDING MENTAL HEALTH

**Why in News:** The Press Information Bureau (PIB) released an informative brief titled “Understanding Mental Health — Global Perspectives and Indian Initiatives” to enhance public awareness about mental health and the Government’s efforts in this area. Mental health is increasingly being recognised as a basic human right that is essential for individual, community and socio-economic well-being.

### About Mental health

- Mental health goes beyond just being free from mental illness — it includes emotional, social, cognitive and psychological well-being.
- Good mental health helps people manage stress, build healthy relationships, make sound decisions, and contribute positively to society.

### Global and Indian Scenario

- Globally, 1 in 7 people lives with a mental health condition, affecting productivity and quality of life.
- In India, approximately 11 out of every 100 adults suffer from some form of mental disorder.
- Mental health disorders significantly contribute to disability, especially conditions like depression and anxiety which affect people across age groups.

### Challenges in Mental Healthcare

- **Treatment Gap:** A large number of individuals with mental illness in India do not receive treatment due to lack of awareness, social stigma, and shortage of trained professionals.
- India has far fewer mental health specialists than

recommended — for example, psychiatrists per population is well below global norms.

- **Social Stigma:** Misconceptions and discrimination contribute to delayed or avoided treatment and social exclusion.

### Government Action and Initiatives

- The Government has introduced several programmes aimed at strengthening mental health services, including integrating mental health into primary healthcare, expanding training for health workers, and promoting community awareness.
- Initiatives like Tele MANAS (Tele Mental Health Assistance and Networking Across States) provide virtual counselling and support services to people across India.
- Under Ayushman Bharat, mental health services are offered at upgraded health centres, making them more accessible and affordable.

### Why it matters

- Poor mental health can affect physical health, productivity, economic growth and social relationships, and contribute to increased suicide risk and social isolation.
- Improving mental health care is essential for achieving universal health coverage and ensuring overall societal well-being.

### Conclusion

The PIB’s explanation on mental health aims to sensitise citizens, policymakers and stakeholders about the importance of mental well-being and the need for a comprehensive, stigma-free approach towards mental healthcare in India. Continued efforts in policy, awareness, and service delivery are vital to bridge treatment gaps and support individuals affected by mental health issues.

## GOVERNMENT IMPLEMENTS FOUR LABOUR CODES

**Why in News:** The Government of India has taken a major reform step in the country’s labour framework by making four consolidated Labour Codes effective from 21 November 2025. This landmark decision replaces 29 existing labour laws, many of which were outdated and framed decades ago, with more modern and streamlined regulations.

### Why the change

- India’s earlier labour laws were complex, fragmented and spread across multiple enactments dating back to pre-independence and early post-independence periods.
- These laws often did not reflect the changing nature of work, new industries and evolving employment relationships. The four Labour Codes aim to provide a simple, modern and balanced labour law framework for workers and employers alike.

### The four labour codes now in force

- Code on Wages, 2019
- Industrial Relations Code, 2020
- Code on Social Security, 2020
- Occupational Safety, Health & Working Conditions Code, 2020

Together, these Codes cover wages, industrial relations, social security benefits, safety, health and working conditions.

### Key Reforms and benefits

- Formalisation of Employment
  - All workers must be given written appointment letters.
  - This brings transparency and job security.
- Universal Social Security
  - All workers including gig and platform workers will receive social security benefits like Provident Fund (PF), ESIC and insurance.
- Minimum Wages for All
  - Minimum wage becomes a statutory right for every worker, ensuring fair pay and financial stability.
- Timely Payment of Wages
  - Employers are legally required to pay wages on time.
- Health & Safety
  - Employers must provide free annual health check-ups for workers above 40 years.
- Women's Participation
  - Women allowed to work in night shifts and all job roles with safety measures and consent.
- Simplified Compliance
  - Introduction of single registration, single licence and single return reduces administrative burden on employers.

### Sector-wise Impact

- Fixed-Term Employees
  - Equal benefits and wages as permanent workers.
  - Eligible for gratuity after 1 year instead of 5.
- Gig & Platform Workers
  - Defined for the first time with welfare provisions.
  - Social security linked to Aadhaar for portability across states.
- Contract Workers
  - Principal employer must ensure health and social security benefits.
- Youth Workers
  - Minimum wages and formal appointment letters strengthen job quality.
- Plantation & Export Workers
  - Plantation workers now covered under safety & social security provisions.

- Export sector workers to get provident fund, gratuity and leave benefits.

### Other important features

- National Floor Wage to prevent wages falling below basic standards.
- Gender-neutral pay and job opportunities.
- Inspector-cum-Facilitator system to support compliance rather than penalise.
- Faster dispute resolution and stronger worker protections.

### Significance of the reforms

The implementation of the Labour Codes represents a historic shift in India's labour governance. It promises:

- Better workers' welfare
- Enhanced formal employment
- Reduced compliance burden for businesses
- Wider social security coverage
- A more flexible and future-ready labour ecosystem.

The Government aims to align India's labour framework with global standards while promoting a secure, productive and resilient workforce for Aatmanirbhar Bharat.

### Conclusion

The implementation of the four Labour Codes marks a new era in India's labour laws, simplifying regulations while ensuring workers' rights, social security, and fair wages. By formalising employment, extending social security to gig and platform workers, and promoting safe and inclusive workplaces, these reforms aim to create a balanced labour ecosystem that benefits both employees and employers. This step strengthens India's vision of a modern, productive, and globally competitive workforce.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

- Q. Which of the following statements is correct regarding the four Labour Codes implemented in India from 21 November 2025?
- They replace all existing labour laws, including the Factories Act, 1948.
  - They provide universal social security benefits to gig and platform workers.
  - Women are still prohibited from working night shifts under the new Codes.
  - Minimum wages are recommended but not legally enforceable.

Answer: (b)

## 'MANYA ACT' TO PREVENT HONOUR KILLINGS

**Why in News:** The brutal killing of Manya Patil, allegedly murdered by her own parents for marrying a Dalit man, has sparked demands for a special law in Karnataka to curb honour killings — violent acts carried out by family or community members against individuals who defy traditional caste, community or family norms in choosing a partner.

### What is being demanded?

Social activists and organisations campaigning against caste-based violence are urging the Karnataka Government to introduce a dedicated law, provisionally called the “Manya Act,” aimed at preventing honour killings and ensuring strict punishment for perpetrators. They argue that:

- Existing legal provisions are not enough to deter honour crimes.
- A specific law would act as a stronger deterrent and send a clear message against caste-based violence.

### Key Perspectives

- Honour killings discourage inter-caste marriages and weaken social equality.
- Current laws do not adequately address deep-rooted caste prejudices.
- Any new legislation should build on Supreme Court guidelines (like Shakti Vahini and Vishaka directions) to effectively punish those obstructing marriages and violating personal liberties.

### Why this matters?

Honour killings continue to be a serious social problem in parts of India, often driven by caste and community pressures. Cases like Manya’s have ignited debate on whether existing laws are sufficient or a specific statutory framework is necessary to safeguard individuals’ right to choose their partner without fear of violence.

### Conclusion

The demand for the “Manya Act” underscores the urgent need to address honour killings and caste-based violence in

Karnataka. While existing laws provide some protection, the persistence of such crimes highlights gaps in enforcement and deterrence. A dedicated legal framework, coupled with public awareness and social reform, is essential to safeguard the fundamental right to life and personal liberty under Article 21 of the Constitution.

### Way Ahead

1. Legislative Action:
  - Enact a special law that clearly criminalises honour killings and provides strict punishment for perpetrators.
  - Include provisions for fast-track courts and witness protection to ensure timely justice.
2. Implementation & Enforcement:
  - Strengthen police and judicial mechanisms to respond swiftly to threats against inter-caste and inter-community couples.
  - Train law enforcement to recognise early warning signs of honour-based violence.
3. Social Awareness & Education:
  - Launch campaigns to challenge caste and gender prejudices.
  - Promote inter-caste marriages through social, cultural, and community support programs.
4. Victim Support:
  - Provide legal aid, counseling, and rehabilitation for survivors of family or community threats.
  - Create helplines and shelters for at-risk individuals.
5. Monitoring & Research:
  - Maintain a state-wide database on honour killings to track trends and policy effectiveness.
  - Encourage academic and civil society research on social attitudes to inform policy.

Combating honour killings requires a holistic approach combining strong legislation, proactive enforcement, social awareness, and victim support. The “Manya Act” could become a model law demonstrating the state’s commitment to protecting individual freedom and equality.

### ARUNACHALESWARAR TEMPLE

**Why in News:** Encroachments around the Arunachaleswarar Temple in Tiruvannamalai, Tamil Nadu, were demolished ahead of the Karthigai Deepam festival to improve space and movement for pilgrims visiting the temple during the festival period.

#### Location & Significance

- Located in **Tiruvannamalai, Tamil Nadu**, the *Arunachaleswarar (Annamalaiyar) Temple* is one of the **Pancha Bhoota Sthalams**, representing the **Fire (Agni)** element in Hindu tradition.
- Dedicated to **Lord Shiva** as *Arunachaleswarar* and *\*Goddess Unnamalai Amman*.
- The temple complex is an example of **Dravidian architecture**, with monumental gopurams and expansive mandapas.

#### Cultural & Religious Importance

- It is one of the holiest *Shaivite* shrines in South India, attracting **millions of devotees**, especially during festivals.
- The **Karthigai Deepam festival** is the most prominent festival here, highlighted by the lighting of a **giant sacred flame (Maha Deepam)** atop *Arunachala Hill*.
- Pilgrims perform *Girivalam*—**barefoot circumambulation** around the hill on full moon nights.

#### Recent Government Action (News Focus)

##### Removal of Encroachments

- Authorities in **Tiruvannamalai** carried out a drive to **remove encroachments (illegal shops/stalls and other unauthorised structures)** around the temple precincts and streets surrounding it ahead of *Karthigai Deepam*.
- Purpose of clearance:
  - **Widen pedestrian pathways** and *Girivalam* route for large crowds.
  - **Enhance crowd management and safety**, reducing fire hazard risks during festival gatherings.
  - **Preserve the heritage and sanctity** of the temple and its surroundings.

#### Conclusion

The removal of encroachments around the Arunachaleswarar Temple demonstrates a responsible effort to ensure public safety, facilitate smooth movement of devotees, and preserve the sanctity of an important cultural and religious site. It reflects the delicate balance between heritage conservation and modern urban management, especially during high-traffic festivals like Karthigai Deepam.

#### Way Forward

- **Sustainable Heritage Management:** Develop long-term plans to prevent encroachments while respecting local businesses and communities.
- **Infrastructure Upgradation:** Improve pathways, lighting, sanitation, and crowd-control measures around the temple for safer pilgrimage experiences.
- **Community Engagement:** Involve local residents and shopkeepers in planning to create win-win solutions that combine livelihood with heritage preservation.
- **Regular Monitoring:** Establish a monitoring mechanism to prevent future unauthorized constructions and maintain open spaces for pilgrims.
- **Festival Preparedness:** Implement annual pre-festival audits to ensure safety, accessibility, and effective crowd management during major events.

#### EXPECTED QUESTION FOR UPSC CSE

##### Prelims MCQ

- Q. Which of the following statements about the Arunachaleswarar Temple in Tamil Nadu is correct?
- It is dedicated to Lord Vishnu and is located on the banks of the Cauvery river.
  - Encroachments around the temple were demolished ahead of the Karthigai Deepam festival to improve safety and accessibility.
  - The temple hosts the festival of Diwali as its main annual event.
  - The Arunachaleswarar Temple is a modern temple built in the 20th century.

(b) Answer

## MUSEUM OF ROYAL KINGDOMS OF INDIA

**Why in News:** On 31 October 2025, Prime Minister Narendra Modi laid the foundation stone for the *Museum of Royal Kingdoms of India* at Ekta Nagar (near the Statue of Unity), Gujarat.

- The event took place on the **eve of Rashtriya Ekta Diwas** — a day commemorating national unity and Sardar Vallabhbhai Patel's role in integrating princely states into India.

### Historical Background

- At India's independence in 1947, the subcontinent had **over 550 princely states** alongside British-ruled territories.
- These states were integrated into the Indian Union chiefly through negotiations led by **Sardar Vallabhbhai Patel**, then **Deputy PM and Home Minister**, using the **Instrument of Accession**.
- By 1949, nearly all princely states had acceded to India, marking a major achievement in the nation's political consolidation and unity.

### Objectives

- Document and display** the legacy of India's royal and princely states.
- Preserve heritage artefacts and archival materials** that reflect royal traditions and their influence on cultural identity.
- Educate and engage** the public on the historical process of integration and governance evolution.
- Facilitate research, preservation and public learning** on India's regal and democratic journey.

### Museum Layout — Thematic Galleries

- Orientation Gallery**
    - Introduces the idea of royalty and cultural heritage with films and audio-visual narratives.
  - The Throne and the State**
    - Exhibits royal families, governance systems, traditions, welfare practices and lifestyle of princely states.
  - The Story of India's Integration**
    - Focuses on political integration post-1947, key documents and events underpinning national consolidation.
  - Hall of Unity**
    - Showcases symbols and insignias of princely states, paying tribute to their contributions to national unity.
- Additional features include a **viewing lounge** overlooking the Statue of Unity and museum café space.

### Conclusion

The establishment of the Museum of Royal Kingdoms of India at Ekta Nagar represents a significant step in preserving and showcasing the country's rich historical and cultural heritage. By documenting the legacy of India's princely states and highlighting the political integration achieved under Sardar Vallabhbhai Patel, the museum will serve as both an educational resource and a symbol of national unity. It not only celebrates India's regal traditions but also strengthens public understanding of the nation's journey from fragmented princely domains to a consolidated democratic republic, fostering appreciation for history, heritage, and governance.

### EXPECTED QUESTIONS FOR UPSC CSE

#### Prelims MCQ

- Q. The primary objective of the Museum of Royal Kingdoms of India is to:
- Display modern Indian art
  - Preserve and showcase India's royal and princely heritage
  - Promote foreign tourism only
  - Document colonial administration

(b) Answer

#### Descriptive Question

- Q. Discuss the significance of the proposed "Museum of Royal Kingdoms of India" in preserving and showcasing India's royal and princely heritage. (10 marks, 150 words)

## RAMMAN FESTIVAL

**Why in News:** During a special session of the Uttarakhand Legislative Assembly, President Droupadi Murmu was presented with a Ramman mask and a book on the Ramman festival.

### What is Ramman?

- Ramman** is a **religious festival and ritual theatre** unique to the Garhwal Himalayas of Uttarakhand.
- It is celebrated annually in **late April (around Baisakhi)** in the **twin villages of Saloor-Dungra** in **Chamoli district**.
- The festival honours **Bhumiyal Devta**, a local **tutelary deity** of the community.

### UNESCO Recognition

- Inscribed in 2009** on UNESCO's **Representative List of the Intangible Cultural Heritage of Humanity**.
- Recognised as a **multiform cultural event** — combining **theatre, music, oral and written traditions, and historical reconstructions** reflecting the community's environmental, spiritual and cultural worldview.

### Historical Origins

- Exact start date is unknown; practices traceable to **medieval period**.

- Initially connected to **Ramayana tradition** brought to the Garhwal Himalayas by **Vaishnavite saints**.
- Over time, local tribal folklore and community narratives got incorporated into the performances.

### Sequence of Events & Rituals

- Festival opens with **invocation to Lord Ganesha** as the remover of obstacles.
- Followed by **dance of the Sun God** and enactment of the myth of the **birth of Brahma and Ganesha**.
- Other acts include the **dance of Bur Deva with Krishna and Radhika**.
- The main segment focuses on **Ramkatha** — episodes from Lord Ram's life — sung and performed with precise rhythms and beats.

### Main Features of the Festival

#### a) Ritual Theatre & Performances

- Involves **theatrical enactments** of episodes from the **Ramayana** and local legends.
- Performed through **songs, dances, and drama**, often based on local folklore.

#### b) Masks & Art

- Performers wear **around 18 distinct types of masks** made from **Bhojpatra (Himalayan birch bark)**.
- Masks are coloured and made up using **natural materials** like honey, turmeric, wool, soot, wheat flour, etc.

#### c) Musical Elements

- Traditional **drums (Dhol, Damau)** and instruments accompany performances.
- Jagar singing** — a ritual musical narration of local legends — is an important performative element.

### Cultural & Symbolic Significance

- Connects man, nature and divine life**, celebrating harmony between humans and environment.
- Reinforces **local identity, shared myths, seasonal cycle, agricultural prosperity and collective memory**.
- The festival also serves to **preserve oral traditions and folk narratives**.

### Contemporary Relevance

- The state often highlights Ramman as a living cultural heritage, and it was recently acknowledged symbolically (e.g., presenting a Ramman mask to President Droupadi Murmu).
- The tradition remains **community-driven**, aimed at **passing knowledge across generations** and preserving heritage beyond local boundaries.

### Way Ahead

- Preservation of cultural heritage:** Strengthen initiatives to document, preserve, and promote intangible cultural heritage like Ramman through digital archiving, research, and training programs for youth.

- Community engagement:** Support local communities in sustaining their traditions by providing platforms for performance, skills transfer, and livelihood opportunities connected to cultural arts.
- National and international promotion:** Use national events, exhibitions, and UNESCO recognition to bring wider attention to regional festivals, encouraging tourism and intercultural learning.
- Integration into Education:** Introduce modules on regional folk arts and festivals like Ramman in school and university curricula to cultivate awareness and respect for India's diverse cultural traditions.
- Policy Support:** Encourage government schemes that provide financial, technical, and institutional support to ensure continuity of such heritage festivals while respecting local customs and ecological considerations.

This approach balances heritage conservation, community empowerment, and cultural awareness, ensuring traditions like Ramman thrive for future generations.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

Q. Which of the following statements about the Ramman festival of Uttarakhand is correct?

- It is celebrated annually in the villages of Saloor-Dungra and is dedicated to Bhumiya Devta.
- The festival primarily commemorates the birth of Sardar Vallabhbhai Patel.
- Ramman performances use metal masks depicting characters from the Mahabharata.
- The festival has not been recognized by UNESCO.

(a) Answer

## JANJATIYA GAURAV VARSH PAKHWADA CELEBRATIONS

### Why in News:

- The Government of India is observing **Janjatiya Gaurav Varsh Pakhwada** from 1–15 November 2025.
- This is part of nationwide celebrations marking the **150th birth anniversary of Bhagwan Birsa Munda** (also called *Dharti Aaba*).
- Organized by the **Ministry of Tribal Affairs** to promote tribal culture, heritage, and empowerment.

### Key Activities Across India

Activities held across States/UTs include:

#### Andaman & Nicobar Islands

- Plantation drive** in the **Jarawa area**.
- Emphasis on tribal communities' *intrinsic connection with nature* and ecological conservation.

**Andhra Pradesh**

- **Drawing Competition** at Sirpur T, KB Asifabad focusing on tribal culture.
- **Orientation training** programmes under ITDAs for officers covering schemes like:
  - PM JANMAN
  - Dharti Aaba Janjatiya Gram Utkarsh Abhiyan
  - Adi Karmayogi Abhiyan
- Multi-department sessions on **25 flagship tribal development initiatives**.

**Odisha**

- **Painting exhibition** on Bhagwan Birsa Munda’s legacy and tribal history.
- Artworks by tribal and contemporary artists reflecting courage and identity.

**Telangana**

- **Birsa Munda Jayanti – 150th celebrations** at Government ST Girls College Hostel, Nagaram.
- Floral tributes and ceremonies honoring the tribal icon.

**Sikkim**

- **Tribal Students Sports Meet & Health Camp** at Khelo India State Centre of Excellence, Gangtok.
- Focus on *fitness, health awareness, and community engagement* among tribal youth.

**Maharashtra**

- **Eklavya Model Residential Schools (EMRS)** involved:
  - Poem recitation
  - Essay & creative writing competitions
- Encouraged exploration of tribal history and pride among students.

**Themes & Significance**

**Cultural & Educational Integration**

- Focus on **tribal art, literature, and community participation** to strengthen national understanding of tribal heritage.

**Capacity Building**

- Training programmes contribute to effective execution of **government tribal welfare schemes**.

**Sport & Health**

- Sports meets and health camps boost **physical well-being and community spirit** among tribal youth.

**Environmental Conservation**

- Plantation drives highlight traditional tribal knowledge linked to **ecological protection**.

**Conclusion**

The Janjatiya Gaurav Varsh Pakhwada celebrations highlight India’s commitment to honouring tribal heroes like Bhagwan

Birsa Munda while promoting the preservation of tribal culture, heritage, and identity. By engaging communities, students, and institutions across the nation, the initiative strengthens awareness, pride, and social inclusion among tribal populations. Such efforts not only celebrate historical contributions but also create a platform for sustained cultural education, community empowerment, and the integration of tribal knowledge into the broader national narrative.

**CLASSICAL LANGUAGES IN INDIA**

**Why in News:** In **October 2024**, the Government of India expanded the list of **Classical Languages** by conferring this status on **five additional languages: Marathi, Pali, Prakrit, Bengali, and Assamese**, bringing the total to **11 languages**. Previously there were 6.

**What Is a Classical Language?**

A language is designated **Classical** in India based on strict criteria, indicating **antiquity, literary excellence, and distinct identity**. The recognised languages are considered custodians of rich cultural and intellectual traditions.

**Criteria for Classical Language Status (Government of India)**

**India follows specific criteria to grant this status:**

**1. Antiquity**

Early texts or recordings dating back *at least 1,500–2,000 years*.

**2. Rich Literary Tradition**

A *substantial body of ancient literature* considered a cultural heritage across generations.

**3. Distinctive Identity**

A linguistic tradition that is *independent, unique, and not merely a derivative* of another language.

**4. Distinct Evolution**

Clear *distinction or discontinuity* between the classical form and modern derivatives.

**5. Epigraphic and Prose Evidence**

Corroboration through inscriptions, grammar texts, and scholarly tradition.

**List of Classical Languages (11 Total)**

S. No.	Language	Earlier/Recent Inclusion
1	Tamil	First Classical language (2004)
2	Sanskrit	2005
3	Kannada	2008
4	Telugu	2008
5	Malayalam	2013
6	Odia	2014
7	Marathi	October 2024

S. No.	Language	Earlier/Recent Inclusion
8	Pali	October 2024
9	Prakrit	October 2024
10	Assamese	October 2024
11	Bengali	October 2024

### Significance of Classical Language Status

#### Cultural & Civilisational Importance

- India's Classical Languages are seen as vessels of *millennia-old philosophical, literary, scientific, and cultural knowledge*.
- Such languages connect **present generations to ancient wisdom**, enriching national identity and cultural continuity.

#### Symbolic & Practical Impact

- Grants prestige and **acknowledges contribution** of a language to Indian civilisation.
- Ensures **institutional support** for documentation, research, and promotion of literature and scholarship.

#### Benefits of Classical Language Recognition

- International Awards** for scholars aiding in global recognition of Indian linguistic traditions.
- Centres of Excellence and Professional Chairs** in central universities to promote advanced studies.
- Academic Funding & Research Support** for preservation of texts, epigraphy, and literature.
- Employment Opportunities** in academia, archives, translation, publishing and digital media.

#### EXPECTED QUESTION FOR UPSC CSE

##### Prelims MCQ

Q1. Which of the following criteria is/are considered for declaring a language as Classical in India?

- High antiquity of early texts
- Large number of present-day speakers
- Original literary tradition
- Distinctness between classical and modern forms

Select the correct answer using the code below:

- (a) 1, 3 and 4 only      (b) 1 and 2 only  
(c) 2 and 3 only      (d) 1, 2, 3 and 4

Answer: (a)

##### Descriptive Question

Q1. What are the criteria for declaring a language as a Classical Language in India? Examine the cultural significance of this status.

## 4,000-YEAR-OLD DILMUN TEMPLE DISCOVERY

**Why in News:** A **Bronze Age temple** dating back **4,000 years** has been unearthed on **Failaka Island**, off the coast of **Kuwait** in the **Persian Gulf** by a **joint Kuwaiti–Danish archaeological team** from the Moesgaard Museum.

The find was announced by the **National Council for Culture, Arts and Letters (NCCAL)** during the **2025 excavation season**.

#### Details of the Site Temple Features

- The excavation revealed the **complete layout** of a large temple structure with foundations, multiple chambers and associated rooms.
- A **range of artefacts** were found including pottery, seals, beads and other material culture typical of Dilmun civilisation.

#### Two Superimposed Temples

- Unusually, **two temples** were discovered **stacked on top of each other** at the same spot both dating to around **1900–1800 BCE**.
- This suggests repeated or sustained **ritual/religious significance** of the site over time.

#### Historical & Cultural Significance

##### The Dilmun Civilization

- Dilmun** was an important **Bronze Age civilisation** in the **eastern Arabian Gulf**, flourishing roughly from 3000 to 1600 BCE.
- It is referenced in ancient Mesopotamian cuneiform texts as a prosperous land associated with trade, religion and mythology.

##### Failaka's Strategic Role

- Failaka served as a **key hub** in the wider Dilmun network of settlements that stretched across modern-day **Kuwait, Bahrain, and eastern Arabia**.
- The island lay on maritime routes connecting **Mesopotamia (Iraq)** with the **Indus Valley (South Asia)**, acting as a **trading and cultural crossroads**.

##### Broader Archaeological Context

- Multiple temples** and settlements from the Dilmun era have been found on Failaka, indicating it was not merely a temporary outpost but a **significant cultural and religious centre**.
- Earlier archaeological surveys showed the island being continuously occupied through different historical phases — Dilmun, Mesopotamian settlements, Hellenistic periods and more.

##### Why It Matters for History

##### Deepens Understanding of Gulf Antiquity

- The find provides new evidence of **organized religious architecture** in the Gulf region dating back to early urban societies.

**Insight into Trade & Culture**

- Artifacts such as seals and pottery point to **administrative and commercial activities**, reinforcing Dilmun’s role in inter-regional exchange networks.

**Cultural Heritage**

- The discovery underscores Kuwait’s **ancient cultural legacy** and the broader significance of Gulf sites in world archaeology.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. The recently discovered 4,000-year-old temple on Failaka Island is associated with which ancient civilisation?

(a) Mesopotamian            (b) Dilmun  
(c) Sumerian                 (d) Harappan

Answer: (b) Dilmun

**Descriptive Question**

Q1. The Dilmun civilisation played a crucial role in ancient maritime trade networks.

Examine this statement in the light of recent archaeological findings from Failaka Island. (150 words)

**UNESCO’S INTANGIBLE CULTURAL HERITAGE LIST**

**Why in News:** *Deepavali*, the Indian *Festival of Lights*, has been officially **inscribed on UNESCO’s Representative List of the Intangible Cultural Heritage of Humanity**.

The decision was announced during the **20th Session of the UNESCO Intergovernmental Committee for the Safeguarding of Intangible Cultural Heritage**, held at Red Fort, New Delhi (8–13 Dec 2025).

**Deepavali: Cultural and Social Dimensions**

- **Core Meaning:** A major cultural festival symbolising the *triumph of light over darkness, good over evil, and hope and renewal*.
- **Celebration:**
  - Lighting of oil lamps (*diyas*), firecrackers and illumination of homes and public places.
  - Social practices include visits with family and community, gift and sweets exchange, rituals, and public gatherings.

**UNESCO & Intangible Cultural Heritage (ICH)**

- **UNESCO Convention (2003):** The *Convention for the Safeguarding of the Intangible Cultural Heritage* (adopted 17 Oct 2003) aims to protect living traditions and practices

that are vulnerable to modernisation, globalisation, and cultural change.

- **Representative List:** This List recognises cultural practices that demonstrate *community involvement, transmission across generations, and cultural significance for humanity as a whole*.

**Here’s a categorized list of some key Indian ICH elements:**

**Festivals & Rituals**

- **Deepavali (2025):** Festival of Lights.
- **Garba of Gujarat (2023):** Devotional dance during Navratri.
- **Durga Puja in Kolkata (2021):** Socio-religious festival.
- **Kumbh Mela (2017):** Largest peaceful pilgrimage.
- **Nowruz (2016, multinational):** Persian New Year.
- **Ramman (2009):** Religious festival in Garhwal Himalayas.

**Performing Arts & Traditions**

- **Chhau Dance (2010):** Tribal martial dance.
- **Kalbelia folk songs & dances (2010):** Rajasthan’s snake charmer community.
- **Kutiyattam (2008):** Sanskrit theatre.
- **Ramlila (2008):** Theatrical performance of the Ramayana.
- **Sankirtana (2013):** Ritual singing/dancing from Manipur.
- **Mudiyettu (2010):** Ritual theatre from Kerala.

**Knowledge & Practices**

- **Yoga (2016):** Ancient Indian practice.
- **Vedic Chanting (2008):** Sacred text recitation.
- **Buddhist chanting of Ladakh (2012).**

**Crafts**

- **Traditional brass and copper craft (Thatheras of Punjab) (2014).**

**Criteria for Inscription**

To be included, an element must:

- Be **recognized by the community**
- Be a **living tradition**
- Be transmitted across generations
- Have **safeguarding measures**
- Have **free, prior and informed consent** of the community

**Significance of ICH List**

- Protects **non-material heritage** ignored by monuments-centric approaches
- Promotes **cultural diversity & pluralism**
- Strengthens **community participation**
- Enhances **soft power & cultural diplomacy**
- Supports **local livelihoods and traditional knowledge**

**EXPECTED QUESTIONS FOR UPSC CSE**

**Prelims MCQ**

Q1. Consider the following statements about UNESCO’s Intangible Cultural Heritage List:

1. It is governed by the UNESCO Convention adopted in 2003.
2. Only festivals are included under this list.
3. Community participation is mandatory for nomination.

Which of the statements given above is/are correct?

- (a) 1 and 3 only                      (b) 1 only  
 (c) 2 and 3 only                      (d) 1, 2 and 3

Answer: (a)

**Descriptive Question**

Q. “UNESCO’s Intangible Cultural Heritage List plays a crucial role in preserving India’s living traditions.” Discuss with suitable examples from India. (150 words)

**PHOOL WAALON KI SAIR FESTIVAL**

**Why in News:** Phool Walon Ki Sair is a centuries-old cultural festival celebrated in Mehrauli, Delhi, symbolising communal harmony and India’s syncretic culture.

**Key Details**

- Traditionally held at Aam Bagh, the festival brings together Hindu and Muslim communities in offering floral tributes at the Khwaja Bakhtiar Kaki Dargah and the Yogmaya Temple, accompanied by cultural performances, swings, and processions.

**Historical Background**

- Originating in the early 19th century, the festival was patronised by the Mughal emperors and local rulers.
- Its name, “Phool Walon Ki Sair”, literally means “Procession of Florists”, referring to the floral offerings made at religious sites.
- The festival is celebrated as a mark of communal unity, showcasing Delhi’s Ganga-Jamuni tehzeeb.

**Festival Activities**

- Floral processions led by locals and artisans.
- Cultural programs including folk music, dance, and theatrical performances.
- Community feasts and traditional swings (jhaulas) set up in the open grounds.
- Children and youth participate in folk performances, preserving local cultural heritage.

**Administrative and Environmental Aspects**

- The festival takes place within the Delhi Ridge area, which is under environmental protection guidelines.
- Organisers coordinate with the Delhi Development Authority (DDA) and local authorities for permissions, safety, and environmental compliance.
- In recent years, clearance delays have occurred due to procedural and regulatory requirements, highlighting the need for better coordination between government and cultural bodies.

**Significance**

- Reinforces India’s cultural diversity and communal harmony.
- Acts as a tourism attraction and generates livelihood opportunities for local artisans.
- Serves as a platform for youth engagement in traditional arts and performances.

**Conclusion / Way Forward**

Phool Walon Ki Sair exemplifies how traditional festivals can strengthen social cohesion while preserving heritage. To ensure continuity and broader participation:

- Authorities should streamline clearance processes for cultural events in heritage and environmentally sensitive zones.
- Encourage community-led management of festivals with government support for safety and infrastructure.
- Promote educational and tourism outreach to raise awareness about India’s syncretic traditions.
- Develop environmental safeguards to balance cultural celebrations with ecological preservation.

By adopting these measures, Delhi can continue to host its historic festivals without administrative delays, promoting cultural pride and harmony.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. Which of the following statements about the Phool Walon Ki Sair Festival is correct?

- (a) It is held exclusively at the Khwaja Bakhtiar Kaki Dargah.  
 (b) The festival celebrates communal harmony through offerings at both a temple and a dargah.  
 (c) It originated in the 20th century during British rule.  
 (d) It is primarily a modern tourism festival with no historical significance.

Answer: (b)



## INDIAN RAILWAYS TO PATRONISE AABHAR STORE

**Why in News:** Indian Railways is promoting and patronising the newly launched *Aabhar* online store to boost India's indigenous talent by providing a digital market platform for craft and artisanal products.

### What is Aabhar Online Store?

- *Aabhar* is an online store hosted on the Government e-Marketplace (GeM) portal.
- It showcases a range of handcrafted gift items and artisanal products made by indigenous tribes, handloom weavers, tribal artisans, rural entrepreneurs, women-led enterprises and self-help groups (SHGs).
- The collection includes products under the One District One Product (ODOP) initiative and Geographical Indication (GI) tags.
- Items are sourced from agencies like Central Cottage Industries Emporium (CCIE), Khadi and Village Industries Commission (KVIC), and various Central/State Handicraft & Handloom Emporiums.

### Objectives and Significance

1. **Promoting Local Craftsmanship:** Encourages traditional arts, handloom and indigenous craft by providing wider market access through a digital platform.
2. **Institutional Demand:** Indian Railways' patronage provides institutional support and bulk demand, helping artisans secure sustainable sales.
3. **Rural & Inclusive Growth:** Enhances income opportunities for rural artisans, women entrepreneurs, tribal groups and marginalised communities.
4. **Promotes ODOP & GI Segments:** Highlights India's cultural and regional diversity through products with district/region-specific identity.

### Linkages with Government Policies

- **Vocal for Local / Atmanirbhar Bharat:** Aligns with flagship campaigns that emphasise self-reliance and local enterprise growth.
- **One Station One Product (OSOP):** *Aabhar* complements OSOP that promotes local products at railway stations, creating a full value chain from production to sales.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

Q. With reference to the 'Aabhar' online store, consider the following statements:

1. It is hosted on the Government e-Marketplace (GeM) portal.
2. It focuses on promoting India's digital transaction infrastructure.

3. It showcases regional ODOP and GI products.

Which of the above are correct?

- (a) 1 and 3 only                      (b) 2 and 3 only  
(c) 1 only                                (d) All of the above

(a) :Answer)

### Descriptive Question

Q. Discuss how digital market initiatives like Aabhar can support rural artisans and contribute to inclusive economic growth in India.

## PLI SCHEME FOR SPECIALTY STEEL

**Why in News:** The third round of the Production-Linked Incentive (PLI) Scheme for Specialty Steel (PLI 1.2) was launched by the Union Minister of Steel and Heavy Industries to attract new investments and expand India's production capacity in advanced and strategic steel products.

### About the PLI Scheme for Specialty Steel

The PLI Scheme for Specialty Steel was approved by the Cabinet in July 2021 under the Atmanirbhar Bharat vision to make India a global hub for high-end steel production.

The third round (PLI 1.2) focuses on promoting investment and production in specialty steel products, including:

- Super alloys
- Cold Rolled Grain Oriented (CRGO) steels
- Stainless steel long and flat products
- Titanium alloys
- Coated steels and other advanced categories.

### Key Features of PLI 1.2

1. **Application Window:** Open for 30 days
2. **Eligibility:** Companies registered in India engaged in end-to-end manufacturing of specified specialty steel products.
3. **Product Coverage:** Includes 22 sub-categories of specialty steel across strategic and commercial segments.
4. **Incentive Rates:** Vary from 4% to 15% of incremental sales, depending on product type and production year.
5. **Incentive Duration:** Benefits are available for up to five years, starting from FY 2025-26, with payouts beginning in FY 2026-27.
6. **Base Year Revision:** The base year for calculating incremental sales has been updated from 2019-20 to 2024-25 to reflect current market conditions.

### Objectives & Significance

- **Boost High-End Manufacturing:** Encourages domestic production of specialty steel used in critical sectors

like aerospace, defence, automotive, energy and infrastructure.

- **Atmanirbhar Bharat:** Supports India’s self-reliance agenda by attracting large scale investments in value-added steel manufacturing.
- **Employment Generation:** Expected to increase jobs in steel manufacturing and allied sectors.
- **Global Competitiveness:** Helps India integrate into global value chains for advanced steel products.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. Consider the following statements about the PLI Scheme for Specialty Steel (PLI 1.2):

1. It provides incentives based on incremental sales of eligible products.
2. It covers only basic construction grade steel products.
3. It offers benefits for up to five years from FY 2025-26.

Which of the above is/are correct?

- (a) 1 and 2 only                      (b) 1 and 3 only  
 (c) 2 only                              (d) All of the above

Answer: (b)

*Explanation:* The scheme applies to specialty steels, not basic construction steels.

**Descriptive Question**

Q. Discuss the role of the Production-Linked Incentive (PLI) schemes in strengthening India’s manufacturing sector, with reference to specialty steel.

**KOYLA SHAKTI – SMART COAL ANALYTICS DASHBOARD**

**Why in News:** The **Ministry of Coal** has launched “**Koyla Shakti**”, a *Smart Coal Analytics Dashboard*, on **29 October 2025** in New Delhi. This digital platform will integrate real-time data on **coal production, logistics, supply and operations** to strengthen governance, decision-making and transparency across India’s coal sector — in line with the **Digital India** vision.

**What is “Koyla Shakti”?**

- A **Smart Coal Analytics Dashboard (SCAD)** developed by the **Ministry of Coal**.
- Serves as a **centralised digital platform** for real-time monitoring and analysis of coal sector operations.
- Aims to enhance **data-driven governance, operational transparency, and efficiency** in the coal value chain.

**Purpose & Significance**

- **Unified Data System:** Consolidates data from multiple stakeholders — coal producers, private miners, railways, power utilities, ports, government departments, and state coal units.
- **Real-Time Monitoring:** Tracks coal production, dispatch, transportation, logistics and supply metrics continuously.
- **Evidence-Based Policy Making:** Provides analytical tools for strategic planning, forecasting, and operational optimisation.
- **Improved Accountability:** Standardised metrics and alerts enhance transparency across the sector.
- **Digital Transformation:** Aligns with the **Digital India** mission, promoting **efficiency, automation, and transparency** in public sector governance.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. Which of the following statements about the “Koyla Shakti” dashboard are correct?

- (a) It integrates real-time coal data from various stakeholders.  
 (b) It focuses only on coal exports and international trade.  
 (c) It supports data-driven governance in the coal sector.  
 (d) It is a private sector initiative.

Answer: (a) & (c)

**Descriptive Question**

Q. Discuss the role of digital platforms like “Koyla Shakti” in transforming governance of traditional energy sectors.

## INDIA'S WEALTH GAP WIDENS

**Why in News:** A landmark G20-commissioned global inequality report has spotlighted growing disparities in the world's largest economies, with India's richest 1% expanding their share of wealth by 62% between 2000 and 2023.

### Key Details

The findings, released under the South African G20 Presidency and led by Nobel laureate Joseph E. Stiglitz, raise urgent concerns about socio-economic imbalances at a time of rapid economic transformation.

### Key findings

The report reveals stark trends in wealth distribution globally and within India:

- **Top 1% surge ahead:** In India, the wealth share of the richest 1% grew by about 62% since 2000, outpacing many emerging economies.
- **Global wealth capture:** Worldwide, the richest 1% captured 41% of all new wealth created between 2000 and 2024 — while the bottom 50% received only 1% of gains.
- **Inequality at "Emergency" levels:** The study characterises extreme inequality as a threat to democracy, economic stability and climate progress if left unchecked.

### India's Dual Narrative

#### Economic growth vs. unequal gains

India's rapid expansion — propelled by liberalisation, digitalisation, and global integration — has elevated millions out of poverty. Yet, the wealth concentration at the top reveals uneven distribution of prosperity:

- The top 10% command a large share of national wealth, while middle and lower segments lag behind. Recent data suggest the bottom half of the population holds a disproportionately small portion of wealth compared to the elite minority.
- Official inequality measures like the Gini coefficient show lower income inequality for India relative to some advanced economies, but wealth inequality remains high and under-measured in standard statistics.

### Why it matters

The report warns that high inequality can have far-reaching socio-political costs:

- Countries with entrenched inequality are seven times more likely to experience democratic erosion.

- Persistent gaps undermine confidence in institutions and heighten social tensions, particularly if growth benefits appear skewed toward elites.
- For India, which champions inclusive growth objectives, rising wealth concentration signals the need for renewed emphasis on equitable policies and redistribution mechanisms.

### Policy Prescriptions from the Report

The G20 experts propose several measures to address inequality:

- **International Panel on Inequality (IPI):** A specialised body, modeled on the Intergovernmental Panel on Climate Change (IPCC), would monitor inequality data globally and guide evidence-based policy.
- **Targeted Domestic Reforms:** Strengthening social safety nets, progressive taxation, universal access to essential services, and improved data transparency are key tools for narrowing gaps.
- **Global Cooperation:** Coordinated policy action, especially among G20 nations, is critical to preventing inequality from becoming entrenched and destabilising.

### Conclusion

The G20 report's findings are a reminder that India's impressive growth story carries a caveat — without equitable distribution, macroeconomic gains risk bypassing large sections of society. As India positions itself on the global stage, addressing internal disparities will be essential for sustainable and inclusive development in the decades ahead.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

- Q. With reference to the G20 Inequality Report, consider the following statements:
1. The wealth share of India's top 1% increased by more than 60% between 2000 and 2023.
  2. Globally, the top 1% captured more than 40% of the new wealth created since 2000.
  3. The report recommends the creation of an International Panel on Inequality on the lines of the IPCC.
  4. According to the report, income inequality is a more

serious concern than wealth inequality in developing countries like India.

Which of the statements given above are correct?

- (a) 1, 2 and 3 only                      (b) 1 and 3 only
- (c) 2 and 4 only                        (d) 1, 2, 3 and 4

(a) :Answer

**Descriptive Question**

Q. The G20 Inequality Report describes rising wealth concentration as a threat to economic stability and democratic governance. In this context, examine the trends in wealth inequality in India and discuss the policy measures suggested to address this challenge. (150 words)

**2025 EAT-LANCET REPORT RAISES**

**Why in News:** A landmark scientific assessment by the 2025 EAT-Lancet Commission has concluded that global food systems have become the single largest driver of planetary boundary transgressions, posing a profound threat to Earth’s ecological stability, human health, and social justice.

**Key Details**

- Released in October 2025 with contributions from leading experts across nutrition, climate science, agriculture and economics, the report provides the most comprehensive evaluation of food systems to date.

**Planetary boundaries breached by food systems**

Planetary boundaries are Earth-system thresholds that define a “safe operating space” for humanity. The 2025 EAT-Lancet report shows that:

- Food systems contribute to five of the six planetary boundaries already breached, including climate change, biodiversity loss, freshwater depletion, land-system change, and nitrogen & phosphorus pollution.
- They are responsible for roughly 30% of total global greenhouse gas emissions, with animal agriculture and nutrient pollution as key drivers.
- Even a complete global shift away from fossil fuels would not prevent food systems from pushing warming beyond 1.5 C, indicating that decarbonisation alone is insufficient without transforming food supply and consumption patterns.
- This stark assessment reframes food not merely as a sectoral issue, but as a planet-scale environmental crisis.

**Human health and social justice under strain**

The report integrates environmental outcomes with human well-being:

- Shifting global diets in line with healthier, sustainable patterns could prevent up to 15 million premature deaths

annually by reducing risks associated with poor diets and chronic disease.

- Despite sufficient global calorie production, more than one billion people remain undernourished, while a large share of workers in food systems earn below a living wage, underscoring deep inequities.
- Fewer than 1% of the global population currently lives within a “safe and just space” where food needs are met within planetary boundaries.
- The richest 30% of the world’s population drive more than 70% of food-related environmental impacts, highlighting the intersection of consumption patterns with ecological harm.

**Policy and transformational pathways**

**The Commission’s findings are not just diagnostic but prescriptive:**

- A shift towards the Planetary Health Diet — rich in fruits, vegetables, whole grains, legumes and nuts, with limited red meat and processed foods — can greatly reduce environmental pressures while improving nutrition.
- Reducing food loss and waste, adopting sustainable agricultural practices, and protecting intact ecosystems are central to the transformation.
- Policy reforms must align food systems with climate, biodiversity, and social equity goals, including supporting smallholder farmers, improving labour conditions, and making healthy food affordable.

**India’s context and challenges**

For India — where diets are heavily cereal-based and ecological pressures from nitrogen fertilisers, pesticide use, and land conversion are mounting — the report’s insights carry particular relevance. Transitioning towards diversified diets and sustainable farming methods will require careful integration with cultural practices, food security goals, and rural livelihoods.

**Conclusion**

The 2025 EAT-Lancet report marks a turning point in how the world views food systems. Not only are food systems central to feeding a growing population, they are now amongst the most critical drivers of planetary instability. Achieving the twin goals of human health and environmental sustainability calls for urgent, integrated action across diets, production, policy, and equity — making food systems reform one of the defining challenges of the decades ahead.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. With reference to the 2025 EAT-Lancet Commission report, consider the following statements:

1. Global food systems are among the largest contributors to greenhouse gas emissions and biodiversity loss.

2. Food systems have contributed to the transgression of more than half of the planetary boundaries already breached.
3. Even complete decarbonisation of the energy sector will be insufficient to keep global warming below 1.5 C without transforming food systems.
4. The Planetary Health Diet advocates increased consumption of red meat and dairy to address global malnutrition.

Which of the statements given above are correct?

- (a) 1, 2 and 3 only      (b) 1 and 3 only  
 (c) 2 and 4 only      (d) 1, 2, 3 and 4

Answer: (a)

**Descriptive Question**

Q. In the light of the 2025 EAT-Lancet Commission report, examine how food systems impact planetary boundaries and discuss the policy measures required for sustainable and equitable food systems in India. (10 marks/ 150 words)

**HENLEY PASSPORT INDEX 2025**

**Why in News:** For the first time since the Henley Passport Index began 20 years ago, the United States passport has fallen out of the world’s top 10 most powerful passports.

**Key Details**

- According to the latest Henley Passport Index 2025, the U.S. now ranks 12th, tied with Malaysia, with visa-free access to 180 countries. This marks a major shift in global travel freedom and diplomatic influence.

**What Is the Henley Passport Index?**

- The Henley Passport Index is a trusted global ranking that measures how many countries a passport holder can visit without needing a visa, or where they can get a visa on arrival.
- The more destinations a passport can access easily, the stronger it is considered. The index uses official travel data from the International Air Transport Association (IATA), covering 199 passports and 227 destinations worldwide.

**Key Highlights of the 2025 Index**

**1. Asia Takes the Lead**

Asian countries dominate the top positions in the 2025 rankings:

- Singapore holds the No. 1 spot, granting its citizens visa-free access to the most countries in the world.
- South Korea and Japan closely follow in the second and third positions.

- These top Asian passports offer access to around 190+ destinations, underscoring increased global integration and diplomatic expansion.

**2. U.S. Passport Declines for the First Time**

- For decades, the U.S. passport was among the most powerful globally. In 2014, it stood at the top of the index. However, changes in visa agreements and global mobility trends have reduced its strength, culminating in its drop from the top 10 in 2025. Experts say this reflects broader shifts in global diplomacy and travel policies.

**3. India’s Position in the Index**

- India’s ranking in the 2025 list is 85th, with Indian citizens able to travel to 57 countries without a prior visa. Compared to the previous year, India has slipped five places.
- This means Indian travelers have relatively fewer visa-free options compared to many other nations, highlighting the need for stronger bilateral agreements and international ties.

**4. Global Mobility Differences**

The Henley Passport Index shows a wide gap in travel freedom around the world:

- Strongest passports allow visa-free access to nearly 200 destinations.
- Weakest passports grant access to fewer than 30 countries.
- Countries like Afghanistan, Syria, and Iraq are among those with the least travel freedom.

**Why this matters**

- Passport strength reflects more than travel convenience. It is a symbol of international relations, economic influence, and diplomatic cooperation. A powerful passport often indicates strong global ties and mutual trust between countries. The fall of the U.S. passport from the top ranks shows how global dynamics are changing, with Asian and European nations becoming more influential in international mobility.

**Conclusion**

The Henley Passport Index 2025 highlights a significant transformation in global mobility. While traditional leaders like the United States and the United Kingdom have declined, Asian nations are rising. For India, the challenge is to improve its ranking by strengthening international relationships and easing travel restrictions with more countries. In an increasingly connected world, passport power continues to be a key indicator of a nation’s global reach and relevance.

**INDIA’S CLIMATE RISK INDEX**

**Why in News:** India has improved its position in the Global Climate Risk Index (CRI) but still remains among the top ten countries most affected by extreme weather events over the past 30 years. The findings were published in the latest CRI

report prepared by the German environmental think-tank Germanwatch.

### About climate risk index

- The Climate Risk Index is a global ranking that shows how much countries have suffered from extreme weather events such as cyclones, floods, storms and heat waves over a long period.
- It covers factors like deaths, economic losses, number of events and people affected. A lower rank number means less risk, while a higher rank means more severe impact.

### Improved rank in the latest report

According to the latest report covering the period 1995–2024 (released at international climate discussions during COP30), India now ranks:

- 9th in the long-term Climate Risk Index
- 15th in the annual ranking for 2024
- These are better positions compared to previous assessments — India was ranked 8th long-term in the earlier index and 10th in the 2023 annual list.
- The improvement suggests enhanced disaster preparedness and risk management, including better early warning systems and climate adaptation measures.

### Why India still remains vulnerable

Despite the improved rank, India continues to be one of the most affected countries worldwide for several reasons:

- Extreme weather events have been frequent and severe over the past three decades.
- The country experienced over 430 major extreme weather incidents between 1995 and 2024.
- These events resulted in more than 80,000 deaths and nearly USD 170 billion in economic losses (inflation-adjusted).
- The long-term exposure to heat waves, floods, cyclones and storms underscores that climate stress remains a serious challenge for India's people, infrastructure and economy.

### Global context

- The CRI report also highlights that many of the countries most affected by climate extremes are low- and middle-income nations, particularly in the Global South.
- Dominica, Myanmar and Honduras are among the top three worst-hit nations over the long term.
- Meanwhile, some high-income countries like France, Italy and the United States also appear in the index due to significant storms and economic losses — showing that no country is entirely immune to climate risks.

### What this means for India

- Improved ranking reflects better preparedness and response.

- However, high vulnerability persists due to frequent and intense extreme weather events.
- The results highlight the need to strengthen climate resilience, disaster risk reduction and adaptation measures across the country.
- This dual picture — of progress in risk management alongside continued high impact — emphasizes that climate change remains a key development challenge for India in the years ahead.

### Conclusion

India's improved ranking in the Climate Risk Index shows that the country has made progress in disaster preparedness, early warning systems and response mechanisms. However, remaining among the top ten most climate-affected countries highlights that extreme weather events continue to cause serious loss of life, livelihoods and infrastructure. Climate change is no longer a future threat for India—it is a present and persistent reality that directly affects economic growth and human security.

### Way Forward

- **Strengthen Climate Resilience:** Focus on climate-resilient infrastructure, especially in coastal, flood-prone and heat-affected regions.
- **Improve Early Warning Systems:** Use advanced technology and local-level communication to ensure timely alerts reach vulnerable communities.
- **Promote Climate-Resilient Agriculture:** Encourage drought-resistant crops, efficient water use and sustainable farming practices.
- **Enhance Disaster Preparedness:** Invest in local disaster response capacity, training and community participation.
- **Accelerate Climate Mitigation Efforts:** Expand renewable energy, reduce emissions and meet India's climate commitments under international agreements.
- **Increase Climate Finance and International Cooperation:** Mobilize funds and technology support from global platforms to support adaptation and loss-and-damage measures.

### EXPECTED QUESTION FOR UPSC CSE

#### Descriptive Question

- Q. How does the Global Climate Risk Index assess climate vulnerability? Examine India's position in the index and suggest a way forward to reduce climate risks. (10 marks/ 150 words)

## GLOBAL HUNGER INDEX 2025

**Why in News:** The 2025 Global Hunger Index (GHI) — titled "20 Years of Tracking Progress: Time to Recommit to Zero Hunger" — shows that global progress in reducing hunger has largely stalled, and the world is not on track to achieve the United Nations' goal of Zero Hunger by 2030.

The report was jointly published by Concern Worldwide and Welthungerhilfe and marks two decades of monitoring hunger worldwide.

### What is the global hunger index (GHI)?

The Global Hunger Index is an annual tool that measures hunger levels in countries using four key indicators:

1. Undernourishment in the population
2. Child stunting (low height for age)
3. Child wasting (low weight for height)
4. Child mortality

Based on these indicators, countries are given a GHI score and categorized from low to alarming hunger. Lower scores and ranks indicate better progress in reducing hunger.

### Key Findings of GHI 2025

- **Minimal global improvement:** After years of slow but steady progress up to 2016, the 2025 GHI shows that hunger remains largely unchanged at the global level. The world's GHI score in 2025 is 18.3, only slightly better than 19.0 in 2016, and continues to fall within the "moderate" hunger category.
- **Stalling progress threatens SDG 2:** The report highlights that conflict, climate shocks and economic crises have increasingly hindered efforts to reduce hunger. As a result, the Sustainable Development Goal 2 — achieving Zero Hunger by 2030 — now appears out of reach at the current pace of progress.
- **Conflict is a major driver:** Armed conflicts continue to be a key driver of hunger, disrupting food production, markets and access to food. In several regions, ongoing violence has led to worsening food emergencies and deepening food insecurity.
- **Humanitarian resources declining:** Despite growing needs, humanitarian assistance budgets have fallen sharply, even as military spending has increased. This mismatch weakens global capacity to respond effectively to hunger and food crises.

### Regional and country patterns

- While some countries have made progress in reducing hunger, many still face serious or alarming hunger situations. Several nations continue to slip backward, with hunger levels deteriorating over the past decade.
- Hunger remains most severe in regions such as Sub-Saharan Africa and South Asia, where undernourishment and child undernutrition rates are high and food systems remain fragile.

### Why this matters

Hunger is not only about food scarcity. It affects health, education, productivity and human dignity. Persistent hunger undermines economic growth and deepens inequalities.

With nearly hundreds of millions still undernourished, the challenge of ending hunger is both urgent and complex.

### Conclusion

The 2025 Global Hunger Index serves as a wake-up call: after years of incremental gains, progress against hunger has stalled. Unless nations recommit to stronger policies, better funding, and peaceful, climate-resilient food systems, achieving Zero Hunger by 2030 will remain an elusive goal.

### Way Forward

- **Strengthen food systems:** Improve agricultural productivity and supply chains to ensure food availability even during crises.
- **Conflict resolution:** Support peacebuilding efforts to prevent hunger driven by violence and displacement.
- **Boost humanitarian funding:** Expand budgets for food and nutrition interventions, especially in high-burden countries.
- **Climate-resilient strategies:** Promote farming practices that withstand climate shocks like droughts and floods.
- **Focus on nutrition:** Go beyond calories to ensure balanced diets that prevent stunting and wasting among children.

Together, these steps can help accelerate progress toward the Zero Hunger goal, making healthy and sufficient food a reality for all.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

Q. Consider the following statements regarding the Global Hunger Index (GHI) 2025:

1. The GHI measures hunger using undernourishment, child stunting, child wasting, and child mortality.
2. According to GHI 2025, global progress in reducing hunger has largely stalled.
3. Hunger is now least severe in Sub-Saharan Africa and South Asia.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Answer: (a) 1 and 2 only

#### Descriptive Question

Q. "Despite two decades of monitoring and progress, the Global Hunger Index 2025 indicates that the world is far from achieving Zero Hunger by 2030." Discuss the factors responsible for the stalled progress and suggest measures to accelerate hunger reduction globally and in India. (15 marks/ 250 words)

## CLIMATE CHANGE PERFORMANCE INDEX (CCPI) 2026

**Why in News:** At the sidelines of COP30 in Belém, Brazil, the Climate Change Performance Index (CCPI) 2026 — jointly published by NewClimate Institute, Germanwatch and Climate Action Network (CAN) International — provided a critical assessment of global mitigation efforts by major emitters.

### Key highlights of CCPI

- This annual ranking evaluates national climate performance based on emissions, renewable energy, energy use, and policy commitments.
- For the 21st consecutive edition, no nation fills the top three ranks, signifying that no country is on track to limit global temperature rise in line with the Paris Agreement goals.
- Denmark ranks highest (4th), with strong climate policy frameworks and leadership in renewable energy — notably offshore wind.
- United Kingdom (5th) climbed one rank, reflecting sustained policy efforts and its coal phase-out.
- Morocco (6th) scores well across categories with low per capita emissions and ambitious transport and climate targets.
- At the bottom are Saudi Arabia (67th), Iran (66th), and notably, the United States (65th) — highlighting persistent reliance on fossil fuels among major producers.
- Despite accounting for over 75% of global greenhouse gas emissions, only the UK ranks in the “high” category. Ten G20 nations — including China, Japan, Russia, USA, and Saudi Arabia — remain “very low” performers.

### India's Performance

**Rank Drop:** India stands 23rd in the CCPI 2026, a significant fall from previous years, moving from ‘high’ to ‘medium’ performer status.

### Why the Decline?

- Absence of a firm coal phase-out plan and continued auctioning of new coal blocks.
- A lack of interim, binding timelines for transitioning away from fossil fuels.
- Renewable energy performance is rated low despite capacity additions.
- Emissions and energy use trends are unfavourable in recent years.

### Expert Recommendations

CCPI calls for a time-bound coal phase-down and eventual phase-out, redirection of fossil fuel subsidies toward decentralised renewable energy, and stronger social and environmental safeguards in energy transitions.

## India's Climate Policy: Strengths and Limitations

India's CCPI performance reveals nuanced realities:

### 1. Strengths

- Installed non-fossil electricity capacity is expanding significantly.
- Institutional mechanisms like the Bureau of Energy Efficiency (BEE) labelling and Perform, Achieve and Trade (PAT) schemes provide systemic energy efficiency gains.

### 2. Limitations

- Absence of a clear coal exit timeline, hindering credibility in mitigation narratives.
- Renewable energy deployment, while substantial, is not yet enough to offset increased fossil demand.
- Lack of detailed interim targets (e.g., 2035, 2040) and sectoral phasing strategies limits accountability.

## Paris Agreement and CCPI within Global Climate Governance

- The CCPI functions as a transparency tool that benchmarks national performance relative to the 1.5°C target. Its findings underscore that while per capita emissions are falling and renewables are expanding, the trajectory is insufficient for the Paris goals. This highlights gaps between pledges (NDCs) and implementation, a recurring theme at COP processes.

## Broader Global Implications

- **Renewables vs. Fossil Fuels:** The CCPI identifies a renewables boom, yet many economies still expand fossil fuel production alongside clean energy — a paradox slowing global decarbonisation.
- **Equity Dimensions:** Low-income nations making limited emissions contributions often perform better in per capita terms, while major industrialised economies lag — illustrating the differentiated responsibilities debate central to climate negotiations.
- **Implementation Gap:** The persistent gap between NDC pledges and on-ground policy implementation remains a critical challenge, necessitating stronger domestic policy alignments and monitoring frameworks.

## Conclusion

The CCPI 2026 report offers a sobering yet instructive snapshot of global climate action. While technological shifts toward renewables and energy efficiency are emergent positives, policy inertia, especially on fossil fuel phase-out, risks undermining climate goals. For India, addressing structural policy gaps — especially in coal transition and renewable scale-up — is critical to regaining leadership credibility both in domestic development and international climate engagements.

### EXPECTED QUESTION FOR UPSC CSE

#### Prelims MCQ

Q. With reference to the Climate Change Performance Index (CCPI) 2026, consider the following statements:

1. The CCPI is jointly published by the NewClimate Institute, Germanwatch and Climate Action Network (CAN) International.
2. In CCPI 2026, the top three ranks were left vacant as no country's climate performance was found fully compatible with the 1.5 C target.
3. India was categorised as a "high performer" in CCPI 2026 due to its rapid expansion of renewable energy capacity.

4. Among the G20 countries, the United Kingdom was the only country to feature in the "high performance" category.

Which of the statements given above are correct?

- (a) 1, 2 and 4 only                      (b) 1 and 2 only  
(c) 2, 3 and 4 only                      (d) 1, 2, 3 and 4

Answer: (a)

#### Descriptive Question

Q. In the light of the Climate Change Performance Index (CCPI) 2026, critically examine the reasons for this implementation gap. Also evaluate India's climate performance and suggest measures to enhance its credibility as a climate leader. (15 marks/ 250 words)

## Free Initiative by Chahal Academy



### What to Read in Indian Express

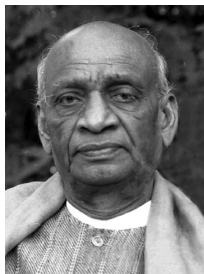
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## PERSONALITIES IN NEWS

**SARDAR VALLABHBHAI PATEL**

**Why in News:** On 31st October 2025, India's Vice-President Shri C. P. Radhakrishnan solemnly commemorated the 150th birth anniversary of Sardar Vallabhbhai Patel, widely known as the "Iron Man of India".

**Features of the Ceremony**

- **Rashtriya Ekta Diwas Pledge:** Reaffirmed the spirit of unity and integrity among attendees.
- **Inter-Institutional Collaboration:** The ceremony underlined cooperation between the Vice-President's Office and the Indian Institute of Public Administration, linking heritage with governance values.

**About Sardar Vallabhbhai Patel**

- Sardar Vallabhbhai Patel (1875–1950) was one of India's foremost leaders and a key architect of modern India.
- **Nicknamed:** The Iron Man of India.
- **Major Roles:** Freedom fighter, senior leader of the Indian National Congress, first Deputy Prime Minister and Home Minister of independent India.
- **Major Contribution:** Instrumental in the political integration of over 500 princely states into the Indian Union after 1947.
- **Legacy:** Founded the modern administrative structure of India and championed unity as a core national value.

**Timeline**

- 1875 – Born in Gujarat
- 1913 – Returns from England as a barrister
- 1917 – Enters public life; Ahmedabad Sanitation Commissioner
- 1918 – Leads Kheda Satyagraha
- 1928 – Leads Bardoli Satyagraha Ears title "Sardar"
- 1930 – Civil Disobedience Movement; imprisoned
- 1942 – Quit India Movement
- 1947 – Deputy PM & Home Minister; integration of princely states
- 1950 – Passes away

**His Contribution to Nation-Building**

- Sardar Patel's statesmanship laid the foundation for a united India.
- **Integration of Princely States:** Successfully negotiated the accession of major princely states, laying the groundwork for political and territorial unity.
- **Strengthening Governance:** Promoted strong administrative institutions and governance systems essential for a diverse, democratic republic.
- **Champion of Unity:** Advocated national integrity and discouraged divisive forces during a critical time in India's history.
- His vision continues to guide India's pursuit of harmony, resilience, and inclusive progress.

**Personal Traits and Leadership Style**

- Known for his iron will and decisive leadership
- Practised simplicity and austerity in personal life
- Valued honesty, discipline, and duty
- Preferred action over rhetoric

**Legacy and Recognition**

- Remembered as the "Iron Man of India"
- Rashtriya Ekta Diwas (National Unity Day) is observed every year on his birth anniversary
- The Statue of Unity in Gujarat, the world's tallest statue, stands as a tribute to his monumental contribution to nation-building

**Administrative contribution**

- Strong advocate of All India Services
- Instrumental in creation of:
  - ✓ Indian Administrative Service (IAS)
  - ✓ Indian Police Service (IPS)
- Called them the "Steel Frame of India"

**Key Note**

"Unity cannot be forged by speeches alone."

**Conclusion**

Sardar Vallabhbhai Patel's decisive leadership and unwavering commitment to unity laid the foundation of a

strong, integrated India, making him an enduring symbol of national integrity and effective governance.

of Literature) in Bengali literary circles, he authored 14 novels along with essays and treatises.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

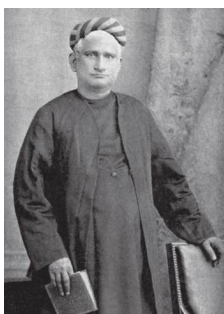
Q. Sardar Vallabhbhai Patel is known as the “Iron Man of India” primarily because of his role in:

- (a) Drafting the Indian Constitution
- (b) Leading the Quit India Movement
- (c) Integrating the princely states into the Indian Union
- (d) Establishing the Indian National Congress

Answer: (c)

**BANKIM CHANDRA CHATTERJEE**

**Why in News:** India marked the 150th anniversary of the national song Vande Mataram — composed by Bankim Chandra Chatterjee — renewing focus on his literary genius and his influence on India’s freedom movement. The song remains a powerful emblem of patriotic fervour and national unity.



**Key Details**

- Personality: Bankim Chandra Chatterjee
- Notable Work: Vande Mataram (national song of India)
- Origin of Song: First appeared in the novel Anandamath (1882)
- Anniversary: 150 years of Vande Mataram celebrated in 2025
- Profession: Novelist, poet, journalist, civil servant
- Region: Bengal (present-day West Bengal)

**About Bankim Chandra Chatterjee**

- **Early life and education:** Bankim Chandra Chatterjee was born in June 1838 near Naihati, Bengal. He studied at Hooghly Mohsin College and Presidency College, graduating from Calcutta University in 1858 — one of its earliest graduates.
- **Career:** After completing his education, Bankim joined the British Indian Civil Service, serving as Deputy Magistrate and Deputy Collector, later becoming the first Sub-Divisional Magistrate of Arambag. He also earned a law degree in 1869 and retired from service in 1891.
- **Literary Frame:** Bankim won fame with his first novel Durgeshnandini (1865), inspired by the ruins of Gar Mandaran Fort. It is considered a milestone in modern Bengali literature. Known as the Sahitya Samrat (Emperor

**Timeline**

- 1838: Born near Naihati, Bengal.
- 1858: Graduated from Calcutta University.
- 1865: Durgeshnandini published — first major novel.
- 1870s: Composed Vande Mataram (later featured in Anandamath).
- 1882: Anandamath published, introducing Vande Mataram.
- 1891: Retired from civil service; awarded title Rai Bahadur.
- 1894: Made Companion of the Most Eminent Order of the Indian Empire (CMEIOE).
- 1894: Passed away, leaving a lasting legacy.

**His Contribution**

1. **Literary Legacy:** Bankim was a pioneering voice in modern Indian literature. His novels blended historical narrative with social commentary, inspiring generations of readers and thinkers. His writings helped articulate a distinct Indian cultural and literary identity during colonial rule.
2. **Nationalism and Vande Mataram:** Vande Mataram became more than a song — it emerged as a battle cry for freedom during India’s struggle against British rule. Its personification of India as Mother ignited patriotic emotions and unity across diverse regions and communities.
3. **Influence on Freedom Movement:** The song was widely sung at political gatherings and protests in the early 20th century, particularly during the Swadeshi movement after the partition of Bengal. It helped bind the nationwide quest for freedom with cultural pride.

**Conclusion**

Bankim Chandra Chatterjee was not just a writer — he was a visionary who gave India a voice of devotion and defiance. Vande Mataram continues to resonate as an enduring symbol of love for the nation and the sacrifices of those who shaped India’s destiny.

**EXPECTED QUESTION FOR UPSC CSE**

**Prelims MCQ**

Q. Consider the following statements regarding Vande Mataram:

1. It was originally written in pure Sanskrit.
2. It first appeared in Bankim Chandra Chatterjee’s novel Anandamath.
3. Rabindranath Tagore set the song to music.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Answer: (b)



- **Cultural Symbol:** Her story survives not only in colonial records but also through folk songs, lavanis and oral histories celebrating her valour.

### Features of Her Rebellion

- **Outnumbered yet Fearless:** Although facing a militarily superior British force, she refused to surrender and chose to fight for her kingdom's autonomy.
- **Initial British Loss:** In the first engagement, British official John Thackeray was killed by Kittur's defenders — a rare defeat for the East India Company at the time.
- **Subsequent British Reinforcements:** A stronger British regiment later attacked the fort, leading to Kittur's fall and her arrest in December 1824.

### About her life

- Rani Chennamma was born into a Lingayat family on 23 October 1778 in Kagati village (now in Belagavi district). She was married at age 15 to Raja Mallasarja, ruler of Kittur.
- **Ascension and Struggle:** After her husband's death in 1816 and later her son's death, Chennamma adopted Shivalingappa as heir to the Kittur throne. When the British refused to recognise the adoption and attempted to annex the state, she resisted — leading her troops personally into battle from Kittur Fort.

### Timeline


- 1778 (23 October): Born in Kagati, Karnataka.
- c.1793: Married Raja Mallasarja of Kittur at age ~15.
- 1816: Death of her husband; her son Shivalingarudra becomes ruler.
- 1824 (23 October): British official John Thackeray killed during first clash; Chennamma wins the first engagement.
- 1824 (3–4 December): British forces capture Kittur Fort; Chennamma is imprisoned.
- 1829: Rani Chennamma dies in prison.

### Legacy and Memory

- Although not as widely known nationally as Rani Lakshmibai, her story occupies a central place in Karnataka's historical imagination and regional pride. Annual celebrations like the Kittur Rani Chennamma Utsav and tributes across cultural platforms continue to honour her bravery.

### Conclusion


Rani Chennamma's rebellion against the British remains a symbol of courage and resistance — not just in early anti-colonial struggles, but also as a timeless inspiration for women and leaders defending autonomy and justice. Her life embodies defiance against imperial power and the courage of conviction in the face of overwhelming odds.



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### THREE NEW DR. AMBEDKAR CHAIRS IN INDIAN UNIVERSITIES

**Why in News:** The Dr. Ambedkar Foundation under the Ministry of Social Justice & Empowerment organised a ceremony for signing Memorandums of Understanding (MoUs) to establish three new Dr. B.R. Ambedkar Chairs in prominent Indian universities.

#### Key Details

- The event took place at the Dr. Ambedkar International Centre (DAIC), New Delhi.
- Three new academic chairs named after Bharat Ratna Dr. B.R. Ambedkar have been agreed to be established at the following institutions:
  - University of Mumbai
  - Jaipur National University
  - GB Pant University of Agriculture and Technology
- These Chairs are part of a larger national initiative to promote research, education, and public discourse on Dr. Ambedkar's philosophy and vision.
- With the addition of these three, the total number of operational Dr. Ambedkar Chairs under the scheme now stands at 28 across the country.

#### Significance of the Initiative

The establishment of Dr. Ambedkar Chairs aims to:

- Deepen academic engagement with the life, works, and ideas of Dr. B.R. Ambedkar.
- Encourage policy-oriented research on social justice, equality, constitutional values, and empowerment of marginalised communities.
- Strengthen India's academic ecosystem to address contemporary societal challenges drawing from Ambedkarite thought.

#### Conclusion

This expansion reinforces the government's commitment to promoting Dr. Ambedkar's ideals through institutional collaboration and research. The additional Chairs will serve as hubs for learning, dialogue, and innovation, furthering academic excellence and social inclusion across India.

### INTERNATIONAL PURPLE FEST

**Why in News:** On the second day of the International Purple Fest held in Goa, the Department of Empowerment of Persons with Disabilities (DEPwD), under the Ministry of Social Justice & Empowerment, unveiled three major initiatives to promote inclusive education, accessibility and skill development for persons with disabilities.

#### Three major initiatives

1. IELTS Training Handbook for Persons with Disabilities
  - A first-of-its-kind handbook designed especially for learners with disabilities to prepare for the International English Language Testing System (IELTS) exam.
  - Prepared by Believe in the Invisible (BITI) with support from DEPwD, the guide offers accessible techniques and tools to improve listening, reading, writing, and speaking skills.
  - It includes accommodation strategies, accessible practice materials, study plans, and Indian Sign Language (ISL) video links to help learners overcome challenges faced in standard IELTS prep.
  - The handbook also serves as a teaching manual for trainers working with persons with disabilities.
  - This initiative aims to remove accessibility barriers in global language proficiency training and expand educational opportunities for persons with disabilities.
2. ISLRTC RPL Certification for ISL Interpretation
  - The Indian Sign Language Research and Training Centre (ISLRTC), New Delhi — the apex body for sign language training — completed the Recognition of Prior Learning (RPL) skill certification in ISL Interpretation.
  - The course was organised for SODA (Siblings of Deaf Adults) and CODA (Children of Deaf Adults) from 11–29 August 2025 in offline mode at ISLRTC.
  - A total of 17 participants from across India successfully completed the assessment.
  - The certificate distribution ceremony for this first batch is scheduled on 03 December 2025, International Day for Persons with Disabilities.
  - This certification strengthens skills in sign language interpretation and supports meaningful professional development for deaf community stakeholders.

3. Basic Training Programme in ASL & BSL
  - ISLRTC also announced the launch of a specialised basic training programme on American Sign Language (ASL) and British Sign Language (BSL).
  - This four-week physical training will begin from 03 December 2025 at ISLRTC, New Delhi.
  - The programme will introduce sign language professionals to the basics of ASL and BSL, including grammar, syntax and vocabulary.
  - The aim is to enhance global exposure and broaden international opportunities for Indian sign language interpreters.

**Importance of initiatives**

- **Inclusivity in Education:** The IELTS handbook opens pathways for persons with disabilities to access international academic and career opportunities.
- **Skill Development:** Certification and training strengthen professional competencies and employability.
- **Global Integration:** Exposure to ASL and BSL equips Indian professionals for participation in international forums.

**Conclusion**

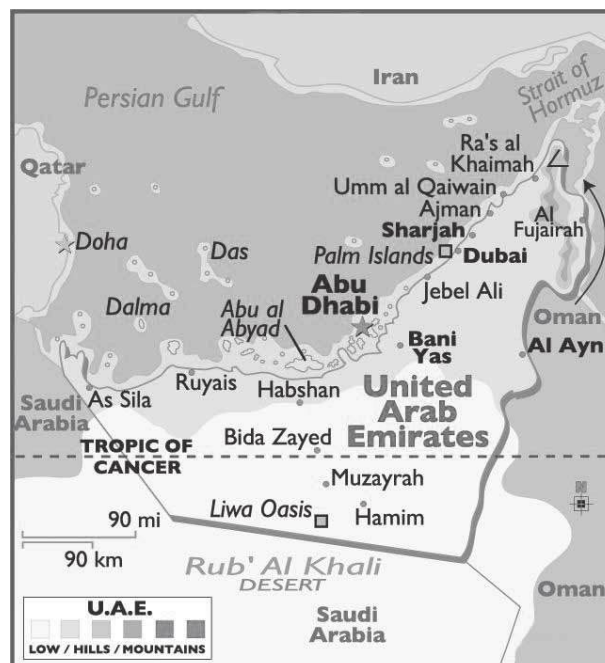
The three initiatives launched at the International Purple Fest demonstrate a holistic approach to empowering persons with disabilities — focusing on education, communication and skills. These efforts align with the Government’s vision of building an inclusive society where persons with disabilities can learn, work and thrive without barriers.



- **Balkh Province & Mazar-i-Sharif, Afghanistan** — Epicenter of a strong earthquake (magnitude ~6.2/6.3) on 2–3 Nov 2025 that caused deaths and injuries across northern Afghanistan and was felt in neighboring regions.



- **Dubai, United Arab Emirates** — Site of the Dubai Airshow 2025 (17–21 Nov), a major global aerospace and defence event influencing international aviation and defence deals.



**EXPECTED QUESTION FOR UPSC CSE**

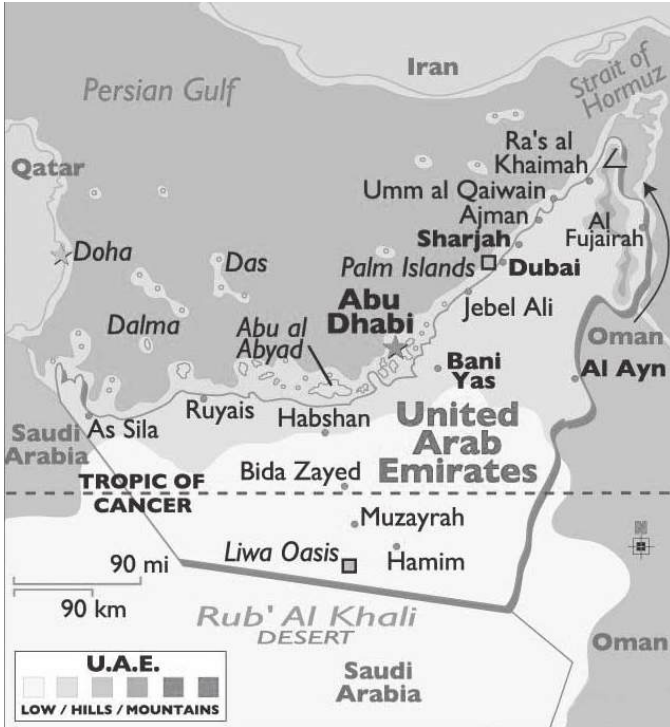
**Prelims MCQ**

- Q. The Government of India has recently launched several initiatives to empower persons with disabilities, including skill certification in Indian Sign Language (ISL) and accessible training materials for international examinations.
- (a) Discuss the significance of such initiatives in promoting social inclusion and equal opportunities for persons with disabilities.
  - (b) Examine the challenges that persons with disabilities face in accessing education and skill development in India.
  - (c) Suggest measures to further strengthen the educational and professional empowerment of persons with disabilities in line with India’s commitments under the Rights of Persons with Disabilities Act, 2016. (15marks/ 250words)

**Location in News (World)**

- **Johannesburg, South Africa** — Hosted the 2025 G20 Summit (22–23 Nov), the first on the African continent, with major global economic and geopolitical discussions.

- **Abu Dhabi & UAE wide (UAE)** — Hosted multiple significant events including ADIPEC, the General Conference of International Council of Museums, Arab Scout Conference and business forums through November 2025.



- **Riyadh, Saudi Arabia** — 2025 UCI Urban Cycling World Championships held here (4–8 Nov), notable as part of Saudi Arabia’s push to host global sporting events.



- **Lebanon (Taybeh, Ain al-Hilweh, Haret Hreik regions)** — Locations of Israeli airstrikes and conflict events during November 2025, drawing international attention to security and Middle East tensions.



- **Darwin, Australia** — Affected by Cyclone Fina, a Category-3 tropical cyclone in late November, leading to closures and severe weather impacts.



- **Hat Yai, Thailand** — Experienced severe flooding in late November 2025, highlighting climate and disaster response issues.



- **North Sumatra & Sibolga, Indonesia** — Impacted by landslides and flooding in late November due to heavy rains, significant for environmental news.



- **Dhaka, Bangladesh** — Reported among the world’s most polluted cities in mid-November 2025, raising environmental health concerns.





2. The Chandrayaan missions are aimed at exploring Mars.
3. The Indian Regional Navigation Satellite System (IRNSS), also called NavIC, is designed to provide accurate positioning information over India and surrounding regions.
4. Gaganyaan is India's first interplanetary mission.

Which of the statements given above are incorrect?

- (a) 1 and 3 only                      (b) 2 and 4 only  
 (c) 1,3 and 4 only                  (d) None of the above

Q7. Which of the following statements are correct in respect of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) Scheme:

1. It aims to promote the installation of solar pumps and grid-connected solar power plants to ensure energy security for farmers.
2. The scheme provides for both individual solar pumps and solarisation of existing grid-connected pumps.
3. It is implemented by the Ministry of New and Renewable Energy (MNRE) in collaboration with State Nodal Agencies.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
 (c) 1 and 3 only                      (d) 1, 2 & 3

Q8. Consider the following statements:

Statement 1: The Western sector of the India-China border dispute lies between Ladakh and Aksai Chin.

Statement 2: China built the Aksai Chin highway (G219) through this region to connect Tibet with Xinjiang, which India claims as part of Ladakh.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
 (b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
 (c) Statement 1 is correct, but Statement 2 is incorrect  
 (d) Statement 2 is correct, but Statement 1 is incorrect

Q9. Which of the following statements are correct in respect of Real Time Gross Settlement (RTGS) system:

1. RTGS enables funds to be transferred from one bank account to another on a real-time and gross basis.

2. It is primarily used for high-value transactions, with a minimum amount limit prescribed by the RBI.

3. Transactions under RTGS are processed and settled only during banking hours on working days.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
 (c) 1 and 3 only                      (d) 1, 2 and 3

Q10. Consider the following statements:

Statement 1: The ASEAN Secretariat is located in Jakarta, Indonesia.

Statement 2: The Secretary-General of ASEAN is appointed for a term of five years by the ASEAN Summit.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
 (b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
 (c) Statement 1 is correct, but Statement 2 is incorrect  
 (d) Statement 2 is correct, but Statement 1 is incorrect

Q11. Consider the following statements regarding the locations of certain pilgrimage sites in the Himalayas:

1. Kedarnath is located in Uttarakhand near the Mandakini River.

2. Gangotri is the origin of the Ganga River and is situated in the Garhwal region of Uttarakhand.

3. Yamunotri, the source of the Yamuna River, is located in the Chamoli district of Uttarakhand.

Which of the statements given above are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
 (c) 1 and 3 only                      (d) 1, 2, and 3

Q12. Consider the following statements regarding Chrysanthemum flowers:

1. Chrysanthemum is native to East Asia and North-eastern Europe.

2. In India, Chrysanthemum is cultivated mainly for ornamental purposes and floral decoration.

3. Chrysanthemum plants have pesticidal and medicinal properties.

Which of the statements given above are incorrect?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1, 2, and 3                      (d) 1 and 3 only

Q13. Which of the following statements are correct in respect of presentation of Union Territories in the Rajya Sabha:

1. Not all Union Territories have representation in the Rajya Sabha.
2. Members representing Union Territories are elected by the members of the Legislative Assemblies of those Territories, wherever such Assemblies exist.
3. Each Union Territory is guaranteed at least one seat in the Rajya Sabha.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q14. Consider the following statements:

Statement 1: The Donbas region is an industrial area in eastern Ukraine comprising the Donetsk and Luhansk oblasts.

Statement 2: The region has been a focal point of conflict since 2014 due to separatist movements supported by Russia.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q15. With reference to execution petitions in Indian courts, consider the following statements:

1. An execution petition is filed after a court has passed a decree but it has not yet been implemented.
2. Execution petitions form a significant portion of the total pending civil cases in India.
3. The Supreme Court of India directly handles all execution petitions arising from High Courts.

Which of the statements given above are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2, and 3

Q16. With reference to the Association of Southeast Asian Nations (ASEAN), consider the following statements:

1. ASEAN was established by the Bangkok Declaration in 1967.
2. The ASEAN Secretariat is located in Jakarta, Indonesia.
3. India is a founding member of ASEAN.

How many of the following statements are correct?

- (a) Only one                              (b) Only two  
(c) All three                              (d) None

Q17. Which of the following statements are correct in respect of Carbon Border Adjustment Mechanism (CBAM)?

1. It is a carbon pricing system proposed by the European Union to prevent "carbon leakage" by taxing imports based on their embedded emissions.
2. It aims to ensure that EU industries are not disadvantaged compared to producers in countries with weaker climate policies.
3. It applies equally to all countries, including those having equivalent carbon pricing mechanisms.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q18. Consider the following statements:

Statement 1: The Carbon Credit Trading Scheme (CCTS) aims to establish a national framework to trade emission reduction certificates and promote low-carbon economic growth.

Statement 2: The Bureau of Energy Efficiency (BEE) acts as the nodal authority to regulate, verify, and maintain the registry of carbon credits under this scheme.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q19. With reference to India's borders with Pakistan and Afghanistan, consider the following statements:

1. The Durand Line forms the boundary between Pakistan and Afghanistan.
2. The Radcliffe Line demarcates the boundary between India and Pakistan.
3. India shares a direct land border with Afghanistan in the Jammu & Kashmir region.

Which of the statements given above are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q20. With reference to HIV (Human Immunodeficiency Virus), consider the following statements:

1. HIV primarily attacks CD4 T-lymphocytes, which play a central role in the body's immune response.
2. Antiretroviral therapy (ART) can completely eliminate the HIV virus from the body if taken regularly.
3. HIV can be transmitted through unprotected sexual contact, blood transfusion, and from mother to child during childbirth or breastfeeding.
4. India's National AIDS Control Organisation (NACO) functions under the Ministry of Health and Family Welfare.

Which of the statements given above are correct?

- (a) 1, 3 and 4 only                      (b) 1 and 2 only  
(c) 2 and 3 only                      (d) 1, 2, 3 and 4

Q21. Which of the following statements are correct in respect of 2025 Nobel Prize in Economic Sciences:

1. It was jointly awarded to Philippe Aghion, Peter Howitt, and Joel Mokyr.
2. The award recognised their contributions to understanding long-term economic growth and technological innovation.
3. Their research shows that growth occurs automatically once innovation begins.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q22. Consider the following statements:

Statement 1: The British Industrial Revolution marked a major transition from manual production methods to machine-based manufacturing.

Statement 2: The invention of the steam engine and the growth of the textile industry provided the technological foundation for this transformation.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q23. With reference to the Nutrient Based Subsidy (NBS) Scheme for fertilizers in India, consider the following statements:

1. Under the scheme, the subsidy is provided to fertilizer companies based on the nutrient content (N, P, K, S) of fertilizers.
2. The scheme is applicable only to urea fertilizers.
3. The objective of the scheme is to promote balanced use of fertilizers and improve soil health.

How many of the following statements are correct?

- (a) Only one                              (b) Only two  
(c) All three                              (d) None

Q24. Consider the following statements regarding Quantum Computing:

1. Quantum computers use qubits which can exist in multiple states simultaneously due to the principle of superposition.
2. Entanglement in quantum computing allows qubits that are far apart to be correlated in a way that classical bits cannot.
3. Quantum computers are already commercially available at scale and are faster than classical computers for all computational problems.

Which of the statements given above are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q25. Which of the following statements are correct in respect of PM SHRI (Pradhan Mantri Schools for Rising India) Scheme:

1. It aims to develop more than 14,500 schools as model schools aligned with the National Education Policy (NEP)-2020.

2. The scheme is fully funded by the Central Government with no contribution from States or UTs.
3. PMSHRI schools will showcase the implementation of NEP-2020 and act as mentor schools for others in their region.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q26. Consider the following statements:

Statement 1: Article 75 deals with the appointment and tenure of the Prime Minister and the Council of Ministers.

Statement 2: The Council of Ministers holds office during the pleasure of the President, who acts on the aid and advice of the Prime Minister.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q27. Consider the following statements:

Statement I: The NDPS Act, 1985 was enacted to control and regulate the operations relating to narcotic drugs and psychotropic substances in India.

Statement II: The Act provides for the establishment of the Narcotics Control Bureau (NCB) to coordinate actions by various central and state agencies in enforcing drug laws.

Statement III: The NDPS Act allows for the cultivation, possession, and consumption of narcotic drugs for recreational purposes under state permission.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I  
(b) Both Statement II and Statement III are correct but only one of them explains Statement I  
(c) Only one of the Statements II and III is correct and that explains Statement I  
(d) Neither Statement II nor Statement III is correct

Q28. With reference to scientific rainmaking (cloud seeding) in India, consider the following statements:

1. Cloud seeding has not yielded consistent results in India because its success largely depends on the availability of moisture-bearing clouds.
2. The Indian Meteorological Department (IMD) has declared cloud seeding as an experimental technique rather than a proven method for large-scale drought management.

Which of the statements given above is/are correct?

- (a) 1 only                                      (b) 2 only  
(c) Both 1 and 2                              (d) Neither 1 nor 2

Q29. Which of the following statements are correct in respect of Forest Rights Act (FRA), 2006:

1. The Act recognizes the rights of forest-dwelling Scheduled Tribes and other traditional forest dwellers to forest resources.
2. The Gram Sabha has the power to initiate the process for determining the nature and extent of individual or community forest rights.
3. The Act allows diversion of forest land for non-forest purposes without the consent of the Gram Sabha.

Select the answer using the code given below:

- (a) 1 and 2 only                              (b) 2 and 3 only  
(c) 1 and 3 only                              (d) 1, 2 and 3

Q30. Consider the following statements:

Statement 1: The National Tiger Conservation Authority (NTCA) was established under the Wildlife (Protection) Act, 1972 to strengthen tiger conservation.

Statement 2: It was set up on the recommendations of the Tiger Task Force, and given statutory status by the 2006 amendment to the Act.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q31. With reference to Fentanyl, consider the following statements:

1. Fentanyl is a synthetic opioid that is significantly more potent than morphine.
2. It is legally used in medical settings as an anesthetic and for pain management.
3. The abuse of illicitly manufactured fentanyl has become a major cause of drug overdose deaths globally.

Which of the statements given above are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q32. With reference to the Air Quality Index (AQI) in India, consider the following statements:

1. The AQI is calculated based on eight pollutants monitored under the National Air Quality Monitoring Programme (NAMP).
2. The Central Pollution Control Board (CPCB) is the nodal agency responsible for the computation and dissemination of AQI data in India.
3. In the AQI scale, a higher numerical value indicates better air quality.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                      (b) 2 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q33. Which of the following statements are correct in respect of Critical Minerals:

1. Critical minerals are those essential for economic development and national security, whose supply chains are vulnerable to disruption.
2. India's Critical Minerals List (2023) includes 30 minerals, identified by the Ministry of Mines.
3. Lithium, cobalt, and nickel are among the key critical minerals used in clean energy technologies such as EV batteries and solar panels.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q34. Consider the following statements:

Statement 1: The IMF Extended Fund Facility (EFF) is designed to assist countries facing serious medium-term balance of payments problems due to structural weaknesses.

Statement 2: EFF loans are typically short-term with low conditionality and are aimed at quick crisis response.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q35. Consider the following statements regarding India's investment rate:

Statement 1: India needs to raise its investment rate to about 34–35% of GDP to sustain an annual economic growth rate of around 7%.

Statement 2: A higher investment rate leads to greater capital formation, which enhances the productive capacity of the economy.

Statement 3: Increased investment promotes technological upgradation and employment generation, both of which contribute to sustained economic growth.

Which of the following is correct?

- (a) All three statements are correct, and Statements 2 and 3 together explain Statement 1.  
(b) All three statements are correct, but Statements 2 and 3 do not explain Statement 1.  
(c) Statement 1 and Statement 2 are correct, but Statement 3 is incorrect.  
(d) Statement 1 is correct, but Statements 2 and 3 are incorrect.

Q36. With reference to the Asia-Pacific Economic Cooperation (APEC), consider the following statements:

1. APEC is a regional forum established in 1989 to promote free trade and economic integration among economies of the Asia-Pacific region.
2. India is a full member of APEC and has hosted the APEC Summit once.

Which of the statements given above is/are correct?

- (a) 1 only                                      (b) 2 only  
(c) Both 1 and 2                              (d) Neither 1 nor 2

Q37. Which of the following statements are correct in respect of Shipping Corporation of India (SCI)?

1. The Shipping Corporation of India is a public sector undertaking under the Ministry of Ports, Shipping and Waterways.
2. It was established through the merger of Eastern Shipping Corporation and Western Shipping Corporation in 1961.
3. SCI was granted Navratna status, giving it greater financial and operational autonomy.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
 (c) 1 and 3 only                      (d) 1, 2 and 3

Q38. Consider the following statements:

Statement 1: The LPG reforms of 1991 were introduced to deal with a balance of payments crisis.

Statement 2: These reforms were guided by recommendations of the Narasimham Committee.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
 (b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
 (c) Statement 1 is correct, but Statement 2 is incorrect  
 (d) Statement 2 is correct, but Statement 1 is incorrect

Q39. With reference to Negros Island, recently in the news due to an earthquake, consider the following statements:

1. Negros Island is located in the Philippines archipelago and lies within the Pacific Ring of Fire.
2. The island is primarily of volcanic origin and has several active and dormant volcanoes.
3. It is separated from the island of Cebu by the Tañon Strait.

Which of the statements given above are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
 (c) 1 and 3 only                      (d) 1, 2 and 3

Q40. Consider the following statements about urea in India:

1. Urea is the only nitrogenous fertilizer not covered under the Nutrient-Based Subsidy (NBS) scheme.

2. Neem-coating of urea helps reduce its diversion and improves nitrogen-use efficiency.

Which of the statements given above is/are correct?

- (a) 1 only                                      (b) 2 only  
 (c) Both 1 and 2                              (d) Neither 1 nor 2

Q41. Which of the following statements are correct in respect of Initial Public Offering (IPO):

1. An IPO refers to the first sale of shares by a private company to the public.
2. IPOs are regulated in India by the Securities and Exchange Board of India (SEBI).
3. After an IPO, a company's shares can be traded on stock exchanges like NSE and BSE.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
 (c) 1 and 3 only                      (d) 1, 2 and 3

Q42. Consider the following statements:

Statement 1: The UNFCCC aims to stabilize greenhouse gas concentrations in the atmosphere at a level that prevents dangerous human interference with the climate system.

Statement 2: The Kyoto Protocol and Paris Agreement were adopted under the framework of the UNFCCC to help achieve its objectives.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
 (b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
 (c) Statement 1 is correct, but Statement 2 is incorrect  
 (d) Statement 2 is correct, but Statement 1 is incorrect

Q43. With reference to the Human Immunodeficiency Virus (HIV) and its impact on the human immune system, consider the following statements:

1. HIV primarily infects and destroys macrophages, which are responsible for antibody production in the human body.
2. The progressive decline in CD4 T-lymphocytes weakens the body's immune response, making it vulnerable to opportunistic infections.
3. Antiretroviral therapy (ART) works by directly killing HIV present in the bloodstream.

Which of the statements given above is/are correct?

- (a) 1 and 2 only            (b) 2 only  
(c) 1 and 3 only            (d) 2 and 3 only

Q44. Consider the following statements regarding Monetary policy:

Statement 1: The Reserve Bank of India adopts a tight monetary policy stance when inflation rises above the target band.

Statement 2: A tight monetary policy reduces the money supply and credit availability in the economy, thereby controlling inflationary pressures.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement 1 and Statement 2 are correct, and Statement 2 is the correct explanation of Statement 1.  
(b) Both Statement 1 and Statement 2 are correct, but Statement 2 is not the correct explanation of Statement 1.  
(c) Statement 1 is correct, but Statement 2 is incorrect.  
(d) Statement 1 is incorrect, but Statement 2 is correct.

Q45. Which of the following statements are correct in respect of "Pig Butchering" scams:

1. "Pig Butchering" is a form of cyber fraud that combines elements of investment and romance scams.
2. The term originated from the method of first "fattening" victims emotionally or financially before exploiting them.
3. Victims are mainly government officials.

Select the answer using the code given below:

- (a) 1 and 2 only            (b) 2 and 3 only  
(c) 1 and 3 only            (d) 1, 2 and 3

Q46. Consider the following statements:

Statement 1: The total number of seats in a State Legislative Assembly is determined by the population of that State.

Statement 2: The Constitution of India provides that the maximum strength of a Legislative Assembly shall not exceed 500 and the minimum shall not be less than 60 members.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1

- (b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1

- (c) Statement 1 is correct, but Statement 2 is incorrect

- (d) Statement 2 is correct, but Statement 1 is incorrect

Q47. Which of the following technologies are generally associated with climate innovation and clean energy transition?

1. Carbon capture and storage (CCS)
2. Green hydrogen
3. Direct air capture
4. Hydraulic fracturing

Select the correct answer using the code given below:

- (a) 1 and 2 only            (b) 1, 2 and 3 only  
(c) 2, 3 and 4 only        (d) 1, 2, 3 and 4

Q48. Consider the following statements regarding US shale oil industry:

1. Shale oil extraction involves the process of hydraulic fracturing and horizontal drilling.
2. The shale oil industry becomes more profitable when crude oil prices are high.
3. The US sanctions on Russian oil have made shale oil extraction economically unviable.

Which of the statements given above are correct?

- (a) 1 and 2 only            (b) 2 and 3 only  
(c) 1 and 3 only            (d) 1, 2 and 3

Q49. Which of the following statements are correct in respect of Motor Vehicles (Amendment) Act, 2019?

1. It introduced higher penalties for traffic violations to promote road discipline.
2. It created provisions for electronic monitoring and enforcement of traffic laws.
3. It reduced penalties for minor offences to ease public compliance.

Select the answer using the code given below:

- (a) 1 and 2 only            (b) 2 and 3 only  
(c) 1 and 3 only            (d) 1, 2 and 3

Q50. Consider the following statements:

Statement 1: The U.S. House of Representatives is the lower chamber of the United States Congress, with representation based on the population of each state.

Statement 2: This structure ensures proportional representation of citizens, allowing larger states to have more influence in legislative decisions.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1
- (b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1
- (c) Statement 1 is correct, but Statement 2 is incorrect
- (d) Statement 2 is correct, but Statement 1 is incorrect

Q51. Which of the following is not correct about Lok Sabha elections?

- (a) Elections are conducted on the basis of universal adult suffrage.
- (b) Each constituency elects one member to the Lok Sabha.
- (c) The President can dissolve the Lok Sabha before completion of its term.
- (d) The Rajya Sabha supervises the conduct of Lok Sabha elections.

Q52. With reference to the Skill India Mission, consider the following statements:

1. The National Skill Development Corporation (NSDC) is a public-private partnership under the Ministry of Skill Development and Entrepreneurship.
2. The Skill India Mission aims to train over 400 million people in different skills by 2022.
3. Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is implemented directly by the State Skill Development Missions.

Which of the statements given above are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only
- (c) 1 and 3 only                      (d) 1, 2 and 3

Q53. Which of the following statements are correct in respect of 'EAT-Lancet Commission on Healthy, Sustainable, and Just Food Systems'?

1. The Commission highlights that current food systems are responsible for breaching five of the six planetary boundaries.
2. It finds that animal-based foods contribute most to agricultural greenhouse-gas emissions, while cereals dominate nitrogen and water use.
3. It recommends focusing solely on agricultural productivity to restore planetary health.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only
- (c) 1 and 3 only                      (d) 1, 2 and 3

Q54. Consider the following statements:

Statement 1: The Surrogacy (Regulation) Act permits only altruistic surrogacy and prohibits commercial surrogacy in India.

Statement 2: The Act allows only Indian couples, including NRIs and foreign nationals, to commission surrogacy to promote reproductive tourism.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1
- (b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1
- (c) Statement 1 is correct, but Statement 2 is incorrect
- (d) Statement 2 is correct, but Statement 1 is incorrect

Q55. Which of the following statements is correct regarding the World Happiness Report?

- (a) It is published annually by the United Nations Environment Programme (UNEP).
- (b) It ranks countries mainly based on military strength and political stability.
- (c) It is released by the Sustainable Development Solutions Network using factors like income, health, freedom, and social support.
- (d) It measures happiness only through per capita GDP.

Q56. With reference to Article 22 of the Constitution, consider the following statements:

1. It provides protection to both citizens and non-citizens against arbitrary arrest and detention.
2. The Supreme Court has mandated that reasons for arrest must be recorded for all offenses.

Which of the statements given above is/are correct?

- (a) 1 only                                      (b) 2 only
- (c) Both 1 and 2                              (d) Neither 1 nor 2

Q57. Which of the following statements are correct in respect of Chief Minister and Governor:

1. The Chief Minister is the de facto executive head of the state, while the Governor is the constitutional (de jure) head.

2. The Chief Minister leads the Council of Ministers, whose advice is binding on the Governor under Article 163 (except in discretionary matters).

3. The Chief Minister determines the allocation of portfolios among ministers and can recommend their appointment or dismissal to the Governor.

Select the answer using the code given below:

(a) 1 and 2 only                      (b) 2 and 3 only

(c) 1 and 3 only                      (d) 1, 2 and 3

Q58. Consider the following statements:

Statement 1: The normal tenure of a State Legislative Assembly is five years from the date of its first sitting.

Statement 2: The Governor of the state can extend the Assembly's term by one year at a time during a national emergency.

Which one of the following is correct in respect of the above statements?

(a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1

(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1

(c) Statement 1 is correct, but Statement 2 is incorrect

(d) Statement 2 is correct, but Statement 1 is incorrect

Q59. With reference to the Quadrilateral Security Dialogue (QUAD), consider the following statements:

1. It includes India, Japan, the United States, and Australia.

2. The primary objective of QUAD is economic cooperation among member states.

3. The QUAD conducts joint military exercises under the framework of the Malabar Exercise.

Which of the statements given above is/are correct?

(a) 1 and 3 only                      (b) 2 and 3 only

(c) 1 only                                (d) 1, 2 and 3

Q60. Consider the following statements regarding the Inter-University Centre for Astronomy and Astrophysics (IUCAA):

1. It is an autonomous institution under the Department of Atomic Energy.

2. It is located in Pune, Maharashtra.

3. It promotes research and training in astronomy and astrophysics among university students.

Which of the statements given above are correct?

(a) 1 and 2 only                      (b) 2 and 3 only

(c) 1 and 3 only                      (d) 1, 2 and 3

Q61. Which of the following statements are correct in respect of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)?

1. CITES is a legally binding international agreement that aims to ensure that international trade in wild animals and plants does not threaten their survival.

2. It classifies species into three appendices based on the degree of protection they require.

3. The Secretariat of CITES is administered by the United Nations Environment Programme (UNEP).

Select the answer using the code given below:

(a) 1 and 2 only                      (b) 2 and 3 only

(c) 1 and 3 only                      (d) 1, 2 and 3

Q62. Consider the following statements:

Statement 1: The Prime Minister must always be a member of the Lok Sabha.

Statement 2: A person who is not a member of either House of Parliament can be appointed Prime Minister, but must get elected to either House within six months.

Which one of the following is correct in respect of the above statements?

(a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1

(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1

(c) Statement 1 is correct, but Statement 2 is incorrect

(d) Statement 2 is correct, but Statement 1 is incorrect

Q63. With reference to the Ayni Airbase, consider the following statements:

1. The Ayni Airbase is located in Tajikistan and has been refurbished with India's assistance.

2. It provides strategic access to the Wakhan Corridor connecting Central Asia with Pakistan.

3. The base is jointly operated by India, Russia, and Tajikistan.

Which of the statements given above are correct?

- (a) 1 and 3 only                      (b) 1 and 2 only  
(c) 2 and 3 only                      (d) 1, 2 and 3

Q64. Which of the following is a concern associated with the rapid deployment of Artificial Intelligence (AI) models?

1. Data privacy and security
2. Algorithmic bias
3. Loss of explainability in decision-making

Select the correct answer:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1, 2 and 3                      (d) 1 only

Q65. Which of the following statements are correct in respect of United Nations Framework Convention on Climate Change (UNFCCC):

1. It was adopted at the Earth Summit in Rio de Janeiro in 1992.
2. It is a legally binding treaty that sets specific emission reduction targets for all member countries.
3. The UNFCCC provides the framework for negotiating agreements like the Kyoto Protocol and the Paris Agreement.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q66. Consider the following statements:

Statement 1: The International Maritime Organization (IMO) was established by a convention adopted under the United Nations in 1948 and became operational in 1959.

Statement 2: IMO's primary role is to promote international cooperation in civil aviation standards and air navigation safety through global conventions.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q67. With reference to the Loss and Damage Fund, consider the following statements:

1. It was formally agreed to during COP27 held in Sharm el-Sheikh, Egypt.
2. The Fund aims to support countries facing irreversible impacts of climate change that cannot be mitigated or adapted to.
3. It is managed by the International Monetary Fund (IMF).
4. The Fund will provide grants and not loans to the developing nations.

Which of the statements given above are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1, 2 and 4 only                      (d) 1, 3 and 4 only

Q68. With reference to the World Artificial Intelligence Cooperation Organization (WAICO) proposed by China, consider the following statements:

1. WAICO was proposed during the World Artificial Intelligence Conference (WAIC) held in Shanghai in 2025.
2. It aims to promote global cooperation, standard-setting, and inclusive development in the field of Artificial Intelligence.
3. The organization's headquarters have been proposed in Shanghai, China.
4. WAICO will function as a specialized agency under the United Nations.

Which of the statements given above are correct?

- (a) 1, 2 and 3 only                      (b) 2, 3 and 4 only  
(c) 1 and 4 only                      (d) 1, 2, 3 and 4

Q69. Which of the following statements are correct in respect of International Labour Organization (ILO)?

1. It was founded in 1919 as part of the Treaty of Versailles that ended World War I.
2. It became the first specialized agency of the United Nations in 1946.
3. Its headquarters are located in Paris, France.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 & 3

Q70. Consider the following statements:

Statement 1: The Employees' State Insurance (ESI) Act, 1948 was enacted to provide social security benefits to workers in case of sickness, maternity, and employment injury.

Statement 2: The ESI scheme is based on the principle of compulsory and contributory social insurance.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1
- (b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1
- (c) Statement 1 is correct, but Statement 2 is incorrect
- (d) Statement 2 is correct, but Statement 1 is incorrect

Q71. "K4", recently mentioned in news, refers to:

- (a) Fourth King of Bhutan who strengthened Indo-Bhutan ties
- (b) A hydropower project jointly developed by India and Bhutan
- (c) A ballistic missile developed by DRDO
- (d) A trans-Himalayan trade corridor

Q72. Which of the following statements about animal behavior and management is/are correct?

- 1. Sterilization and vaccination are scientific methods recommended for population control of street dogs.
- 2. Culling is the most effective long-term method for managing street dog populations.

Select the correct answer:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q73. Which of the following protected areas lies closest to the Pamed Wildlife Sanctuary?

- (a) Kanger Valley National Park
- (b) Udanti Wildlife Sanctuary
- (c) Achanakmar Tiger Reserve
- (d) Barnawapara Wildlife Sanctuary

Q74. With reference to the concept of "G2" in global geopolitics, consider the following statements:

- 1. The idea of G2 refers to a proposed strategic partnership between the United States and China to jointly manage major global issues.
- 2. The concept gained prominence during discussions on global financial governance, climate negotiations, and strategic stability.
- 3. India is a founding member of the G2 grouping.

How many of the statements given above are incorrect?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Q75. Which of the following statements are correct in respect of resolutions passed by the Union Cabinet:

- 1. Cabinet resolutions are laid before Parliament for mandatory approval before implementation.
- 2. The Union Cabinet can pass resolutions to approve international treaties and agreements before they are signed by the Government of India.
- 3. Resolutions passed by the Cabinet are binding on all ministries and departments of the Government of India.

Select the answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 & 3

Q76. Consider the following statements:

Statement 1: The Governor of a State decides the schedule and conduct of elections for the State Legislative Assembly.

Statement 2: The tenure of a State Legislative Assembly is five years from the date of its first sitting.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1
- (b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1
- (c) Statement 1 is correct, but Statement 2 is incorrect
- (d) Statement 2 is correct, but Statement 1 is incorrect

Q77. Which of the following statements are correct in respect of Article 32 of the Constitution of India?

1. It gives the right to individuals to move the Supreme Court for the enforcement of Fundamental Rights.
2. It empowers the Supreme Court to issue writs such as habeas corpus, mandamus, prohibition, certiorari, and quo warranto.
3. It can be suspended only during a National Emergency declared under Article 352.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 & 3

Q78. Consider the following statements:

Statement 1: The Booker Prize is awarded annually for the best original novel written in the English language and published in the United Kingdom or Ireland.

Statement 2: The eligibility criteria were expanded in 2014 to allow writers of any nationality, provided their work is published in the UK and written in English.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q79. Consider the following statements regarding the cryptocurrency industry in India:

1. The cryptocurrency industry in India is expected to witness exponential growth, reaching a market size of \$15 billion by 2035.
2. Regulatory frameworks and guardrails for the crypto industry in India are robust and well-established, minimizing risks of financial crimes.
3. Challenges such as disclosure of data, legal blocks, and seizure of assets complicate law enforcement investigations in crypto cases.
4. Pump-and-dump schemes and fake coin launches are among the common modus operandi for fraud in the Indian crypto market.

Which of the above statements are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1, 3 and 4 only                      (d) 1, 2, 3 and 4

Q80. Consider the following statements regarding the recent initiatives by the Comptroller and Auditor General of India (CAG) in urban governance:

1. The CAG is undertaking an audit to assess the "ease of living" in 101 major cities, focusing on citizen-centric dimensions such as infrastructure, environmental sustainability, and local economic growth.
2. The audit will restrict its assessment to only physical infrastructure parameters, without examining aspects like employment, grievance redressal, or foundational literacy.
3. The initiative marks the first time CAG has linked urban audits with projected demographic changes, such as more than half the population residing in urban areas by 2047.

Which of the above statements is/are correct?

- (a) 1 and 3 only                      (b) 2 and 3 only  
(c) 1 only                              (d) 1, 2 and 3

Q81. Consider the following statements regarding post-facto environmental clearance in India:

1. The Supreme Court's recent recall of the May 2024 Vanashakti judgment amounts to an endorsement of the post-facto environmental clearance regime.
2. Post-facto clearance attempts to regularise projects that began operations without obtaining prior Environmental Clearance (EC) under the EIA Notification, 2006.
3. The 2017 MoEFCC notification and the 2021 Standard Operating Procedure (SOP) provided a mechanism for processing violation cases under the EIA framework.

How many of the above statements are correct?

- (a) One only                              (b) Two only  
(c) All three                              (d) None

Q82. Sir Creek, often seen in news, is a disputed region between India and Pakistan located in which of the following areas?

- (a) The Rann of Kutch region along the Gujarat coast  
(b) The Indus River delta near Sindh-Punjab border  
(c) The Shaksgam Valley in the Karakoram Range  
(d) The Pir Panjal range along the LoC in Jammu & Kashmir

Q83. Which of the following statements are correct in respect of PM-KISAN?

1. PM-KISAN provides income support of ₹6,000 per year to all eligible farmer families, paid in three equal installments.
2. The scheme is fully funded by the Government of India.
3. Tenant farmers are automatically eligible for benefits under PM-KISAN.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 & 3

Q84. Consider the following statements:

Statement 1: The Inland Waterways Authority of India is responsible for the regulation and development of national waterways in India.

Statement 2: The Inland Waterways Authority of India was established in 1986 under the Inland Waterways Authority of India Act.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q85. Which of the following statements are correct in respect of President of India in relation to Bills passed by Parliament:

1. The President can return a non-money Bill once for reconsideration of the Parliament.
2. The President is bound to give assent to a Constitutional Amendment Bill; he/she cannot return it.
3. The President can send back the Money Bill.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q86. Consider the following statements:

Statement 1: The Governor has discretionary power to recommend President's Rule in the State.

Statement 2: The Governor acts only on the aid and advice of the Council of Ministers while sending such a report.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q87. Consider the following statements regarding Left-Wing Extremism (LWE) in India:

1. The Government of India implements the Special Central Assistance (SCA) scheme to fill critical infrastructure gaps in the most affected LWE districts.
2. The number of LWE-affected districts has reduced from more than 100 a decade ago to around 11 in recent years.
3. The CPI (Maoist), formed in 2004, emerged from the merger of the People's War Group and the Maoist Communist Centre.

How many of the above statements are correct?

- (a) Only one                              (b) Only two  
(c) All three                              (d) None

Q88. Consider the following statements regarding the Supreme Court's recent observations on the practice of Talaq-e-Hasan:

1. The Supreme Court indicated that the issue may be referred to a Constitution Bench as it involves questions affecting society at large.
2. Under Talaq-e-Hasan, divorce becomes final immediately after the husband pronounces "talaq" three times in a single sitting.

Which of the statements given above is/are correct?

- (a) 1 only                                  (b) 2 only  
(c) Both 1 and 2                      (d) Neither 1 nor 2

Q89. Which of the following statements are correct in respect of COP30?

1. COP30 is the first UN Climate Conference to be held in South America.
2. Brazil will chair the COP30 Presidency throughout 2025.

3. COP30 is expected to push countries to submit more ambitious NDCs aligned with the 1.5 C target.

Select the answer using the code given below:

- (a) 1 and 2 only            (b) 2 and 3 only  
(c) 1 and 3 only            (d) 1, 2 and 3

Q90. Consider the following statements:

Statement 1: Under Article 142, the Supreme Court can pass any order necessary to ensure complete justice in a case before it.

Statement 2: A Presidential Reference under Article 143 allows the Supreme Court to issue advisory opinions, which are binding on the government.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q91. Consider the following statements:

Statement I: The Attorney General is the highest law officer of India, appointed by the President.

Statement II: The Attorney General's term is fixed at five years by the Constitution.

Statement III: The Attorney General is a full-time government employee and cannot take up private legal practice.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I  
(b) Both Statement II and Statement III are correct but only one of them explains Statement I  
(c) Only one of the Statements II and III is correct and that explains Statement I  
(d) Neither Statement II nor Statement III is correct

Q92. Consider the following statements regarding institutional mechanisms for monitoring river pollution in India:

1. The Central Pollution Control Board (CPCB) is empowered to coordinate with State Pollution Control Boards for joint monitoring of polluted river stretches.

2. The National Mission for Clean Ganga (NMCG) functions as the implementing arm of the National Ganga Council and can be directed by the National Green Tribunal (NGT) to take corrective measures.

3. State Pollution Control Boards are responsible for submitting regular water quality data of major drains and tributaries to central agencies.

How many of the above statements are correct?

- (a) Only one                    (b) Only two  
(c) All three                    (d) None

Q93. With reference to species conservation in India, consider the following:

1. The Cheetah is listed as Vulnerable on the IUCN Red List.
2. Project Cheetah in India focuses on reintroducing African cheetahs into their historical habitat.
3. Only the Central Government can declare a species as 'Endangered' under the Wildlife Protection Act, 1972.

Which of the statements given above is/are correct?

- (a) 1 and 2 only                    (b) 2 only  
(c) 1 and 3 only                    (d) 1, 2 and 3

Q94. Consider the following statements:

Statement I: The Supreme Court recently held that prescribing strict time-lines for the Governor or the President to act on Bills would violate the principle of separation of powers under the Constitution.

Statement II: Under Article 200, a Governor cannot indefinitely delay a Bill, and the Supreme Court can intervene in cases of prolonged, unexplained, and indefinite withholding of assent.

Statement III: The Constitution explicitly provides a fixed time-limit within which the Governor or the President must take a decision on Bills passed by the State Legislature.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I  
(b) Both Statement II and Statement III are correct but only one of them explains Statement I  
(c) Only one of the Statements II and III is correct and that explains Statement I  
(d) Neither Statement II nor Statement III is correct

Q95. Which of the following statements are correct in respect of Article 200 of the Constitution?

1. The Governor may assent, withhold assent, or return a Bill (other than a Money Bill) to the State Legislature for reconsideration.
2. The Governor may reserve a Bill for the consideration of the President.
3. When the Bill is reconsidered and passed again by the Legislature, the Governor is constitutionally bound to give assent.

Select the answer using the code given below:

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2 and 3

Q96. Consider the following statements:

Statement 1: Public health and sanitation is a subject under the State List of the Constitution.

Statement 2: States have exclusive power to legislate on public health matters unless the Constitution provides otherwise.

Which one of the following is correct in respect of the above statements?

- (a) Both statement 1 and Statement 2 are correct and statement 2 explains statement 1  
(b) Both statement 1 and Statement 2 are correct and statement 2 does not explain statement 1  
(c) Statement 1 is correct, but Statement 2 is incorrect  
(d) Statement 2 is correct, but Statement 1 is incorrect

Q97. Consider the following statements:

Statement I: The SCO was created to enhance regional security and cooperation.

Statement II: The SCO evolved from the Shanghai Five formed in 1996.

Statement III: Uzbekistan was a member of the original Shanghai Five.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement II and Statement III are correct and both of them explain Statement I  
(b) Both Statement II and Statement III are correct but only one of them explains Statement I  
(c) Only one of the Statements II and III is correct and that explains Statement I  
(d) Neither Statement II nor Statement III is correct

Q98. Consider the following statements regarding the recently implemented Labour Codes in India:

1. The four Labour Codes consolidate all central labour laws related to wages, industrial relations, social security, and occupational safety.
2. Gig and platform workers are included under social security provisions for the first time under these reforms.
3. Implementation and enforcement of the Labour Codes are solely the responsibility of the Central Government.

Which of the statements given above are correct?

- (a) 1 and 2 only                      (b) 2 and 3 only  
(c) 1 and 3 only                      (d) 1, 2, and 3

Q99. Consider the following statements regarding the 20th G20 Summit held in South Africa:

1. It is the first time the G20 Summit is being hosted on the African continent.
2. The South African presidency focuses on development issues, debt sustainability, disaster resilience, finance for just energy transition, and inclusive growth through critical minerals.
3. India's participation at the summit builds on its 2023 G20 presidency, highlighting initiatives such as global development, climate action, and representation of the Global South.

Which of the statements given above is/are correct?

- (a) Only one                              (b) Only two  
(c) All three                              (d) None

Q100. Consider the following statements:

Statement I: The first privately built PSLV rocket in India marks a milestone in the commercialisation of the space sector.

Statement II: The private consortium will manufacture the PSLV launch vehicles, but ISRO will initially provide or contract the payloads.

Statement III: The private consortium will independently market and schedule PSLV launches from the very first mission.

Which one of the following is correct in respect of the above statement

- (a) Both Statement II and Statement III are correct and both of them explain Statement I  
(b) Both Statement II and Statement III are correct but only one of them explains Statement I

- (c) Only one of the Statements II and III is correct and that explains Statement I  
 (d) Neither Statement II nor Statement III is correct



**ANSWER KEY**

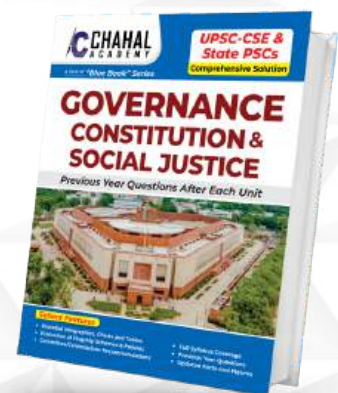
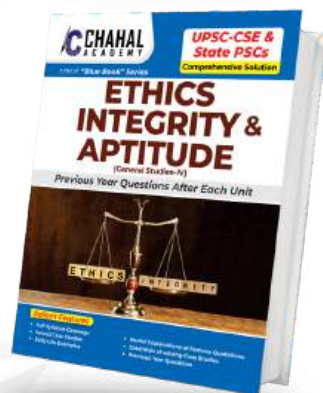
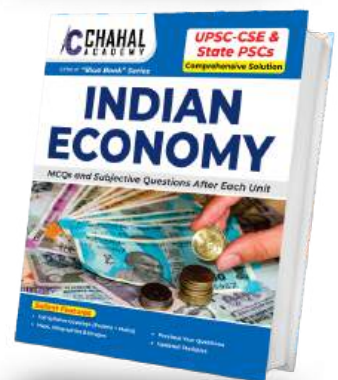
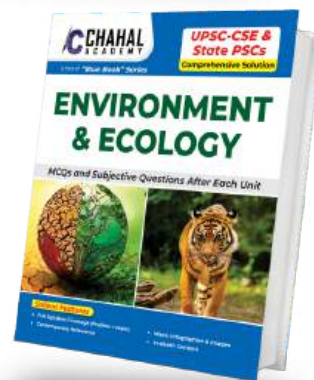
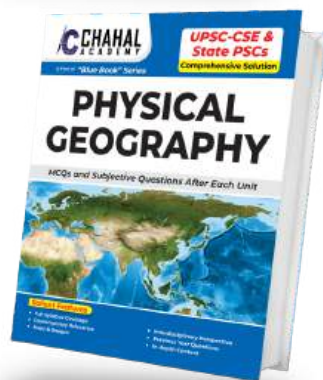
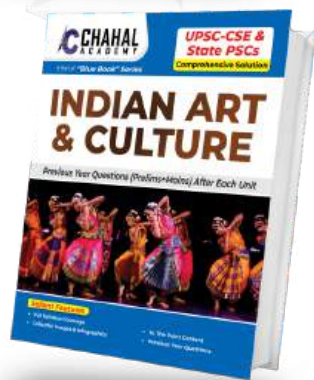
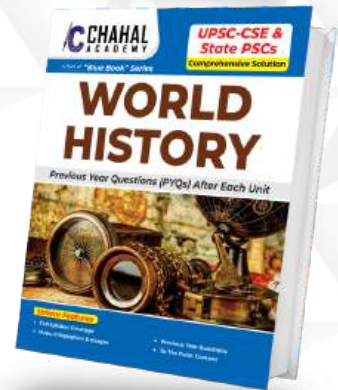
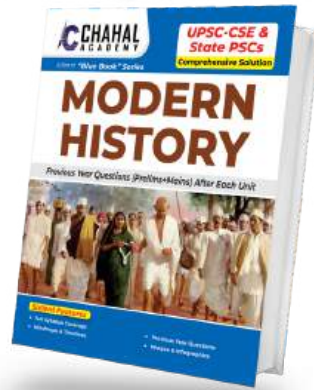
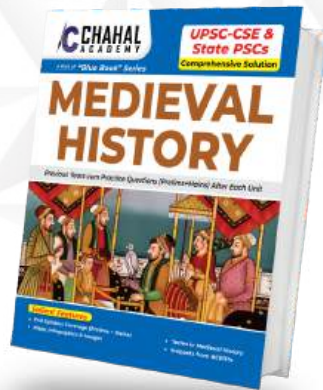
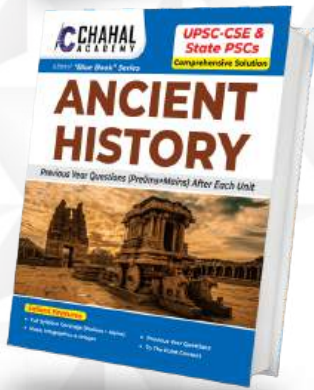
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Q4	C	Q24	A	Q44	A	Q64	C	Q84	B
Q5	A	Q25	C	Q45	A	Q65	C	Q85	A
Q6	B	Q26	A	Q46	A	Q66	C	Q86	C
Q7	D	Q27	C	Q47	B	Q67	C	Q87	C
Q8	A	Q28	C	Q48	A	Q68	A	Q88	A
Q9	A	Q29	A	Q49	A	Q69	A	Q89	B
Q10	B	Q30	A	Q50	a	Q70	A	Q90	C
Q11	A	Q31	D	Q51	D	Q71	C	Q91	C
Q12	D	Q32	A	Q52	A	Q72	A	Q92	C
Q13	A	Q33	D	Q53	A	Q73	B	Q93	B
Q14	A	Q34	C	Q54	C	Q74	A	Q94	C
Q15	A	Q35	A	Q55	C	Q75	B	Q95	A
Q16	B	Q36	A	Q56	C	Q76	D	Q96	A
Q17	A	Q37	D	Q57	D	Q77	A	Q97	C
Q18	A	Q38	B	Q58	C	Q78	B	Q98	A
Q19	A	Q39	D	Q59	A	Q79	C	Q99	C
Q20	B	Q40	C	Q60	B	Q80	A	Q100	C

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